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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE								
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>			PE 0603795N: <i>Land Attack Tech</i>								
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	9.733	0.905	0.421	-	0.421	0.427	0.340	0.284	0.291	Continuing	Continuing
2325: <i>Naval Fires Control System</i>	1.166	0.905	0.421	-	0.421	0.427	0.340	0.284	0.291	Continuing	Continuing
9999: <i>Congressional Adds</i>	8.567	-	-	-	-	-	-	-	-	0.000	8.567

A. Mission Description and Budget Item Justification

The Naval Fires Control System (NFCS) (Project 2325) - Automates shipboard land attack battle management duties to be interoperable and consistent with joint C4ISR systems. This shipboard system will significantly improve the Navy's ability to support Operational Maneuver from the Sea (OMFTS).

76mm Swarmbuster Capability (Project 9D60A) - (FY10) Supports efforts to integrate the MK 75 with Close-In Weapons System (CIWS) for ASuW capability against swarming boats.

Hybrid Propellant for Medium and Large Caliber Ammunition (Project 10C130) - (FY10) Propellant and primer technologies developed under this add will be integrated into future acquisitions of Navy propelling charges.

MK38 MOD 2 at Sea Testing (Project 10C204) - (FY10) Funding supports demonstration of the feasibility/suitability of integrating a 10KW laser onto the MK38 Mod 2 Machine Gun System.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	6.809	0.905	0.548	-	0.548
Current President's Budget	9.733	0.905	0.421	-	0.421
Total Adjustments	2.924	-	-0.127	-	-0.127
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	2.991	-			
• SBIR/STTR Transfer	-0.042	-			
• Program Adjustments	-	-	-0.077	-	-0.077
• Section 219 Reprogramming	-0.025	-	-	-	-
• Rate/Misc Adjustments	-	-	-0.050	-	-0.050

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 1319: *Research, Development, Test & Evaluation, Navy*
 BA 4: *Advanced Component Development & Prototypes (ACD&P)*

R-1 ITEM NOMENCLATURE
 PE 0603795N: *Land Attack Tech*

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 9999: *Congressional Adds*

Congressional Add: *Hybrid Propellant for Medium and Large Caliber Ammunition*

Congressional Add: *MK 38 MOD 2 AT SEA TESTING*

Congressional Add: *76mm Swarbuster Capability*

Congressional Add Subtotals for Project: 9999

Congressional Add Totals for all Projects

	FY 2010	FY 2011
	3.983	-
	2.991	-
	1.593	-
Congressional Add Subtotals for Project: 9999	8.567	-
Congressional Add Totals for all Projects	8.567	-

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603795N: <i>Land Attack Tech</i>	PROJECT 2325: <i>Naval Fires Control System</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
2325: <i>Naval Fires Control System</i>	1.166	0.905	0.421	-	0.421	0.427	0.340	0.284	0.291	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Naval Fires Control System (NFCS) covers the mission planning and coordination for current and future Naval Surface Fire Support system requirements. NFCS plans, coordinates and manages the firing of Naval Surface Fires Support (NSFS) weapon systems including the 5"/62 caliber gun and Conventional Munitions. The NFCS phase I is interfacing with the Advanced TOMAHAWK Weapons Control Systems (ATWCS) and the Tactical TOMAHAWK Weapons Control Systems (TTWCS) in order for NFCS to share the Advanced Tactical Display Console (ATDC) with ATWCS and TTWCS. 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.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2010	FY 2011	FY 2012
<p>Title: Software/System Engineering</p> <p align="right">Articles:</p> <p>FY 2010 Accomplishments: Funding provided 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.</p> <p>FY 2011 Plans: Funding will provide 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.</p> <p>FY 2012 Plans: Funding will provide 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.</p>	0.632 0	0.665 0	0.296 0
<p>Title: Technical Design Agent</p> <p align="right">Articles:</p> <p>FY 2010 Accomplishments: Funding provided Technical Design Agent (TDA) support, joint requirements investigation and Concept of Operations (CONOPs) scenario development.</p> <p>FY 2011 Plans:</p>	0.100 0	0.100 0	0.050 0

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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603795N: <i>Land Attack Tech</i>		PROJECT 2325: <i>Naval Fires Control System</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2010
				FY 2011
				FY 2012
Funding will provide Technical Design Agent support, joint requirements investigation and Concept of Operations (CONOPs) scenario development.				
FY 2012 Plans: Funding will provide Technical Design Agent support, joint requirements investigation and Concept of Operations (CONOPs) scenario development.				
Title: C4I Systems				
				Articles:
				0.200
				0.140
				0.075
				0
				0
				0
FY 2010 Accomplishments: Funding provided continued support for C4I and combat system interface investigation and analysis in relation to developing C4I systems and technologies.				
FY 2011 Plans: Funding will provide continued support for C4I and combat system interface investigation and analysis in relation to developing C4I systems and technologies.				
FY 2012 Plans: Funding will provide continued support for C4I and combat system interface investigation and analysis in relation to developing C4I systems and technologies.				
Title: Logistic Support				
				Articles:
				0.100
				-
				-
				0
FY 2010 Accomplishments: Funding supports developmental test and evaluation, and logistics support elements development.				
Title: Operational Development				
				Articles:
				0.134
				-
				-
				0
FY 2010 Accomplishments: Funding supports operational test and evaluation, and logistics support element developments.				
Accomplishments/Planned Programs Subtotals				1.166
				0.905
				0.421

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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>			<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To</u>	
			<u>Base</u>	<u>OCO</u>	<u>Total</u>					<u>Complete</u>	<u>Total Cost</u>
• 5112: <i>OPN</i>	1.387	1.086	2.049	0.000	2.049	3.516	1.301	1.327	1.048	0.000	11.714

D. Acquisition Strategy

A sole source contract was awarded to GDIS for Phase 1 software development. NSWC/DD took over this function from GDIS and will remain the software developer. The original hardware manufacturer and developer is NUWC, Keyport.

E. Performance Metrics

Quarterly Program Reviews and semi-annual Product Certification Panel Reviews.

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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	8.567	-	-	-	-	-	-	-	-	0.000	8.567
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Project 9D60A
76mm Swarmbuster Capability - FY10 \$1,593K
Continue efforts to integrate the MK 75 with Close-In Weapons System (CIWS) for ASuW capability against swarming boats.

Project 10C130
Hybrid Propellant for Medium and Large Caliber Ammunition - FY10 \$3,983K
Propellant and primer technologies developed under this add will be integrated into future acquisitions of Navy propelling charges.

Project 10C204
MK38 Mod 2 at Sea Testing - FY10 \$2,991K
Funding supports demonstration of the feasibility/suitability of integrating a 10KW laser onto the MK38 Mod 2 Machine Gun System.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2010	FY 2011
Congressional Add: Hybrid Propellant for Medium and Large Caliber Ammunition	3.983	-
FY 2010 Accomplishments: USN qualification of Hybrid Propellant that meets Navy goals and capability requirements.		
Congressional Add: MK 38 MOD 2 AT SEA TESTING	2.991	-
FY 2010 Accomplishments: Demonstrate laser beam director integration onto a MK 38 Mod 2 Machine Gun System (MGS) that is capable of pointing, stabilizing, and firing a 10KW laser. This effort will produce a feasibility report exploring integration platforms.		
Congressional Add: 76mm Swarmbuster Capability	1.593	-
FY 2010 Accomplishments: Continue supporting development and testing of system to support integration of MK 75 with CIWS.		
Congressional Adds Subtotals	8.567	-

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C. Other Program Funding Summary (\$ in Millions)

N/A

D. Acquisition Strategy

Congressional Add.

E. Performance Metrics

Quarterly Program Reviews.