

CLASSIFICATION:

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EXHIBIT R-2, RDT&E Budget Item Justification						DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-4				R-1 ITEM NOMENCLATURE 0603795N/Land Attack Technology			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	122.032	119.684	82.049	18.432	15.636	9.955	9.216
2156/Naval Surface Fire Support (NSFS) ⁽²⁾	48.233	42.155	38.345	6.516	5.469	6.652	6.773
9051/Advance Medium Caliber Gun Demonstrator (AMCGD) ^(1,2)	3.236	3.362	0.000	0.000	0.000	0.000	0.000
9052/Autonomous Naval Support Round (ANSR) ^(1,2)	4.045	16.811	0.000	0.000	0.000	0.000	0.000
2325/Naval Fires Control System (NFCS)	23.443	6.001	6.135	3.351	2.384	1.459	1.727
2927/2871/Naval Fires Network (NFN) ^(1,2)	31.517	15.557	8.663	8.565	7.783	1.844	0.716
9053/Integrated Deepwater System (IDS) ⁽¹⁾	10.511	0.000	0.000	0.000	0.000	0.000	0.000
9209/Semi-Automated Imagery Intelligence Processor (SAIP) ⁽¹⁾	1.047	0.000	0.000	0.000	0.000	0.000	0.000
9359/Affordable Weapon System (AWS) ⁽²⁾	0.000	27.688	28.906	0.000	0.000	0.000	0.000
9360/Hardened Precision Sensors For Missiles & Projectiles (HPSFMP) ⁽²⁾	0.000	2.769	0.000	0.000	0.000	0.000	0.000
9361/Local Situational Assessment Segment Adjunct To TES-N(LSASATT) ⁽²⁾	0.000	2.472	0.000	0.000	0.000	0.000	0.000
9362/Millennium Gun System (MGS) ⁽²⁾	0.000	1.187	0.000	0.000	0.000	0.000	0.000
9363/TES-N And P-3 Ground Station (TP3GS) ⁽²⁾	0.000	1.682	0.000	0.000	0.000	0.000	0.000
Quantity of RDT&E Articles & Cost (see attached projects)							
⁽¹⁾ Funding includes the following FY03 Adds: NFN Project 2871 - \$7.138M, ANSR Project 9052 - \$4.045M, AMCGD Project 9051 - \$3.236, SAIP Project 9209 - \$1.047M, IDS Project 9053 - \$10.511M (Earmark)							
⁽²⁾ Funding includes the following FY04 Adds: Extended Range Munition (ERM) Project 2156 - \$10M, NFN Project 2871 - \$.988M, ANSR Project 9052 - \$16.811M, AMCGD Project 9051 - \$3.362M, AWS Project 9359 - \$27.688M, HPSFMP Project 9360 - \$2.769M, LSASATT Project 9361 - \$2.472M, MGS Project 9362 - \$1.187M, TP3GS - Project 9363 - \$1.682M							
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 2156) 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 program is currently being restructured to provide a robust NSFS capability within existing resources. The funding profile also supports the development of an Extended Range Munition (ERM) for use in MK45 Mod2/4 guns. The Autonomous Naval Support Round (ANSR) (Project 9052) is a rolling airframe platform used to demonstrate/advance gun-launched guided projectile technologies. The Advanced Medium Caliber Gun System (AMCGD) (Project 9051) 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 2927) 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 9209) 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). The Naval Fires Control System (NFCS) (Project 2325) 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 9053) 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. Hardened Precision Sensors for Missiles and Projectiles (Project 9360) compliments an ongoing Phase II SBIR to develop a Miniature Electromechanical System (MEMS) Annular Rotating Sensor (MARS). It will conduct hardware prototyping and evaluate gun hardening approaches for a potential very low cost, high performance guidance and control unit.							

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 1 of 65)

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APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY BA-4		R-1 ITEM NOMENCLATURE 0603795N/Land Attack Technology
<p>The Affordable Weapons System (AWS) (Project 9359) is a COTS based Land Attack and Strike missions missile that can loiter and be directed to the target by the shooter or a Forward Observer (FO/FAC). The Millennium Gun System (MGS) (Project 9362) supports the investigation of a 35mm minor caliber gun mount and associated munitions for ship self defense mission area capability in USN Surface Ships.</p> <p>NFN Project 9361 - \$2.472M; NFN Project 9363 - \$1.682M</p>		

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EXHIBIT R-2a, RDT&E Project Justification						DATE:	
						February 2004	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4				PROJECT NUMBER AND NAME 2156/9051/9052/9360Naval Surface Fire Support			
COST (\$ in Millions)	FY 2003*	FY 2004**	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	55.514	65.097	38.345	6.516	5.469	6.652	6.773
RDT&E Articles Qty					80		
*Funding includes FY 2003 Congressional Adds for NSFS: ANSR Project 9052 - \$4.045M; AMCGD Project 9051 - \$3.236M							
**Funding includes FY 2004 Congressional Adds for NSFS: ERM Project 2156 - \$10M, ANSR Project 9052 - \$16.811M, AMCGD Project 9051 - \$3.362M, HPSFMP Project 9360 - \$2.769M							
Project 2156 includes funding for ERM: FY 2004 - \$10M; FY 2005 - \$25M							
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 to fire extended range munitions; 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 such as MARS, 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 MK45 Mod 2/4 guns. The Autonomous Naval Support Round (ANSR) is a rolling airframe platform used to demonstrate gun launched guided projectile technology including a LCGEU guidance package.							

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Exhibit R-2a, RDTEN Project Justification

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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 2156/9051/9052/9360Naval Surface Fire Support													
B. Accomplishments/Planned Program															
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 35%;"></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;">35.815</td><td style="text-align: center;">28.079</td><td style="text-align: center;">11.266</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td></tr></tbody></table>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	35.815	28.079	11.266	RDT&E Articles Quantity			
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Accomplishments/Effort/Subtotal Cost	35.815	28.079	11.266												
RDT&E Articles Quantity															
<div style="border: 1px solid black; padding: 5px; min-height: 40px;">Continue ERGM development. In FY03, completed ERGM CDR and start component Qualification and Land-Based Flight Tests. Review and maintain Technical Data Package. During FY06, complete Qualification and Land Based flight tests. Complete Shipboard DT (FY07) and OT (FY08). Implement production cost reduction initiatives and performance upgrades (post IOC: FY09 and out).</div>															
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Accomplishments/Effort/Subtotal Cost	1.719	0.000	0.000												
RDT&E Articles Quantity															
<div style="border: 1px solid black; padding: 5px; min-height: 40px;">Complete final test report for LCGEU in the ERGM airframe. Guided flight tests completed 1st quarter FY04.</div>															
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RDT&E Articles Quantity															
<div style="border: 1px solid black; padding: 5px; min-height: 40px;">Complete final test report of the demonstration of the LCGEU in the ANSR airframe. Guided flight tests completed by the end of FY03. In FY04, continue technology development and testing of the ANSR concept.</div>															

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B. Accomplishments/Planned Program (Cont.)															
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	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	0.000	10.000	25.000												
RDT&E Articles Quantity															
<div style="border: 1px solid black; padding: 5px; min-height: 40px;">Award contract(s) via a broad agency announcement during the 2nd quarter FY04 for the Extended Range Munition (ERM) demonstration The ERM guided projectile will be capable of operation in the MK 45 Mod 4 (required) and the Mod 2 (desired). A shoot-off (trade-off analysis) with ERGM will be conducted at the end of the 20 month ERM demonstration effort (Oct 05).</div>															
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RDT&E Articles Quantity															
<div style="border: 1px solid black; padding: 5px; min-height: 40px;">Complete development of the EX-167 Propelling Charge (FY04). Complete Technical Data Package, qualification efforts, and initiate technical activities supporting production efforts (FY06).</div>															
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	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	8.968	3.000	1.300												
RDT&E Articles Quantity															
<div style="border: 1px solid black; padding: 5px; min-height: 40px;">Continue development and testing of 5"/62 MK 45 modification and GFM preparation. Continue test firing of the modification (including Level III Mod4 drawings, installation and manufacturing of hardware for the extended range munitions Ships, Hot Gun Predator Updates, and Gun Barrel Wear). Continue development and test firing of the modification leading up to achieve extended range munition IOC.</div>															

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004	
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B. Accomplishments/Planned Program (Cont.)

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.909	0.167	0.446
RDT&E Articles Quantity			

Complete development and testing of the Gun Fire Control Modification and required interfaces to achieve ERGM IOC.

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	3.236	3.362	0.000
RDT&E Articles Quantity			

Continue fabrication and development of AMCGD gun. Begin testing of the 5" version of the Advance Modular, Scalable, Compact, Long-Range Gun Design.

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.000	2.769	0.000
RDT&E Articles Quantity			

Begin hardware prototyping for gun hardening and evaluation of manufacturing processes for high yield MEMS devices

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Exhibit R-2a, RD TEN Project Justification
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C. PROGRAM CHANGE SUMMARY: <table border="0"> <tr> <td>Funding:</td> <td>FY 2003</td> <td>FY 2004</td> <td>FY 2005</td> </tr> <tr> <td>Previous President's Budget: (FY 04 Pres Controls)</td> <td>55.441</td> <td>42.630</td> <td>42.186</td> </tr> <tr> <td>Current BES/PRES Budget: (FY 05 Pres Controls)</td> <td>55.514</td> <td>65.097</td> <td>38.345</td> </tr> <tr> <td>Total Adjustments</td> <td>0.073</td> <td>22.467</td> <td>-3.841</td> </tr> <tr> <td colspan="4">Summary of Adjustments</td> </tr> <tr> <td>Program Adjustments</td> <td>1.178</td> <td>0.000</td> <td>-0.047</td> </tr> <tr> <td>SBIR</td> <td>-1.105</td> <td>0.000</td> <td>0.000</td> </tr> <tr> <td>NWCF Rate Adjustment</td> <td>0.000</td> <td>0.000</td> <td>-0.294</td> </tr> <tr> <td>Section 8094-Man Impr</td> <td>0.000</td> <td>-0.174</td> <td>0.000</td> </tr> <tr> <td>Sec. 8126 - Efficiencies/Revis</td> <td>0.000</td> <td>-0.559</td> <td>0.000</td> </tr> <tr> <td>ANSR Add</td> <td>0.000</td> <td>17.000</td> <td>0.000</td> </tr> <tr> <td>AMCGD Add</td> <td>0.000</td> <td>3.400</td> <td>0.000</td> </tr> <tr> <td>HPSFMP Add</td> <td>0.000</td> <td>2.800</td> <td>0.000</td> </tr> <tr> <td>Long Range Convention Round</td> <td>0.000</td> <td>0.000</td> <td>-10.000</td> </tr> <tr> <td>Fact of Life Adjustment for ERGM</td> <td>0.000</td> <td>0.000</td> <td>6.500</td> </tr> <tr> <td>Subtotal</td> <td>0.073</td> <td>22.467</td> <td>-3.841</td> </tr> </table> <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 FY02 to reflect a requirements change to a unitary warhead. A major contract modification was also signed supporting the program revision. The contractor began the ERGM LBFT series in FY04. Guided flight tests of the LCGEU have been conducted on the ERGM and ANSR airframes. Final reports will be complete 2nd quarter FY04. Award contract(s) via a broad agency announcement during the 2nd quarter FY04 for the Extended range Munition (ERM) demonstration. A shoot-off (trade-off analysis) will be conducted at the end of the 20 month ERM demonstration effort (Oct 05). AMCGD continues fabrication and begins testing.</p> <p>Technical: N/A</p>			Funding:	FY 2003	FY 2004	FY 2005	Previous President's Budget: (FY 04 Pres Controls)	55.441	42.630	42.186	Current BES/PRES Budget: (FY 05 Pres Controls)	55.514	65.097	38.345	Total Adjustments	0.073	22.467	-3.841	Summary of Adjustments				Program Adjustments	1.178	0.000	-0.047	SBIR	-1.105	0.000	0.000	NWCF Rate Adjustment	0.000	0.000	-0.294	Section 8094-Man Impr	0.000	-0.174	0.000	Sec. 8126 - Efficiencies/Revis	0.000	-0.559	0.000	ANSR Add	0.000	17.000	0.000	AMCGD Add	0.000	3.400	0.000	HPSFMP Add	0.000	2.800	0.000	Long Range Convention Round	0.000	0.000	-10.000	Fact of Life Adjustment for ERGM	0.000	0.000	6.500	Subtotal	0.073	22.467	-3.841
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D. OTHER PROGRAM FUNDING SUMMARY:									
	<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	0.000	3.748	0.500	0.044	33.104	43.945	154.710		
WPN BLI:4217, E5004	1.800	34.434	5.490	5.175	7.210	7.159	11.162		
SCN BLI 212200	0	0	0	0	0	0	0		
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 FY09, 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" MK 45 Gun Mount. 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 Hardened Precision Sensors prototyping will be awarded to Archangel Systems. The ERM demonstration via a BAA contract award is a 20 month effort. A shoot-off /trade-off analysis between ERM and ERGM will be conducted at the end of the demonstration in Oct 05.</p>									
F. MAJOR PERFORMERS:									
<p>Prime Contractor for ERGM development: Raytheon Missile Systems located in Tucson, AZ. Contract awarded to Texas Instruments (TI) in September 1996. Raytheon subsequently purchased TI and moved operations to Tucson location.</p> <p>Prime Contractor for Gun development: United Defense Limited Partnership (UDLP) located in Minneapolis, MN. Contract awarded to UDLP in February 1996 to modify the existing 5"/54 gun to a 5"/62 Gun to accomodate handling, loading, and firing the ERGM round.</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>Prime Contractor for ERM development: TBD</p> <p>Prime Contractor for AMCGD development: AOT located in Waldorf, MD.</p> <p>Prime Contractor for HPSFMP development: Archangel Systems located in Auburn, AL.</p> <p>Primary Navy Warfare Center: Naval Surface Warfare Center (NSWC) 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. NSWC, Indian Head is development activity for ERGM Propelling Charge.</p>									

R-1 SHOPPING LIST - Item No. 74

UNCLASSIFIED

Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 8 of 65)

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-4			0603795N/Land Attack Technology			2156/9051/9052/9360Naval 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	CPFF/FF	UDLP, Minneapolis, MN (C5223)	58.738	0.000	N/A	0.000	N/A	0.000	N/A	CONT	CONT	59.657
	CPFF	UDLP, Minneapolis, MN (C4101)	0.754	6.200	11/02	2.000	11/03	0.800	11/04	CONT	CONT	48.414
	CPAF/IF	Raytheon, Tucson, AZ	135.779	24.665	11/02	13.600	11/03	3.400	11/04	CONT	CONT	182.862
	WR	NSWC Dahlgren, VA	56.867									N/A
	WR	NSWC Indian Head, MD	15.088									N/A
	WR	NSWC Port Hue., CA	25.386									N/A
LRIP	CPAF/IF	Raytheon, Tucson, AZ	0.000	0.000	N/A	0.000	N/A	0.000	N/A	CONT	CONT	0.000
LCGEU	CPFF	Draper, Cambridge, MA	12.276	1.335	11/02	0.000	N/A	0.000	N/A	CONT	CONT	13.611
	CPAF/IF	Raytheon, Tucson, AZ	1.442	0.050	11/02	0.000	N/A	0.000	N/A	CONT	CONT	1.492
	WX/WR	NSWC	2.925	0.334	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	11/02	0.000	N/A	0.000	N/A	CONT	CONT	10.323
	TBD	TBD	0.000	0.000	N/A	12.600	N/A	0.000	N/A	CONT	CONT	12.600
	WX/WR	NSWC	1.217	1.818	N/A	0.000	N/A	0.000	N/A	CONT	CONT	N/A
	SS/CPAF	JHU/APL	0.000	0.430	8/03	0.000	N/A	0.000	N/A	CONT	CONT	N/A
	VAR	Miscellaneous	0.000	0.090	N/A	4.211	N/A	0.000	N/A	CONT	CONT	N/A
ERM Demonstration	TBD	TBD	0.000	0.000	N/A	9.150	TBD	22.880	TBD	CONT	CONT	TBD
AMCGD Demonstration	CPFF	AOT, Waldorf, MD	2.494	2.774	11/02	3.362	03/04	0.000	N/A	CONT	CONT	8.630
	WX/WR	NSWC	0.000	0.275	N/A	0.000	N/A	0.000	N/A	CONT	CONT	N/A
	VAR	Miscellaneous	0.000	0.187	N/A	0.000	N/A	0.000	N/A	CONT	CONT	N/A
Hardened Precision Sensor	CPFF	Archangel Systems, Auburn	0.000	0.000	N/A	2.069	03/04	0.000	N/A	CONT	CONT	2.069
	VAR	Miscellaneous	0.000	0.000	N/A	0.700	N/A	0.000	N/A	CONT	CONT	N/A
MEMS	VAR	Miscellaneous	2.000									N/A
Systems Engineering	WX/WR	NSWC	13.397	1.265	N/A	1.466	11/03	0.612	11/04	CONT	CONT	N/A
Systems Engineering	VAR	Miscellaneous	33.281	0.000	N/A	0.000	11/03	0.000	N/A	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			377.132	42.315		49.858		28.492		CONT	CONT	CONT
Development Support Equipment												
Software Development												
Training Development												
Integrated Logistics Support	WR/WX	NSWC	6.357	1.338	11/02	1.545	11/03	1.061		CONT	CONT	N/A
Configuration Management												
Technical Data												
GFE												
Subtotal Support			6.357	1.338		1.545		1.061		CONT	CONT	CONT

R-1 SHOPPING LIST - Item No. 74

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 9 of 65)

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4			PROGRAM ELEMENT 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME 2156/9051/9052/9360Naval 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	5.265	11/02	8.451	11/03	4.188	11/04	CONT	CONT	N/A
Operational Test & Evaluation												
Tooling												
GFE												
Subtotal T&E			22.186	5.265		8.451		4.188		CONT	CONT	N/A
Contractor Engineering Support												
Government Engineering Support	WR/WX	NSWC	12.918	2.631	11/02	1.726	11/03	1.066	11/04	CONT	CONT	N/A
Project Engineering Support	WR/WX	NSWC	3.012	2.857	11/02	1.132	11/03	1.073	11/04	CONT	CONT	N/A
Program Management Support	WR/WX	Various	9.118	1.008	11/02	2.285	11/03	2.365	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			25.876	6.596		5.243		4.604		CONT	CONT	N/A
Total Cost			431.551	55.514		65.097		38.345		CONT	CONT	CONT
Remarks:												

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 10 of 65)

UNCLASSIFIED

[illegible]

CLASSIFICATION:

UNCLASSIFIED

Exhibit R-4a, Schedule Detail					DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT			PROJECT NUMBER AND NAME			
RDT&E, N / BA-4	0603795N/Land Attack Technology			2156/9051/9052/9360Naval Surface Fire Su			
Schedule Profile	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
ERGM							
Control Test Vehicle #2							
Guided Gun Fire #1							
Land Based Flight Test Series	3Q-4Q	1Q-4Q					
Critical Design Review (CDR)	3Q						
Unitary Warhead Flight Test		2Q					
Component & All-Up Round Qualifications	4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q		
Pre-Production Round Decision				3Q-4Q			
Pre-Production Round Award					1Q		
Technical Evaluation (TECHEVAL)					3Q		
Operational Evaluation (OPEVAL)						2Q	
LRIP Deliveries						1Q-4Q	
LRIP Decision/MS C					3Q		
IOC						4Q	
ERM							
Contract Award		2Q					
Demonstration		2Q-4Q	1Q-4Q	1Q			
Flight Tests			3Q-4Q	1Q			
Shoot Off / Trade-Off Analysis				1Q			
LCGEU BAA (ERGM)							
Design Phase							
Flight Tests	3Q	1Q					
ANSR							
Design Phase	1Q						
Flight Tests	4Q	1Q					
EX 45 5"/62 Mod 4							
Developmental Testing (DT)	1Q						
Operational Test (OT)	1Q						
MS III		2Q					
AMCGD							
Demonstration Phase	1Q-4Q	1Q-4Q	1Q-4Q				
Hardened Precision Sensor							
Prototyping Phase			2Q-4Q	1Q-3Q			
Propelling Charge (for ERGM)							
Qualification Tests	1Q-4Q	1Q-4Q					
LRIP Deliveries				3Q-4Q			
Shipboard Integration & Installation							
DDG-81 PSA							
DDG-82 PSA							
DDG-82 Fun & FC DT							
DDG-82 Fun & FC OT							

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Exhibit R-4a, Schedule Detail
 (Exhibit R-4a, page 12 of 65)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N /Land Attack Technology				PROJECT NUMBER AND NAME 2325/Naval Fires Control System			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Project Cost	23.443	6.001	6.135	3.351	2.384	1.459	1.727	
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. Developmental testing will be conducted in FY03 and Operational testing will be conducted in FY04.

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, Page 13 of 65)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 2325/Naval Fires Control System	
B. Accomplishments/Planned Program			
	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	9.429	2.093	2.135
RDT&E Articles Quantity			
Funding provides software and system engineering analysis and development, reuse and integration of government and commercial computer programs to support extended range munitions and other naval weapon applications.			
	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	3.560	0.400	0.400
RDT&E Articles Quantity			
Funding support hardware configuration to support NFCS implementation. Support DT validation.			
	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	4.605	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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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 14 of 65)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2004												
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 2325/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 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;">1.657</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></tr></tbody></table>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	1.657	0.400	0.400	RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	1.657	0.400	0.400												
RDT&E Articles Quantity															
<div style="border: 1px solid black; padding: 5px;">Funding provides C4I and combat system interface investigation and analysis to include BFTT, Link 16, TTWCS and other developing C4I system and technology.</div>															
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></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;">2.516</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></tr></tbody></table>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	2.516	0.300	0.300	RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	2.516	0.300	0.300												
RDT&E Articles Quantity															
<div style="border: 1px solid black; padding: 5px;">Funding supports developmental test and evaluation, and logistics support elements development.</div>															
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></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;">1.676</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></tr></tbody></table>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	1.676	2.000	2.000	RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	1.676	2.000	2.000												
RDT&E Articles Quantity															
<div style="border: 1px solid black; padding: 5px;">Funding supports operational test and evaluation, and logistics support elements development.</div>															

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	2325/Naval Fires Control System

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget: (FY 04 Pres Controls)	24.327	6.071	6.243
Current Pres Budget: (FY 05 PresBud Controls)	23.443	6.001	6.135
Total Adjustments	-0.884	-0.070	-0.108
Summary of Adjustments			
FY03 BTR (Apr-03)	-0.281	0.000	0.000
FY03 UPDATE	-0.001		
SPAWAR Service Cost Center Adj.		-0.002	-0.002
NWCF Rates - SPAWAR, NSWC, & NUWC			-0.103
Management Improvements		-0.016	
Efficiencies/Revisions		-0.052	
Other Adjustments	-0.602	0.000	-0.003
Subtotal	-0.884	-0.070	-0.108

Schedule:

NFCS milestone III and IOC scheduled adjustment from first quarter FY04 to 3rd quarter FY04 due to test ship availability for TECHEVAL and OPEVAL and software development delay.

Technical:

N/A

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4		PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME 2325/Naval Fires Control System				

D. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</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	2.697	2.366	2.408	2.580	2.775	2.889	17.576	
OPN BL, 511200	5.463	4.129	2.849	6.071	5.003	4.736	4.079	32.330	

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:

NSWC/DD - Technical Direction Agent, Software Development Agent and Systems Engineering Lead.
 NUWC/KP - Hardware Design Agent and Hardware Developer.
 NSWC/PHD - Test and Evaluation Agent and Integrated Logistics Support Agent.
 SPAWARSSYSCEN, San Diego - Common Operating Environment (COE) and Adjunct Processor Developer.

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CLASSIFICATION:

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Exhibit R-3 Cost Analysis (page 1)								DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-4			0603795N/Land Attack Technology			2325/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	0.000		0.000		0.000		CONT	CONT	TBD
	SS/CPAF	LM/MDS, Valley Forge, PA	18.952	0.127	11/02	0.000		0.000		CONT	CONT	
	WR/WX	NSWC, Dahlgren, VA	2.300	4.480	10/02	1.700	10/03	1.700	10/04	CONT	CONT	
	VAR	VARIOUS	1.119							CONT	CONT	
	WR/WX	SSC/SD	2.375	1.461	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	4.200	10/02	0.500	10/03	0.585	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	1.304							CONT	CONT	
Ancillary Hardware Development	WR/WX	NUWC, Keyport Division	8.613	1.461	10/02	0.400	10/03	0.400	10/04	CONT	CONT	
	WR/WX	NSWC/PT HUE, CA	3.874	0.858	10/02	0.403	10/03	0.403	10/04	CONT	CONT	
	VAR	PMFATDS	1.587	1.949	10/02	0.000	N/A	0.000	N/A	CONT	CONT	
	SS/CPAF	JHU/APL	1.070	0.292	11/02	0.000	N/A	0.000	N/A	CONT	CONT	
	WR	NSWC, Dahlgren, VA	2.100	0.136	N/A	0.000	N/A	0.000	N/A	CONT	CONT	
	VAR	VARIOUS	1.541	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								4.181	
TERMINATED	SS/CPAF	LM/MDS, Valley Forge, PA	12.131								12.131	
	SS/CPFF	UDLP	0.455								0.455	
	WR	NSWC, Dahlgren, VA	1.162								1.162	
	WR	SSC/SD	0.486								0.486	
LAM FC Systems Engineering	SS/CPFF	JHU/APL	0.386								0.386	
TERMINATED	WR	NSWC/PT HUE, CA	0.361								0.361	
Award Fees			3.979								3.979	
Subtotal Product Development			111.519	14.964		3.403		3.488		CONT	CONT	
Remarks:												
Development Support Equipment												
Software Development		NSWC, Panama City	0.049									
Training Development	VAR	VARIOUS		0.487		0.000		0.000				
Integrated Logistics Support	VAR	VARIOUS	3.208	1.352	Various	0.105	Various	0.105	Various	CONT	CONT	
Configuration Management												
Technical Data												
GFE												
Subtotal Support			3.257	1.839		0.105		0.105		CONT	CONT	
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-4			0603795N/Land Attack Technology			2325/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	2.515	10/02	0.300	10/03	0.300	10/04	CONT	CONT	
	VAR	Various	1.500									
Operational Test & Evaluation	VAR	Various	1.000	1.948	10/02	2.000	10/03	2.000	10/04	CONT	CONT	
Live Fire Test & Evaluation												
Test Assets												
Tooling												
GFE												
Award Fees												
Subtotal T&E			5.300	4.463		2.300		2.300				
Remarks:												
BTR			0.000									
Contractor Engineering Support												
Government Engineering Support												
Program Management Support	VAR	VARIOUS	2.272	2.077	Various	0.143	Various	0.192	Various	CONT	CONT	
Travel	PD	NAVSEA HQ	0.305	0.100	Various	0.050	Various	0.050	Various	CONT	CONT	
Labor (Research Personnel)												
SBIR Assessment												
Subtotal Management			2.577	2.177		0.193		0.242		CONT	CONT	
Remarks:												
Total Cost			122.653	23.443		6.001		6.135		CONT	CONT	
Remarks:												

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Exhibit R-4, Schedule Profile
(Exhibit R-4, page 20 of 65)

EXHIBIT R-4														DATE: February 2004																									
APPROPRIATION/BUDGET ACTIVITY								PROGRAM ELEMENT NAME AND NUMBER								PROJECT NAME AND NUMBER																							
RDT&E, N BA-4								0603795N/Land Attack Technology								2325/Naval Fires Control System																							
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				
Naval Fires Control System (NFCS) Phase I																																							
<div> <div>Milestones / Reviews</div> <div> <div>△</div> <div>△</div> <div>△</div> <div>△</div> <div>△</div> <div>☆</div> </div> <div>PDR</div> <div>CDR</div> <div>WSESRB</div> <div>SSST RP</div> <div>WSESRB</div> <div>MS III / IOC</div> </div>																																							
<div> <div>Design Development</div> <div>E&MD Phase</div> <div>▽</div> </div>																																							
<div> <div>Tests</div> <div>Integration Testing</div> <div>△</div> <div>▽</div> </div>																																							
<div> <div>Tests - DT/OT</div> <div>DT-IIA</div> <div>OA</div> <div>DT-IIC</div> <div>OT IIB</div> <div>△</div> <div>OPEVAL Report</div> </div>																																							

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R-1 SHOPPING LIST - Item No. 74

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Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 21 of 65)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology				PROJECT NUMBER AND NAME 9053/Integrated Deepwater System			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Project Cost	10.511	0.000	0.000	0.000	0.000	0.000	0.000	
RDT&E Articles Qty								
<p>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 conduct of technical safety testing and qualification of the intermediate caliber gun system and appropriate ammunition along with engineering evaluation of interfacing fire control and support systems in preparation for fleet introduction.</p>								

R-1 SHOPPING LIST - Item No. 74

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2004																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 9053/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 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th><th style="width: 15%;">FY 06</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.200</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 system architecture and design.</div>						FY 03	FY 04	FY 05	FY 06	Accomplishments/Effort/Subtotal Cost	0.200	0.000	0.000	0.000	RDT&E Articles Quantity				
	FY 03	FY 04	FY 05	FY 06															
Accomplishments/Effort/Subtotal Cost	0.200	0.000	0.000	0.000															
RDT&E Articles Quantity																			
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	FY 03	FY 04	FY 05	FY 06															
Accomplishments/Effort/Subtotal Cost	0.300	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 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th><th style="width: 15%;">FY 06</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.500</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 provides for engineering design assessment.</div>						FY 03	FY 04	FY 05	FY 06	Accomplishments/Effort/Subtotal Cost	0.500	0.000	0.000	0.000	RDT&E Articles Quantity				
	FY 03	FY 04	FY 05	FY 06															
Accomplishments/Effort/Subtotal Cost	0.500	0.000	0.000	0.000															
RDT&E Articles Quantity																			

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2004																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 9053/Integrated Deepwater System																	
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	FY 03	FY 04	FY 05	FY 06															
Accomplishments/Effort/Subtotal Cost	0.500	0.000	0.000	0.000															
RDT&E Articles Quantity																			
Funding supports qualification planning including review of NDI gun/ammo international test results.																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th><th style="width: 15%;">FY 06</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">6.200</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 03	FY 04	FY 05	FY 06	Accomplishments/Effort/Subtotal Cost	6.200	0.000	0.000	0.000	RDT&E Articles Quantity				
	FY 03	FY 04	FY 05	FY 06															
Accomplishments/Effort/Subtotal Cost	6.200	0.000	0.000	0.000															
RDT&E Articles Quantity																			
Funding provides for Gun/Ammo qualification test and procurement of 57mm Ammo.																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th><th style="width: 15%;">FY 06</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">2.811</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 03	FY 04	FY 05	FY 06	Accomplishments/Effort/Subtotal Cost	2.811	0.000	0.000	0.000	RDT&E Articles Quantity				
	FY 03	FY 04	FY 05	FY 06															
Accomplishments/Effort/Subtotal Cost	2.811	0.000	0.000	0.000															
RDT&E Articles Quantity																			
Funding provides for program management and the procurement of additional 57mm Ammo for qualification testing.																			

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:	
			February 2004	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME		
RDT&E, N / BA-4	0603795N/Land Attack Technology	9053/Integrated Deepwater System		
C. PROGRAM CHANGE SUMMARY:				
Funding:	FY 2003	FY 2004	FY 2005	FY 2006
Previous President's Budget: (FY 04 Pres Controls)	11.000	0.000	0.000	0.000
Current BES/President's Budget (FY 05 DON Controls)	10.511	0.000	0.000	0.000
Total Adjustments	-0.489	0.000	0.000	0.000
Summary of Adjustments				
BSO Adjustments	-0.489	0.000	0.000	0.000
Subtotal	-0.489	0.000	0.000	0.000
Schedule:				
N/A				
Technical:				
N/A				

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Exhibit R-2a, RD TEN Project Justification
(Exhibit R-2a, page 25 of 65)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 9053/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. The program will include Technical Qualification of the gun and selected ammo in accordance with USN safety standards		
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 2004				
APPROPRIATION/BUDGET ACTIVITY RD&E, N / BA-4			PROGRAM ELEMENT 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME 9053/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	FY 06 Cost	FY 06 Award Date	Cost to Complete	Total Cost	Target Value of Contract
IDS Demonstration	WR	NSWC Louisville	0.865	1.500		0.000		0.000				0.000	2.365	
	WX	NSWC Dahlgren	1.196	7.109		0.000		0.000				0.000	8.305	
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	8.609		0.000		0.000		0.000		0.000	10.670	
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
(Exhibit R-3, page 27 of 65)

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)												DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY RD&E, N / BA-4			PROGRAM ELEMENT 0603795N/Land Attack Technology				PROJECT NUMBER AND NAME 9053/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	FY 06 Cost	FY 06 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	0.000	
Remarks:														
Contractor Engineering Support													0.000	
Government Engineering Support													0.000	
Program Management Support				1.902									1.902	
Travel			0.010										0.010	
Labor (Research Personnel)													0.000	
SBIR Assessment													0.000	
Subtotal Management			0.010	1.902		0.000		0.000		0.000		0.000	1.912	
Remarks:														
Total Cost			2.071	10.511		0.000		0.000		0.000		0.000	12.582	
Remarks:														

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CLASSIFICATION:

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EXHIBIT R4, Schedule Profile						DATE:		February 2004	
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME			
RDT&E, N / BA-4				0603795N/Land Attack Technology		9053/Integrated Deepwater System			
	FY02				FY03				
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
Integrated Deep Water System									
Program Planning & System Architecture		△				▽			
Operability / Maintainability Demo					△		▽		
Qualification Testing						△	▽		
Test Analysis							△	▽	
Final Report								△	▽

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CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: February 2004			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NUMBER AND NAME				
RDT&E, N / BA-4		0603795N/Land Attack Technology			9053/Integrated Deepwater System				
Schedule Profile			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)									
Preliminary Design Review (PDR)									
System Development			1Q-3Q						
Critical Design Review (CDR)									
Quality Design and Build									
Test Readiness Review (TRR)				1Q					
Developmental Testing (DT-IIA)				1Q-3Q					
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)									
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
(Exhibit R-4a, page 30 of 65)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4		PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME 9359/Affordable Weapon System			
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		0.000	27.688	28.906	0.000	0.000	0.000	0.000
RDT&E Articles Qty								

* FY 2004 Congressional Add - \$27.688

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:
 The Affordable Weapons System (AWS) is a COTS based Land Attack and Strike missions missile that can loiter and be directed to the target by the shooter or a Forward Observer (FO/FAC).

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Exhibit R-2a, RDTEN Project Justification
 (Exhibit R-2a, page 31 of 65)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2004																																														
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 9359/Affordable Weapon System																																															
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		FY 03	FY 04	FY 05																																													
Accomplishments/Effort/Subtotal Cost		0.000	7.110	3.000																																													
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R-1 SHOPPING LIST - Item No. 74

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2004																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 9359/Affordable Weapon System																	
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	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.000	0.000	2.370	1.800															
RDT&E Articles Quantity																			
Missile Design Maturation and Systems Engineering,																			
<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;">0.000</td><td style="text-align: center;">1.250</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	1.250	0.000	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.000	0.000	1.250	0.000															
RDT&E Articles Quantity																			
AWS Military Utility/Lethality Effectiveness Analysis; Warhard Design & Assessment; Safety Evaluation & Analysis; Safety Plan & WSESRB suppor																			
<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;">0.000</td><td style="text-align: center;">2.760</td><td style="text-align: center;">1.300</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	0.000	0.000	2.760	1.300	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.000	0.000	2.760	1.300															
RDT&E Articles Quantity																			
Test Demonstration and Evaluation																			

R-1 SHOPPING LIST - Item No. 74

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2004																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 9359/Affordable Weapon System																	
B. Accomplishments/Planned Program																			
<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;">0.000</td><td style="text-align: center;">3.500</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	0.000	3.500	2.000	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.000	0.000	3.500	2.000															
RDT&E Articles Quantity																			
Warhead design and assessment																			
<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;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">3.100</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	0.000	3.100	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.000	3.100															
RDT&E Articles Quantity																			
Hazard Assessment & Insensitive Munitions testing																			
<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;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">9.056</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	0.000	9.056	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.000	9.056															
RDT&E Articles Quantity																			
Test Ranges, Support, missile component testing , and Facilities including E3/HERO, PHST & Ship compatibility, and developmental testing																			

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2004																																														
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 9359/Affordable Weapon System																																															
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	FY 02	FY 03	FY 04	FY 05																																													
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RDT&E Articles Quantity																																																	
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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 2004
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 9359/Affordable Weapon System

C. PROGRAM CHANGE SUMMARY:

	FY 2003	FY 2004	FY 2005
Funding:			
Previous President's Budget: (FY 04 Pres Controls)	0.000	0.000	0.000
FY05 President's Budget	0.000	27.688	28.906
Total Adjustments	0.000	27.688	28.906
(U) Summary of Adjustments			
Cong Add		28.000	0.000
NWCF Rate Adjustment			0.000
Misc Minor Adjustment		-0.312	0.000
Manpower			0.000
Inflation			-0.094
SBIR	0.000		
Reprogramming (PBD)	0.000		29.000
Total	0.000	27.688	28.906

Schedule:

None

Technical:

None

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification									DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4			PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME 9359/Affordable Weapon 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>
N/A	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
 E. ACQUISITION STRATEGY:										
N/A										
 F. MAJOR PERFORMERS:										
Titan Corp - Primary hardware development & fabrication										
Various Naval Actys - Warhead design & assessment, Engineering Support										
- NSWC Dah Div, VA										

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-4			0603795N/Land Attack Technology			9359/Affordable Weapon 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
Missile Fabrication & Assy	SS	Titan Corp, San Diego CA	0.000	0.000	N/A	5.900	02/04	5.800	11/04	0.000	11.700	N/A
Launcher Design, Fab & Test	SS	Titan Corp, San Diego CA	0.000	0.000	N/A	3.160	02/04	0.800	11/04	0.000	3.960	N/A
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Product Development			0.000	0.000		9.060		6.600		0.000	15.660	
Remarks:												
Missile Maturation & System Eng	SS	Titan Corp, San Diego CA	0.000	0.000	N/A	2.370	02/04	1.800	11/04	0.000	4.170	N/A
Warhead Design & Assessment	WX	TBD	0.000	0.000	N/A	3.500	02/04	2.000	10/04	0.000	5.500	N/A
Safety/Sys/Missile/Launcher Eng	WX	Var.	0.000	0.000	N/A	0.700	02/04	1.200	10/04	0.000	1.900	N/A
System Analysis	WX	Var.	0.000	0.000	N/A	1.250	02/04	0.000	N/A	0.000	1.250	N/A
Hazard Assessment & Insensitive Mun	WX	TBD	0.000	0.000	N/A	0.000	N/A	3.100	10/04	0.000	3.100	N/A
Production Engineering & Tooling	SS	Titan Corp, San Diego CA	0.000	0.000	N/A	7.110	02/04	3.000	11/04	0.000	10.110	N/A
											0.000	
											0.000	
Subtotal Support			0.000	0.000		14.930		11.100		0.000	26.030	
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY RD&E, N / BA-4			PROGRAM ELEMENT 0603795N/Land Attack Technology				PROJECT NUMBER AND NAME 9359/Affordable Weapon 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
T&E	SS	Titan Corp, San Diego CA	0.000	0.000	N/A	2.760	02/04	1.300	11/04	0.000	4.060	N/A
Missile Component testing (FTS)	WX	TBD	0.000	0.000	N/A	0.000	N/A	0.500	10/04	0.000	0.500	N/A
Test Ranges, Support & Facilities	WX	TBD	0.000	0.000	N/A	0.000	N/A	8.556	10/04	0.000	8.556	N/A
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal T&E			0.000	0.000		2.760		10.356		0.000	13.116	
Remarks:												
Program Management Support		Var.	0.000	0.000	N/A	0.938	Var.	0.850	Var.	0.000	1.788	N/A
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Management			0.000	0.000		0.938		0.850		0.000	1.788	
Remarks:												
Total Cost			0.000	0.000		27.688		28.906		0.000	56.594	
Remarks:												

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 39 of 65)

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CLASSIFICATION:

EXHIBIT R-4, Schedule Profile																DATE:				February 2004											
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT NAME AND NUMBER								PROJECT NAME AND NUMBER																			
RDT&E, N/BA-4				0603795N/Land Attack Technology								9359/Affordable Weapon System																			
Affordable Weapons Systems (AWS)																															
				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 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
Contract Award								△																							
Utility Analysis and Studies								<div></div>																							
Production Engineering/Tooling								<div></div>																							
Fabricate & Assemble Missiles								<div></div>																							
Launcher Final Design, Fabrication & Test								<div></div>																							
Test & Evaluation								<div></div>																							

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CLASSIFICATION:

[illegible]

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Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 41 of 65)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology				PROJECT NUMBER AND NAME 9362/Millennium Gun System			
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		0.000	1.187	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Qty			1000					

* FY 2004 Millenium Gun System Program Add - \$1.187

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

These funds provide for the initial review of the 35mm Millennium Gun and ammunition development process and planning for successful weapon suitability. It also supports the Weapon System Explosives Safety Review Board (WSESRB) review, testing and certification process as well as required logistics support analyses and planning. The gun is a candidate system for future USN ship classes. ☐

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 42 of 65)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4		PROJECT NUMBER AND NAME 9362/Millennium Gun System	
B. Accomplishments/Planned Program			
	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.000	1.187	0.000
RDT&E Articles Quantity		1000	
Conduct basic research, planning, safety and logistics investigations for the 35mm Millennium Gun Mount for the manufacture of the first article test rounds. <input type="checkbox"/>			
	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost			
RDT&E Articles Quantity			
	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost			
RDT&E Articles Quantity			

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 43 of 65)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004																																	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME																																	
RDT&E, N / BA-4	0603795N/Land Attack Technology	9362/Millennium Gun System																																	
<p>C. PROGRAM CHANGE SUMMARY:</p> <table> <tr> <td>Funding:</td> <td>FY 2003</td> <td>FY 2004</td> <td>FY 2005</td> </tr> <tr> <td>Previous President's Budget: (FY 04 Pres Controls)</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> </tr> <tr> <td>Current BES/President's Budget (FY 05 President Controls)</td> <td>0.000</td> <td>1.187</td> <td>0.000</td> </tr> <tr> <td>Total Adjustments</td> <td>0.000</td> <td>1.187</td> <td>0.000</td> </tr> </table> <table> <tr> <td>Summary of Adjustments</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Millennium Gun System Program Add</td> <td>0.000</td> <td>1.200</td> <td>0.000</td> </tr> <tr> <td>Minor Pricing Adjustments</td> <td>0.000</td> <td>-0.013</td> <td>0.000</td> </tr> <tr> <td>Subtotal</td> <td>0.000</td> <td>1.187</td> <td>0.000</td> </tr> </table> <p>Millennium Gun Mount Program comprises of research, logistics elements, testing and engineering necessary to qualify the 35mm Millennium Gun Mount for USN/USCG use. The contractor has currently completed some basic planning and research into this effort and this will be reviewed by NSWC and continued. Any additional T&E and ISEA efforts for this project will be planned in FY-04 with possible continuation in FY-05</p> <p>Technical: N/A</p>				Funding:	FY 2003	FY 2004	FY 2005	Previous President's Budget: (FY 04 Pres Controls)	0.000	0.000	0.000	Current BES/President's Budget (FY 05 President Controls)	0.000	1.187	0.000	Total Adjustments	0.000	1.187	0.000	Summary of Adjustments				Millennium Gun System Program Add	0.000	1.200	0.000	Minor Pricing Adjustments	0.000	-0.013	0.000	Subtotal	0.000	1.187	0.000
Funding:	FY 2003	FY 2004	FY 2005																																
Previous President's Budget: (FY 04 Pres Controls)	0.000	0.000	0.000																																
Current BES/President's Budget (FY 05 President Controls)	0.000	1.187	0.000																																
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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2004							
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 9362/Millennium Gun System								
D. OTHER PROGRAM FUNDING SUMMARY:										
N/A										
	<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>
E. ACQUISITION STRATEGY:										
<p>The Millennium Gun Program will procure components and munitions necessary for the test and evaluation as well as support of the Millennium Gun Mount. The gun is developed by Oerlikon (Switzerland) and is licensed for manufacture and sale by Lockheed Martin in the United States. This system is a candidate gun mount for HSV class ships as well as other future ships for the USN. Work will be conducted by the NSWC centers at Louisville and Dahlgren in support of WSESRB certification, T&E, logistics planning and preparation for initial operational capability for HSV type ships or other surface ships as necessary. Provisions will be made for zero cost bailments of equipment for T&E as necessary.</p>										
F. MAJOR PERFORMERS:										
<p>Millennium Gun Mount: Prime Contractor for Millennium Gun is Lockheed Martin, Akron, Ohio.</p>										
<p>Primary Navy Warfare Center: Naval Surface Warfare Center, Louisville will provide program and acquisition management. NSWC Dahlgren will support in WSESRB research and T&E functions.</p>										

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)							DATE: February 2004					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-4			0603795N/Land Attack Technology			9362/Millennium Gun 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
Millennium Gun Mount Demonstration	WX	NSWC PHD Louisville, KY	0.000	0.000		0.831		0.000		CONT	CONT	
	TBD	Lockheed Martin, Akron, OH	0.000	0.000		0.356		0.000		CONT	CONT	
Subtotal Product Development			0.000	0.000		1.187		0.000		CONT	CONT	
Development Support Equipment												
Software Development												
Training Development												
Integrated Logistics Support												
Configuration Management												
Technical Data												
GFE												
Subtotal Support			0.000	0.000		0.000		0.000		CONT	CONT	
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-4			0603795N/Land Attack Technology			9362/Millennium Gun 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												
Operational Test & Evaluation												
Tooling												
GFE												
Subtotal T&E												
Contractor Engineering Support												
Government Engineering Support												
Project Engineering Support												
Program Management Support												
Travel												
Labor (Research Personnel)												
Overhead												
Subtotal Management												
Total Cost			0.000	0.000		1.187		0.000		CONT	CONT	CONT
Remarks:												

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CLASSIFICATION:

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EXHIBIT R-4, Schedule Profile																DATE:				February 2004																			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4								PROGRAM ELEMENT NAME AND NUMBER 0603795N/Land Attack Technology								PROJECT NAME AND NUMBER 9362/Millennium Gun System																							
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				
35mm Millennium Gun Mount																																							
Milestones																																							
Tests																																							
Production																																							
Tech Demos																																							

R-1 SHOPPING LIST - Item No. 74

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Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 49 of 65)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-4		PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology		PROJECT NUMBER AND NAME 2927/2871/9361/9363/9209 Naval Fires Network			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	32.564	19.711	8.663	8.565	7.783	1.844	0.716
RDT&E Articles Qty							
<p>*Funding includes FY 2003 Congressional Adds for NFN Project 2871 - \$7.138M; SAIP Project 9209 - \$1.047M</p> <p>**Funding includes FY2004 Congressional Adds for NFN Project 2871 - \$.988M; NFN Project 9361 - \$2.472M; NFN Project 9363 - \$1.682M</p> <p>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>The Joint Fires Network (JFN) is a system which will automate, coordinate, and correlate, in real time, 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 JFN 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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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004													
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 2927/2871/9361/9363/9209 Naval Fires Network													
B. Accomplishments/Planned Program															
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY03</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;">0.360</td><td style="text-align: center;">2.472</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-top: 5px; padding: 5px;">Development of hardware for NFN.</div>					FY03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.360	2.472	0.000	RDT&E Articles Quantity			
	FY03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	0.360	2.472	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 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;">1.659</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></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-top: 5px; padding: 5px;">Development of software for NFN.</div>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	1.659	0.000	0.000	RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	1.659	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 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;">0.345</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></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-top: 5px; padding: 5px;">Testing of on-board and land-based facilities.</div>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.345	0.000	0.000	RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	0.345	0.000	0.000												
RDT&E Articles Quantity															

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004													
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 2927/2871/9361/9363/9209 Naval Fires Network													
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 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;">2.800</td><td style="text-align: center;">0.988</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td></tr></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px;"></div>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	2.800	0.988	0.000	RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	2.800	0.988	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 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;">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></tr></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px;"></div>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	1.034	1.010	0.250	RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	1.034	1.010	0.250												
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 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;">15.219</td><td style="text-align: center;">5.893</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td></tr></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px;"></div>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	15.219	5.893	0.000	RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	15.219	5.893	0.000												
RDT&E Articles Quantity															

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004													
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 2927/2871/9361/9363/9209 Naval Fires Network													
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 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;">1.600</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></tr></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">Training /Training System Development.</div>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	1.600	0.000	0.000	RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	1.600	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 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;">1.550</td><td style="text-align: center;">0.000</td><td style="text-align: center;">1.780</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td></tr></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">P3I and future Limited Objective Experiments/ Fleet Battle Experiments. (LOE/FBE)</div>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	1.550	0.000	1.780	RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	1.550	0.000	1.780												
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 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;">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></tr></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">X, Ku, Phased Array Antenna System Development.</div>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	1.245	0.000	0.000	RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	1.245	0.000	0.000												
RDT&E Articles Quantity															

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004													
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 2927/2871/9361/9363/9209 Naval Fires Network													
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 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;">0.700</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></tr></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">Program Management Support.</div>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.700	0.825	0.900	RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	0.700	0.825	0.900												
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 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;">0.000</td><td style="text-align: center;">0.950</td><td style="text-align: center;">1.120</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td></tr></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">DT/OT&E.</div>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.000	0.950	1.120	RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	0.000	0.950	1.120												
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 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;">0.000</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></tr></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">Spiral Development</div>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.000	2.398	0.000	RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	0.000	2.398	0.000												
RDT&E Articles Quantity															

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 2927/2871/9361/9363/9209 Naval Fires Network	
B. Accomplishments/Planned Program (Cont.)			
	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	2.100	0.950	1.148
RDT&E Articles Quantity			
Acquisition Strategy, AoA, TEMP and other required Acquisition Documentation, Technical Data Collector			
	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	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.			
	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	2.100	0.000	0.000
RDT&E Articles Quantity			
Provides onboard ship and integrated logistics support			

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2004												
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 2927/2871/9361/9363/9209 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 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;">0.805</td><td style="text-align: center;">4.225</td><td style="text-align: center;">3.465</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td></tr></tbody></table>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.805	4.225	3.465	RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	0.805	4.225	3.465												
RDT&E Articles Quantity															
<div style="border: 1px solid black; padding: 5px;">Rqmts Definition - System Eng, Config Mgt, Architecture Support</div>															
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></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;">1.047</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></tr></tbody></table>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	1.047	0.000	0.000	RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	1.047	0.000	0.000												
RDT&E Articles Quantity															
<div style="border: 1px solid black; padding: 5px;">Begin software development of a Semi-Automated Imagery Intelligence (IMINT) Processing Program design.</div>															

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 2927/2871/9361/9363/9209 Naval Fires Network

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget: (FY 04 Pres Controls)	44.374	14.733	8.712
Current BES/President's Budget (FY 05 President Controls)	32.564	19.711	8.663
Total Adjustments	-11.810	4.978	-0.049
Summary of Adjustments			
SBIR Withholds	-0.990		
BTR	-0.222		
BSO Adjustment	0.402		
NWCF Rates			-0.035
Management Improvements		-0.053	
Effeciency Revisions		-0.169	
PBD 430 WCF			0.004
PBD 426 Rates			0.010
PBD 604 Inflation			-0.028
P-3 Ground Station Congressional Add		1.700	
Integrated Deepwater System Earmark	-11.000		
LSAS Adjunct to TES-N Congressional Add		2.500	
TDM Congressional Add		1.000	
Subtotal	-11.810	4.978	-0.049

Schedule:

N/A

Technical:

N/A

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4			PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME 2927/2871/9361/9363/9209 Naval Fires Network			
D. OTHER PROGRAM FUNDING SUMMARY:									
<u>Line Item No. & Name</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>
Naval Fires Control System/ 511200	0	24.0	4.8	4.9	4.9	28.0	23.1	CONT	89.7
Littoral Surveillance System/812000	13.7								
E. ACQUISITION STRATEGY:									
The Joint Fires Network (JFN) 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 JFN support of Navy Network Centric Warfare Time Critical Targeting. <input type="checkbox"/>									
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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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 58 of 65)

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-4			0603795N/Land Attack Technology			2927/2871/9361/9363/9209 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	IP	SAF/FMB/OLE (Air Force)	26.604	15.579	11/02	2.472	11/03			0.000	44.655	
Ancillary Hardware Development	WX	NAWC, China Lake, CA	8.800	2.800	11/02	0.988	11/03			0.000	12.588	
Component Development	VAR	VARIOUS		1.245	11/02	5.893	11/03			0.000	7.138	
Ship Integration	WR	NSWC PHD, Pt. Hueneme, CA	1.270							0.000	1.270	
Ship Suitability												
Systems Engineering	WX	VARIOUS		2.355	11/02	4.225	11/03	3.465	11/04	Continuing	Continuing	
Training Development	WX	VARIOUS	1.100	1.600	11/02					0.000	2.700	
Licenses												
Tooling												
GFE	IP	SAF/FMB/OLE (Air Force)	2.000							0.000	2.000	
Award Fees												
Subtotal Product Development			39.774	23.579		13.578		3.465		Continuing	Continuing	
Remarks:												
Development Support	MIPR	Various		1.034	11/02	1.010	11/03	0.250	11/04	Continuing	Continuing	
Software Development	VAR	Various	2.100	1.659	11/02	2.398	11/03			0.000	6.157	
Software Development (SAIP)	IP	SAF/FMB/OLE (Air Force)	0.000	1.047	03/03					0.000	1.047	
Training Development	VAR	Various	2.830							0.000	2.830	
Integrated Logistics Support	WX/IP	Various		2.100	11/02					0.000	2.100	
Configuration Management												
Technical Data	WX/MIPR	Various	0.950	2.100	11/02	0.950	11/03	1.148	11/04	Continuing	Continuing	
GFE	VAR	Various	0.600							0.000	0.600	
Award Fees												
Subtotal Support			6.480	7.940		4.358		1.398		Continuing	Continuing	
Remarks:												

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, Page 59 of 65)

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY RD&E, N / BA-4			PROGRAM ELEMENT 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME 2927/2871/9361/9363/9209 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	WX/MIPR	VAR	0.350			0.475	11/03	0.560	11/04	Continuing	Continuing	
Operational Test & Evaluation	WX/MIPR	VAR				0.475	11/03	0.560	11/04	Continuing	Continuing	
Live Fire Test & Evaluation	WX/MIPR	VAR	5.266	0.345	02/03			1.780	11/04	Continuing	Continuing	
Test Assets												
Tooling												
GFE												
Award Fees												
Subtotal T&E			5.616	0.345		0.950		2.900		Continuing	Continuing	
Remarks:												
Contractor Engineering Support												
Government Engineering Support												
Program Management Support	IP	VAR , VA	1.992	0.700	11/02	0.825	11/03	0.900	11/04	Continuing	Continuing	
Travel	PD	NAVSEA HQ	0.350							0.000	0.350	
Labor (Research Personnel)												
SBIR Assessment												
Subtotal Management			2.342	0.700		0.825		0.900		Continuing	Continuing	
Remarks:												
Total Cost			54.212	32.564		19.711		8.663		Continuing	Continuing	
Remarks:												

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Exhibit R-3, Project Cost Analysis
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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)							DATE: February 2004					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N/ERF,D			0603795N/Land Attack Technology			3090/1010 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	WR/MIPR	SAF/FMB/OLE (Air Force)	27.498							0.000	27.498	
Ancillary Hardware Development	WR	NAWC China Lake	3.000							0.000	3.000	
Aircraft Integration												
Ship Integration	WR	NSWC PHD, Pt. Hueneme, CA	5.793							0.000	5.793	
Ship Suitability												
Systems Engineering												
Training Development												
Licenses												
Tooling												
GFE												
Award Fees												

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Exhibit R-3, Project Cost Analysis
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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N/ERF,D			PROGRAM ELEMENT 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME 3090/1010 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												
Operational Test & Evaluation		Various	13.133							0.000	13.133	
Live Fire Test & Evaluation	CPFF/IF/A	Various	2.551							0.000	2.551	
Test Assets												
Tooling												
GFE												
Award Fees												
Subtotal T&E			15.684	0.000		0.000		0.000		0.000	15.684	
Remarks:												
Contractor Engineering Support			13.683							0.000	13.683	
Government Engineering Support			0.260							0.000	0.260	
Program Management Support			3.514							0.000	3.514	
Travel												
Transportation												
SBIR Assessment												
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
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Exhibit R-4, Schedule Profile
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CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT 0603795N/Land Attack Technology				PROJECT NUMBER AND NAME 2927/2871/9361/9363/9209 Naval Fires Network		
Schedule Profile	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Fleet Experiments							
Millenium Challenge '02 (MC02)							
Emergency Deployments							
ASN Deployment Approval							
LINCOLN Install							
COMFIFTHFLT Install							
BLUE RIDGE Install							
Continuing Installs on all Deploying CVN, LHA, LHD	1Q-4Q	1Q					
RTC installations on deployers							
Spiral development (Migrationto Converged Architecture)							
Spiral 1A							
Spiral 1B							
Spiral 2	1Q-3Q						
Spiral 3	4Q						
Acquisition Program							
Mission Needs Statement (MNS)							
ORD/CRD	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
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