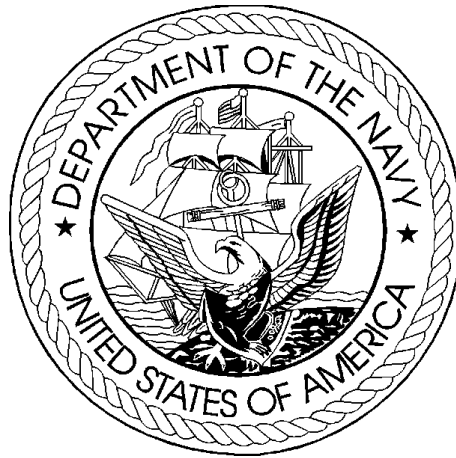


DEPARTMENT OF THE NAVY
FISCAL YEAR (FY) 2011
BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES
FEBRUARY 2010

RESEARCH, DEVELOPMENT, TEST & EVALUATION,
NAVY
BUDGET ACTIVITY 6

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Navy • President's Budget FY 2011 • RDT&E Program

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Department of Defense Appropriations Act, 2011

Research, Development, Test and Evaluation, Navy

For expenses necessary for basic and applied scientific research, development, test and evaluation, including maintenance, rehabilitation, lease, and operation of facilities and equipment, \$17,693,496,000, to remain available for obligation until September 30, 2012.

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Department of the Navy
 FY 2011 President's Budget
 Exhibit R-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request
 Summary
 (Dollars in Thousands)

19 Jan 2010

Summary Recap of Budget Activities -----	FY 2009 (Base & OCO) -----	FY 2010 Base & OCO Enacted -----	FY 2010 Supplemental Request -----	FY 2010 Total -----	FY 2011 Base -----	FY 2011 OCO -----	FY 2011 Total Request -----
RDT&E Management Support	1,350,224	994,787	1,461	996,248	849,242	5,200	854,442
Total Research, Development, Test & Eval, Navy	1,350,224	994,787	1,461	996,248	849,242	5,200	854,442
Summary Recap of FYDP Programs -----							
Intelligence and Communications	1,993	2,454		2,454	1,859		1,859
Research and Development	1,343,191	988,153	1,461	989,614	843,123	5,200	848,323
Training Medical and Other	4,983	4,180		4,180	4,260		4,260
Administration and Associated Activities	57						
Total Research, Development, Test & Eval, Navy	1,350,224	994,787	1,461	996,248	849,242	5,200	854,442

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Department of the Navy
FY 2011 President's Budget
Exhibit R-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request
(Dollars in Thousands)

Appropriation: 1319N Research, Development, Test & Eval, Navy

Date: 19 Jan 2010

Line No --	Program Element Number -----	Item -----	Act ---	FY 2009 (Base & OCO) -----	FY 2010 Base & OCO Enacted -----	FY 2010 Supplemental Request -----	FY 2010 Total -----	FY 2011 Base -----	FY 2011 OCO -----	FY 2011 Total Request -----	S e c -
140	0604256N	Threat Simulator Development	06	24,114	27,021		27,021	18,755		18,755	U
141	0604258N	Target Systems Development	06	76,018	79,273		79,273	66,066		66,066	U
142	0604759N	Major T&E Investment	06	51,167	51,629		51,629	37,522		37,522	U
143	0605152N	Studies and Analysis Support - Navy	06	14,817	12,321		12,321	8,149		8,149	U
144	0605154N	Center for Naval Analyses	06	46,050	44,399		44,399	49,165		49,165	U
145	0605502N	Small Business Innovative Research	06	402,074	1,593		1,593				U
146	0605804N	Technical Information Services	06	16,023	20,749		20,749	662		662	U
147	0605853N	Management, Technical & International Support	06	49,255	60,181		60,181	58,329		58,329	U
148	0605856N	Strategic Technical Support	06	3,504	3,618		3,618	3,451		3,451	U
149	0605861N	RDT&E Science and Technology Management	06	70,089	70,648		70,648	72,094		72,094	U
150	0605863N	RDT&E Ship and Aircraft Support	06	172,492	192,551	1,461	194,012	95,332		95,332	U
151	0605864N	Test and Evaluation Support	06	350,514	369,154		369,154	376,418		376,418	U
152	0605865N	Operational Test and Evaluation Capability	06	12,044	11,960		11,960	15,746		15,746	U
153	0605866N	Navy Space and Electronic Warfare (SEW) Support	06	2,686	2,659		2,659	4,013	5,200	9,213	U
154	0605867N	SEW Surveillance/Reconnaissance Support	06	25,221	20,747		20,747	19,700		19,700	U

Exhibit R-1G: FY 2011 President's Budget (Published), as of January 19, 2010 at 15:26:10

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Department of the Navy
 FY 2011 President's Budget
 Exhibit R-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request
 (Dollars in Thousands)

Appropriation: 1319N Research, Development, Test & Eval, Navy

Date: 19 Jan 2010

Line No --	Program Element Number -----	Item -----	Act ---	FY 2009 (Base & OCO) -----	FY 2010 Base & OCO Enacted -----	FY 2010 Supplemental Request -----	FY 2010 Total -----	FY 2011 Base -----	FY 2011 OCO -----	FY 2011 Total Request -----	S e c -
155	0605873M	Marine Corps Program Wide Support	06	27,123	19,650		19,650	17,721		17,721	U
156	0305885N	Tactical Cryptologic Activities	06	1,993	2,454		2,454	1,859		1,859	U
157	0804758N	Service Support to JFCOM, JNTC	06	4,983	4,180		4,180	4,260		4,260	U
158	0909999N	Financing for Cancelled Account Adjustments	06	57							U
		RDT&E Management Support		1,350,224	994,787	1,461	996,248	849,242	5,200	854,442	
		Total Research, Development, Test & Eval, Navy		1,350,224	994,787	1,461	996,248	849,242	5,200	854,442	

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Navy • President's Budget FY 2011 • RDT&E Program

Program Element Table of Contents (by Budget Activity then Line Item Number)

Budget Activity 06: RDT&E Management Support

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141	06	0604258N	Target Systems Development.....	17
142	06	0604759N	Major T&E Investment.....	31
143	06	0605152N	Studies & Analysis Supt - Navy.....	43
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145	06	0605502N	Small Business Innovative Research.....	65
146	06	0605804N	Technical Information Services.....	99
147	06	0605853N	Management, Technical & Intl Supt.....	109
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149	06	0605861N	RDT&E Science & Tech Mgmt.....	149
150	06	0605863N	RDT&E Ship & Aircraft Support.....	157
151	06	0605864N	Test & Evaluation Support.....	169
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153	06	0605866N	Navy Space & Electr Warfare Supt.....	207
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Navy • President's Budget FY 2011 • RDT&E Program

Budget Activity 06: RDT&E Management Support

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Navy • President's Budget FY 2011 • RDT&E Program

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Program Element Title	Program Element Number	Line Item	Budget Activity	Page
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Major T&E Investment	0604759N	142	06.....	31
Management, Technical & Intl Supt	0605853N	147	06.....	109
Marine Corps Program Wide Supt	0605873M	155	06.....	223
Navy Space & Electr Warfare Supt	0605866N	153	06.....	207
Operational Test & Eval Capability	0605865N	152	06.....	199
RDT&E Science & Tech Mgmt	0605861N	149	06.....	149
RDT&E Ship & Aircraft Support	0605863N	150	06.....	157
Service Support To JFCOM, JNTC	0804758N	157	06.....	251
Small Business Innovative Research	0605502N	145	06.....	65
Space & Elec War Surv/Recon	0605867N	154	06.....	217
Strategic Technical Support	0605856N	148	06.....	143
Studies & Analysis Supt - Navy	0605152N	143	06.....	43
Tactical Cryptologic Activities	0305885N	156	06.....	247
Target Systems Development	0604258N	141	06.....	17
Technical Information Services	0605804N	146	06.....	99
Test & Evaluation Support	0605864N	151	06.....	169

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Navy • President's Budget FY 2011 • RDT&E Program

Program Element Title	Program Element Number	Line Item	Budget Activity	Page
Threat Simulator Development	0604256N	140	06.....	1

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0604256N: Threat Simulator Development							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	24.114	27.021	18.755	0.000	18.755	20.448	18.694	14.831	15.120	Continuing	Continuing
0602: Eletronics W/F Env Simulation (ECHO)	11.720	12.479	7.955	0.000	7.955	8.264	7.782	7.802	7.797	Continuing	Continuing
0672: Effect Nav E/W (ENEWS)	12.394	12.949	10.800	0.000	10.800	12.184	10.912	7.029	7.323	Continuing	Continuing
9999: Congressional Adds	0.000	1.593	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.593
A. Mission Description and Budget Item Justification											
This is a continuing program that consolidates the design, fabrication and integration of Naval Electronic Warfare (EW) threat simulators for increased managerial emphasis and coordination. These simulator development efforts provide realistic Developmental and Operational Test and Evaluation (DT&E/OT&E) environments to test Tri-service EW systems and defensive tactics. These projects develop former Soviet and Free-World Anti-Air and Anti-Ship weapon system simulators in accordance with the Services' requirements.											
The 0602 Project, Electronic Warfare Environment Simulation (ECHO), directly supports the Test and Evaluation resource requirements for all Naval Air EW development programs to include multi-spectral situational awareness and countermeasures. Programs in development and future programs include: Advanced Anti-Radiation Guided Missile (AARGM), ALR-67 (v) 2 and (v) 3, Integrated Defensive Electronic Countermeasures (IDECM) Suite ALQ-214, AAR-47 (v) 2 and the AAR-47 (v) 3, AVR-2, Advanced 6" Expendable, Advanced Strategic Tactical Expendable (ASTE), ALQ-144A, Joint and Allied Threat Awareness System (JATAS), Strike and Assault Directed Infrared Countermeasures (DIRCM), Joint Strike Fighter, EA-18G, LR700, Low Band Transmitter, P-8A, and the Next Generation Jammer (NGJ).											

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		PE 0604256N: Threat Simulator Development			
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	24.714	25.534	0.000	0.000	0.000
Current President's Budget	24.114	27.021	18.755	0.000	18.755
Total Adjustments	-0.600	1.487	18.755	0.000	18.755
• Congressional General Reductions		-0.113			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		1.600			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-0.600	0.000			
• Program Adjustments	0.000	0.000	18.755	0.000	18.755
Congressional Add Details (\$ in Millions, and Includes General Reductions)					
Project: 9999: Congressional Adds					
Congressional Add: Navy Advanced Threat Simulator					
Congressional Add Subtotals for Project: 9999					
Congressional Add Totals for all Projects					
Change Summary Explanation					
Technical: Not applicable.					
Schedule: Not applicable.					
FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0604256N: <i>Threat Simulator Development</i>				PROJECT 0602: <i>Eletronics W/F Env Simulation (ECHO)</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0602: <i>Eletronics W/F Env Simulation (ECHO)</i>	11.720	12.479	7.955	0.000	7.955	8.264	7.782	7.802	7.797	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification <p>The objective of this project is development of necessary simulation facilities and approaches to allow determination of the effectiveness of Electronic Warfare (EW) in real world engagement situations and to support the introduction of modern, effective systems into Naval Aviation. The heavy use of test resources by all Services demonstrates the importance of these assets. The Navy has been very successful in executing all of its major programs, and to date has had no major technical problems.</p> <p>The Electronic Warfare Environment Simulation (ECHO) project is unique because it is the only program within the Department of Defense (DoD) which develops and provides Naval anti-air warfare threat assets for Testing and Evaluation (T&E), and is a critical part of the Office of the Secretary of Defense (OSD) Test Resource Master Plan. The OSD Master Plan employs many ECHO project resources for planning, analysis, testing, and verification of airborne EW equipment.</p> <p>This project directly supports the Test and Evaluation resource requirements for all Naval Air EW development programs, to include multi-spectral situational awareness and countermeasures. Programs in development and future programs include: Advanced Anti-Radiation Guided Missile (AARGM), ALR-67 (v) 2 and (v) 3, Integrated Defensive Electronic Countermeasures (IDECM) Suite ALQ-214, AAR-47 (v) 2 and the AAR-47 (v) 3, AVR-2, Advanced 6" Expendable, Advanced Strategic Tactical Expendable (ASTE), ALQ-144A, Joint and Allied Threat Awareness System (JATAS), Strike and Assault Directed Infrared Countermeasures (DIRCM), Joint Strike Fighter, EA-18G, LR700, Low Band Transmitter (LBT), P-8A, and the Next Generation Jammer (NGJ).</p> <p>This project provides for the development of an Integrated Air Defense T&E capability to be fielded at each of the three sites comprising the Navy's Tri-Center complex: Naval Air Warfare Center Weapons Division, China Lake and Point Mugu in CA, and Naval Air Warfare Center Aircraft Division, Patuxent River, MD.</p> <p>This project unit includes \$.060 million for the Defense Acquisition Development Fund (DAWDF) in FY 2009.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0604256N: Threat Simulator Development		PROJECT 0602: Eletronics W/F Env Simulation (ECHO)	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
ELECTRO-OPTICAL/INFRA-RED (EO/IR) THREAT CAPABILITIES Provide the test community with the modern threat systems necessary for T&E of airborne EO/IR passive alert systems and airborne EO/IR active response systems. Funding decreases from FY 2009 to FY 2010, and FY 2011 based on the priority of the test requirement. Funding for the EO/IR effort decreases due to the completion of the MvM portions of the ICAS in FY09 and the Reactive Plume Simulator (RPS) in FY 2010. These systems will support testing for the Joint and Allied Threat Awareness System (JATAS), Assault DIRCM and other Navy programs. FY 2009 Accomplishments: - Continued the development the Reactive Plume Simulator (RPS). - Completed the development of Many versus Many (MvM) Infrared Countermeasure Assessment System (ICAS). FY 2010 Plans: - Complete the development of the Reactive Plume Simulator (RPS). - Initiate the development of Advanced Imaging Infra-Red (IIR) Seeker. FY 2011 Base Plans: - Complete the development of Advanced Imaging Infra-Red (IIR) Seeker.	1.529	0.950	0.550	0.000	0.550
RADIO FREQUENCY (RF) THREAT CAPABILITIES Provide the test community with the modern threat systems necessary for T&E of airborne RF alert, Situation Awareness, targeting systems and airborne RF response systems. Funding for the RF effort increases from FY 2009 to FY 2010 due to the need to address double digit threat systems (I-32 Transmitter, I-34, and J-32B), and to start development of another high priority long range threat system. Funding decreases from FY 2010 to FY2011 because project completions and	8.229	9.633	6.426	0.000	6.426

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0604256N: Threat Simulator Development		PROJECT 0602: Eletronics W/F Env Simulation (ECHO)		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
phasing of continuing project to align with program schedules. These systems are required to test the Joint Strike Fighter, EA-18G, Next Generation Jammer, and other Navy platforms.						
FY 2009 Accomplishments: <ul style="list-style-type: none">- Continued the upgrade of the existing open air range threat simulator to provide a new generation, high fidelity double digit threat I-34 (Advanced Threat Simulator).- Continued the procurement and integration of an advanced threat system through Foreign Materials Acquisition channels.- Continued the upgrade of the I-32 open air simulator by replacing the transmitter.- Continued intel updates to missile, radar, and gun simulations.						
FY 2010 Plans: <ul style="list-style-type: none">- Complete the upgrade of the existing open air range threat simulator to provide a new generation, high fidelity double digit threat I-34 (Advanced Threat Simulator).- Complete the procurement and integration of an advanced threat system through Foreign Materials Acquisition channels.- Complete the upgrade of the I-32 open air simulator by replacing the transmitter.- Complete intel updates to missile, radar, and gun simulations.- Initiate the development of the long range threat systems in laboratories.- Initiate the upgrade to the J-32B Advanced Threat System at Electronic Combat Range (ECR).- Initiate the development of an Advanced Early Warning and Acquisition (EW/ACQ) radar hybrid laboratory simulator.						
FY 2011 Base Plans: <ul style="list-style-type: none">- Continue the development of the long range threat systems in laboratories.- Continue the upgrade to the J-32B Advanced Threat System at Electronic Combat Range (ECR).- Continue the development of an Advanced Early Warning and Acquisition (EW/ACQ) radar hybrid laboratory simulator.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0604256N: Threat Simulator Development		PROJECT 0602: Eletronics W/F Env Simulation (ECHO)	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
REQUIREMENTS AND VALIDATION Validate and track intel updates of the threat systems necessary for the operation and continuous improvement of Navy laboratories and ranges which provide engineering support, testing and analysis to the developers, integrators, testers and users of systems and technologies that counter or penetrate air defenses. Funding decreases from FY 2010 to FY2011 based on the priority of the test requirements Requirements assimilation and project management activities will be reduced to correspond with fewer executing projects. FY 2009 Accomplishments: - Continued to provide program management, systems engineering, and requirements identification for the development of simulators and foreign material acquisition. - Continued to validate simulators and stimulators at the Navy tri-lab centers. FY 2010 Plans: - Continue to provide program management, systems engineering, and requirements identification for the development of simulators and foreign material acquisition. - Continue to validate simulators and stimulators at the Navy tri-lab centers. FY 2011 Base Plans: - Continue to provide program management, systems engineering, and requirements identification for the development of simulators and foreign material acquisition. - Continue to validate simulators and stimulators at the Navy tri-lab centers.	1.902	1.896	0.979	0.000	0.979
DAWDF REALIGNMENT FY 2009 Accomplishments: - DAWDF Realignment.	0.060	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0604256N: <i>Threat Simulator Development</i>		PROJECT 0602: <i>Eletronics W/F Env Simulation (ECHO)</i>	
B. Accomplishments/Planned Program (\$ in Millions)					
				FY 2009	FY 2010
				FY 2011 Base	FY 2011 OCO
				FY 2011 Total	
Accomplishments/Planned Programs Subtotals				11.720	12.479
				7.955	0.000
				7.955	
C. Other Program Funding Summary (\$ in Millions) N/A					
D. Acquisition Strategy Not Applicable.					
E. Performance Metrics Successfully achieve Initial Operational Capability of Navy Threat Simulation projects within 60 days of approved schedule and have test capabilities scheduled in support of Navy test programs within 180 days.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0604256N: <i>Threat Simulator Development</i>				PROJECT 0672: <i>Effect Nav E/W (ENEWS)</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0672: <i>Effect Nav E/W (ENEWS)</i>	12.394	12.949	10.800	0.000	10.800	12.184	10.912	7.029	7.323	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification <p>The objective of the Effectiveness of Navy Electronic Warfare (EW) Systems (ENEWS) Project is the development and application of necessary simulation assets to determine the effectiveness of EW for Navy ships in simulated real-world engagement situations. The project primarily supports the introduction of modern, effective shipboard and offboard EW systems, and tactics for the Surface Navy. The heavy use of ENEWS resources by Naval Sea Systems Command, Operational Test and Evaluation (OT&E) Force, Special Operations, and other EW Research, Development, Test and Evaluation (T&E) agencies speaks to the overall importance of this project. The project provides support for EW system design Engineering Test (ET), Development Test (DT), Operational Test (OT), and the development of utilization tactics. Its quick reaction capabilities have had great impact on crisis situations such as the Lebanon and Libyan crises, Iran Harpoon threat, Persian Gulf crisis, and Operation Desert Shield/Storm. Simulation Display is another ENEWS modeling tool that was developed to support T&E. The display has been adopted by most Department of Defense (DoD) T&E and training ranges to provide visualization of T&E and training scenarios. The primary threat to surface ships is Anti-Ship Capable Missile systems. The ENEWS Project is unique in that it is the only project within DoD dedicated to developing and providing realistic Anti-Ship Capable Missile assets to test and evaluate the effectiveness of shipboard EW systems and tactics against these type threats. The ENEWS Project is a critical part of the Office of the Secretary of Defense Test Resource Master Plan. This plan employs many of the ENEWS assets for planning, analysis, testing, and verification of shipboard and offboard EW systems techniques and tactics. As part of its normal activities, ENEWS provides Development Test and Evaluation (DT&E), OT&E, and Follow-on Operational Test and Evaluation (FOT&E) support to the surface Navy for all ship classes. DT, OT and FOT&E support includes AN/SLQ-32 Surface Electronic Warfare Improvement Program (SEWIP), R17.OX NULKA, Rapid Anti-ship Integrated Defense System, all MK245 Giant tests, advanced InfraRed (IR) decoys, decoy placement, ship IR signature and radar cross section measurement of DDG-51, LPD-17, DD-21 and PC class ships, High Power Microwave program, and other ship self-defense initiatives, including T&E of Future Naval Capability process. In addition, ENEWS assets are regularly employed to test the effectiveness of North Atlantic Treaty Organization ships' EW systems in joint allied exercises. ENEWS assets also support Joint EW exercises that are conducted with Rim of the Pacific (RIMPAC) nations.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
CLASSIFIED PROGRAM						7.774	8.146	5.701	0.000	5.701	

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0604256N: Threat Simulator Development		PROJECT 0672: Effect Nav E/W (ENEWS)		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Details about this program are classified.						
Details about this program and any changes are classified.						
FY 2009 Accomplishments: - Details are of a higher classification.						
FY 2010 Plans: - Details are of a higher classification.						
FY 2011 Base Plans: - Details are of a higher classification.						
HARDWARE SIMULATION SYSTEMS		1.707	1.775	1.738	0.000	1.738
Maintain and perform Hardware and Software Upgrades to the inventory of ENEWS flyable and shore based Anti-Ship Capable Missile (ASCM) Electro-Optic/Infrared, Visible and Radio Frequency (RF) Simulators. Perform characterization of IR and RF simulators as part of periodic evaluation of simulation performance and collect performance data for comparison with previously recorded data. Development and maintenance of all simulator control panels.						
FY 2009 Accomplishments: - Continued annual maintenance on ENEWS simulators to support flight/shore based tests. - Continued and completed characterization of KILO, QUEBEC AND TANGO. - Continued and completed transition of the ROMEO simulator into the Naval Research Laboratory Learjet Electronics Pod (NRL LEP). - Completed intelligence upgrades to FOXTROT 2 and VICTOR 2 SIPs. - Completed software intelligence upgrades to FOXTROT 2 and VICTOR 2 SIPs. - Completed QUEBEC control panel.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0604256N: Threat Simulator Development		PROJECT 0672: Effect Nav E/W (ENEWS)		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<ul style="list-style-type: none">- Initiated and complete characterization of INDIA III and PAPA.- Initiated and complete transition of the INDIA III into the NRL LEP.- Initiated and complete VICTOR 1 SIP control panel. <p>Acquisition Workforce Fund:</p> <ul style="list-style-type: none">- Funded DoD Acquisition Workforce Fund. <p><i>FY 2010 Plans:</i></p> <ul style="list-style-type: none">- Continue all efforts of FY 2009, less those noted as completed above.- Initiate intelligence upgrades to MEIR 2-2, MEIR 3, SUMMIT simulators and the MIKE 2 & 3, and VICTOR 1 SIPs.- Initiate software intelligence upgrades to VICTOR 1 SIP and SUMMIT simulators.- Initiate and complete characterization of the TANGO simulator modified for the NRL LEP.- Initiate transition of the TANGO simulator into the NRL LEP- Initiate and complete the INDIA I control panel. <p><i>FY 2011 Base Plans:</i></p> <ul style="list-style-type: none">- Continue all efforts of FY 2010- Complete intelligence upgrades to MEIR 2-2, MEIR 3 simulators the MIKE 2 & 3 SIPs.- Complete transition of the TANGO simulator into the NRL LEP- Initiate software intelligence upgrades to the towed FOXTROT 3 simulator.						
SIMULATION VALIDATION AND REQUIREMENTS Provides for the validation of hardware simulators and digital models. Develops reports that contain detailed descriptions and parametric data of the threat simulators or digital models and compares the simulator's parametric data to the actual threats parametric data. Provide technical management functions in support of the ENEWS project; engineering and technical support requirements for the overall efforts of ASCM simulator and digital model development to meet DT/OT testing requirements,		1.047	0.946	0.985	0.000	0.985

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0604256N: Threat Simulator Development		PROJECT 0672: Effect Nav E/W (ENEWS)		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
development of detailed test resource requirements and provides an interface between N-912, N-433, Office of Naval Research and other ENEWS oversight activities.						
The decrease between FY 2009 and FY 2010 is due to only one validation report being initiated in FY 2010.						
FY 2009 Accomplishments: <ul style="list-style-type: none">- Continued management of the SVWG.- Continued INDIA I, PAPA and KILO hardware validation reports.- Completed NOVEMBER Vb and TANGO hardware validation reports and submitted to the SVWG.- Initiated and completed update of FY 2009 Program Management Plan.- Initiated and completed FY 2009 quarterly reports, earned value management analysis, progress tracking and analysis.						
FY 2010 Plans: <ul style="list-style-type: none">- Continue all efforts of FY 2009, less those noted as completed above.- Initiate MEIR 3 hardware validation report.- Initiate and complete update of FY 2010 Program Management Plan.- Initiate and complete FY 2010 quarterly reports, earned value management analysis, progress tracking and analysis.						
FY 2011 Base Plans: <ul style="list-style-type: none">- Continue all efforts of FY 2010, less those noted as completed above.- Complete INDIA I, PAPA, and KILO hardware validation reports.- Initiate QUESTION and UNIFORM hardware validation reports.- Initiate and complete update of FY 2011 Program Management Plan.- Initiate and complete FY 2011 quarterly reports, earned value management analysis, progress tracking and analysis.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0604256N: Threat Simulator Development		PROJECT 0672: Effect Nav E/W (ENEWS)	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SUPPORT AND COMPUTERS SIMULATION SYSTEMS	1.866	2.082	2.376	0.000	2.376
<p>Perform maintenance and intelligence upgrades to EO/IR, Digital, and RF Laboratory Simulation testing facilities and flight support equipment based on existing and emerging complex threat systems. Development of test and evaluation (T&E) scenarios and environmental modeling to support electronic support (ES) and electronic attack (EA) testing; modify ASCM Digital Models based on the latest intelligence data obtained from threat databases.</p> <p>The increase in the "Support and Computer Simulation Systems" Line between FY09 and FY10 is directly associated with upgrades and improvements to a technically challenging digital model. ENEWS personnel have developed numerous models of non-coherent radar missile seekers, but have minimal experience working with digital models of coherent radar missile seekers. ENEWS is initiating the development of upgrades and improvements for a coherent radar missile seeker digital model in FY10. This development will require additional resources to support the in-depth research required to obtain the detailed knowledge of coherent radar technology required to create a representative model.</p> <p>The increase between FY10 and FY11 is due to the continuation of the upgrades and improvements to the coherent radar missile seeker digital model, plus ENEWS is initiating the development of upgrades and improvements for a millimeter wave radar seeker digital model in FY11.</p> <p>The development of the millimeter wave radar digital model upgrades and improvements also ventures into an area where the ENEWS modelers have minimal experience; thus, this development will require additional resources to support the in-depth research required to obtain the detailed knowledge of millimeter wave radar technology required to create a representative model.</p> <p><i>FY 2009 Accomplishments:</i></p> <ul style="list-style-type: none">- Continued maintenance and upgrades to shore based test facilities and mobile test vans as required to conduct tests in support of SEWIP, NULKA and multi function Electronic Warfare (EW) programs.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0604256N: <i>Threat Simulator Development</i>		PROJECT 0672: <i>Effect Nav E/W (ENEWS)</i>		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<ul style="list-style-type: none"> - Continued transitioning NRL Codes 5750 and 5770's environmental, threat and platform simulations to the subversion software configuration management program. Upgraded subversion software library as new releases became available. - Continued new digital models of Anti-ship Cruise Missile (ASCM) threats as they became available. - Continued upgrades and maintenance of flight support systems as necessary to support the IR/RF ENEWS simulators. - Continued improvements and intelligence upgrades to ALPHA I, INDIA I, II, III, LIMA, NOVEMBER III, QUEBEC, TANGO, and TANGO II. In all, a total of 9 digital models. - Completed upgrade to cruise missile simulation suite to improve capability to model advanced threats by adding GUI. <p><i>FY 2010 Plans:</i></p> <ul style="list-style-type: none"> - Continue all efforts of FY 2009, less those noted as completed above. - Initiate improvements and intelligence upgrades to the COHERENT and FASM digital models. - Initiate intelligence updates and simulation productization for the Long Range High Altitude (LRHA) digital model. <p><i>FY 2011 Base Plans:</i></p> <ul style="list-style-type: none"> - Continue all efforts of FY 2010. - Initiate improvements and intelligence upgrades to the Millimeter Wave (mmW) digital models. 						
Accomplishments/Planned Programs Subtotals		12.394	12.949	10.800	0.000	10.800
C. Other Program Funding Summary (\$ in Millions) N/A						
D. Acquisition Strategy N/A						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604256N: <i>Threat Simulator Development</i>	PROJECT 0672: <i>Effect Nav E/W (ENEWS)</i>
<p>E. Performance Metrics</p> <p>Performance metrics are discussed within each project (R2a).</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0604256N: <i>Threat Simulator Development</i>				PROJECT 9999: <i>Congressional Adds</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	0.000	1.593	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.593
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Congressional Add.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010			
Congressional Add: Navy Advanced Threat Simulator							0.000	1.593			
<i>FY 2010 Plans:</i> Initiate the documentation survey required prior to developing a high priority threat simulator.											
Congressional Adds Subtotals							0.000	1.593			
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy Not required for Congressional Adds.											
E. Performance Metrics Not required for Congressional Adds.											

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				PE 0604258N: Target Systems Development							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	76.018	79.273	66.066	0.000	66.066	52.874	39.180	38.439	39.351	Continuing	Continuing
0609: Aerial Target System Dev	47.648	55.390	49.456	0.000	49.456	30.655	15.226	13.794	14.076	Continuing	Continuing
0610: Wpn Sys T&E Trng Dev/ Proc	26.068	22.671	15.190	0.000	15.190	20.788	22.499	23.157	23.757	Continuing	Continuing
0612: Surface Targets Development	2.302	1.212	1.420	0.000	1.420	1.431	1.455	1.488	1.518	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program element funds the development and procurement of aerial targets, sea surface targets, control systems, and associated target augmentation and auxiliary systems needed to represent real world threat systems. These capabilities are key enablers to the successful execution of the developmental and operational test and evaluation of naval combat weapons systems and to the satisfaction of advanced fleet training requirements.

This program element includes \$0.011 Million for the Acquisition Workforce in FY2009.

B. Program Change Summary (\$ in Millions)

	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>
Previous President's Budget	79.858	79.603	0.000	0.000	0.000
Current President's Budget	76.018	79.273	66.066	0.000	66.066
Total Adjustments	-3.840	-0.330	66.066	0.000	66.066
• Congressional General Reductions		-0.330			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	-1.496	0.000			
• SBIR/STTR Transfer	-2.345	0.000			
• Program Adjustments	0.000	0.000	66.066	0.000	66.066
• Rate/Misc Adjustments	0.001	0.000	0.000	0.000	0.000

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604258N: <i>Target Systems Development</i>	
<p><u>Change Summary Explanation</u></p> <p>Technical: Not applicable.</p> <p>Schedule: Not applicable.</p> <p>FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0604258N: <i>Target Systems Development</i>				PROJECT 0609: <i>Aerial Target System Dev</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0609: <i>Aerial Target System Dev</i>	47.648	55.390	49.456	0.000	49.456	30.655	15.226	13.794	14.076	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Aerial target systems, target control, and associated target augmentation and auxiliary systems are developed to support test & evaluation and advanced fleet training for Joint Strike and Littoral Warfare Systems required to defend fleet surface and air units in a hostile environment.

This project includes

- Subsonic Targets. Subsonic Aerial Target (SSAT) development. The SSAT primarily represents subsonic anti-ship cruise missile threats in direct support of the test & evaluation of major combat weapons systems programs and fleet training.
- Supersonic Targets. Supersonic Sea Skimming Target (SSST), Multi-Stage Supersonic Target (MSST) and supersonic high-diver capability development. The family of supersonic target capabilities represents supersonic anti-ship cruise missile threats in direct support of developmental & operational test and evaluation of major combat weapons systems programs in development.
- Target Control (TC) and Target Augmentation & Auxiliary Systems (TA/AS) development. TC provides command and control of targets to enable the execution of threat representative mission profiles. TA/AS enables each target to be uniquely configured for specific mission profiles. TA/AS configured targets are used for radar acquisition test, electronic countermeasures (jamming) evaluation, infrared measurement/test, radar cross section evaluation, decoy effectiveness, maneuver analysis, electronic warfare, warhead effectiveness and evaluation of fleet tactics. TA/AS scoring capabilities include both surface and airborne scalar and vector scoring systems.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Supersonic Aerial Targets	36.793	44.417	29.207	0.000	29.207
Multi-Stage Supersonic Target (MSST) emulates a two-stage Anti Ship Cruise Missile. The MSST will have a bus stage that will tumble and fall into the sea, and a sprint stage that continues flight to impact. The fielded system will provide threat representation in support of DOT and will identify deficiencies in shipboard air defense systems. Funding will continue GQM-163 SSST upgrades/					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0604258N: Target Systems Development		PROJECT 0609: Aerial Target System Dev		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
evolutionary development to keep pace with evolving threat characteristics. Efforts include continuing to establish operational capability at Pacific Missile Range Facility, developing performance envelope characteristics to include flight termination performance, and continuing development of high-diver capability. FY 2009 Accomplishments: Held Post Award Conference. Held program's Startup Workshop. Held program's System Requirements Review (SRR). Held a successful Management Systems Assessment and Schedule Risk Assessment. Participated in subcontractor's Integrated Baseline Review (IBR). Renegotiated SDD Contract for equitable adjustment necessitated by protest. Held IBR with Prime Contractor. Held a Program Management Review. FY 2010 Plans: Hold the program's Systems Functional Review. Hold the program's Systems Software Review. Hold the program's Preliminary Design Review. Participate in the Technology Assessment Review. Hold quarterly Program Management Reviews and hold quarterly Schedule Risk Assessments. FY 2011 Base Plans: Test the EEU #2 unit, Hold the program's Critical Design Review, T&E training to begin, Hold the program's Integrated Readiness Review, Hold the program's Technology Readiness Review, Hold quarterly Program Management Reviews, and Hold quarterly Schedule Risk Assessments.						
Subsonic Aerial Targets Continue Subsonic Aerial Target development to keep pace with evolving threat requirements. Incorporate configuration control requirements into RFP and System Engineering Plan. Conduct source selection for the Engineering and Manufacturing Development phase (EMD). Manage the execution of the EMD phase and conduct and support reviews and development decisions.		3.641	4.816	13.300	0.000	13.300

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0604258N: Target Systems Development		PROJECT 0609: Aerial Target System Dev		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: Defined requirements; developed RFP package.						
FY 2010 Plans: Release RFP, conduct source selection, and award contract.						
FY 2011 Base Plans: Conduct Engineering and Manufacturing Development (EMD).						
Target Control/Target Threat Sim./Target Aux. & Augmentation Sys. Continue to support Target Control (TC) and Target Auxilliary & Augmentation System (TA/AS) capable of supporting T&E and fleet training activities. TC involves the improved command and control systems capable of controlling multiple targets simultaneously while delivering adequate fidelity of T&E telemetry data. Augmentation and Auxilliary systems must be capable of augmenting targets in support of radar acquisition test, electronic countermeasures (jamming) evaluation, infrared measurement/test, radar cross section evaluation, decoy effectiveness, maneuver analysis, electronic warfare, warhead effectiveness and evaluation of fleet tactics, readiness and training. FY 2009 Accomplishments: Filthy Badger incremental upgrade FY08 completed. Unit meets requirements. Delivery of enhanced DPT-2B threat emitter. Unit inducted for evaluation. Awarded contracts for MPM Second Source and Filthy Badger incremental upgrade. Intelligence gathering and exploitation ongoing. CDR for Measure and Set system completed. FY 2010 Plans: Plan to award Filthy Buzzard Advanced Digital Radio Frequency Modulators (DRFM): Phase III SBIR contract will establish a five year IDIQ contract for first article development and production quantities.		7.214	6.157	6.949	0.000	6.949

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy							DATE: February 2010					
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support			R-1 ITEM NOMENCLATURE PE 0604258N: Target Systems Development			PROJECT 0609: Aerial Target System Dev						
B. Accomplishments/Planned Program (\$ in Millions)												
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total		
FY 2011 Base Plans: Filthy Badger DRFM - incremental upgrade planned. Millimeter wave threat emitter - development of two prototypes planned. E/F Band RF Deck for Modulator controller - development of two prototypes planned. Millimeter Wave Antennas - development of two prototypes planned for each of the 6 different types required. E/F Band Integrated Stabilized RF Source - development of two prototypes planned.												
Accomplishments/Planned Programs Subtotals						47.648	55.390	49.456	0.000	49.456		
C. Other Program Funding Summary (\$ in Millions)												
Line Item		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• WPN 22800: Aerial Targets		78.581	43.349	43.988	0.000	43.988	78.421	76.161	72.532	74.079	Continuing	Continuing
• WPN 31200: Spares and Repair Parts		1.461	0.820	1.422	0.000	1.422	1.554	1.559	1.485	1.562	Continuing	Continuing
D. Acquisition Strategy												
N/A												
E. Performance Metrics												
EFFORT	PERFORMANCE REQUIREMENT	OBJECTIVE		THRESHOLD		TEST RESULT						
SSAT EMD program	Maximum Speed at Low Altitude [Mach (M) at feet (ft) above wave crest at WMO Sea State conditions]	0.95 M @ 6.6 ft @ Sea State 5		0.90 M @10.0 ft @ Sea State 3		TBD						
MSST	Speed of separated sprint	Mach 2.2 to Mach 3.5		Threshold=Objective		TBD						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy					DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE		PROJECT
1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support			PE 0604258N: Target Systems Development		0609: Aerial Target System Dev
EMD	vehicle				
TC-TA/AS TTSP	Microwave power module - Second Source	100 Watts output power	Threshold=Objective	TBD	

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0604258N: <i>Target Systems Development</i>				PROJECT 0610: <i>Wpn Sys T&E Trng Dev/Proc</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0610: <i>Wpn Sys T&E Trng Dev/Proc</i>	26.068	22.671	15.190	0.000	15.190	20.788	22.499	23.157	23.757	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification This project provides for the development and procurement of aerial targets and associated systems used exclusively for test and evaluation of naval weapons systems which closely represent current and projected threats to fleet units in the Joint Strike and the Littoral Warfare environments. These representations must include characteristics related to size, performance envelope, and electromagnetic and infrared signatures. As threats change, changes must be made to keep the targets threat representative in response to changes in the test requirements of the developers of naval weapons systems.											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Air Superiority Target The Air Superiority Target (AST) is being developed as the follow-on to the current Full Scale Aerial Target (FSAT). The AST will be a supersonic, high altitude, remote-controlled aerial target. This target will have full command and control capability through normal flight maneuvers. <i>FY 2009 Accomplishments:</i> Developed and released RFP. <i>FY 2010 Plans:</i> Award contract and begin Engineering and Manufacturing Development (EMD). <i>FY 2011 Base Plans:</i> Continue conduct of Engineering and Manufacturing Development (EMD).						8.635	6.500	4.000	0.000	4.000	

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0604258N: Target Systems Development		PROJECT 0610: Wpn Sys T&E Trng Dev/Proc	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
QF-4 Full-scale Aerial Target The FSAT is a supersonic, high altitude, remote-controlled aerial target. This target has full command and control capability through normal flight maneuvers. Continued program, engineering and logistics support for the FSAT, including Aviation Depot Level Repairables (AVDLR), procurement of kit material and conversion of F-4 aircraft into FSAT targets. QF-4 procurements support aircraft and weapons systems testing and development, including that of the JSF, AIM-9X, AMRAAM and SM-6. FY 2009 Accomplishments: Accomplished the procurement of 5 QF-4 aircraft target. FY 2010 Plans: Plan to procure 5 QF-4 aircraft targets. FY 2011 Base Plans: Plan to maintain and operate the fielded inventory earmarked for the Navy. Plan to procure 3 QF-4 aircraft targets.	16.463	15.131	9.894	0.000	9.894
Target Control/Target Aux. & Aug. Systems and Scoring Systems Continue to support Target Control (TC) and Target Auxiliary and Augmentation Systems (TA/AS) capable of supporting T&E activities. TC involves the improved command and control systems capable of controlling multiple targets simultaneously while delivering adequate fidelity of T&E telemetry data. Augmentation and Auxiliary systems must be capable of augmenting targets in support of radar acquisition test, infrared measurement/test, radar cross section evaluation, decoy effectiveness, maneuver analysis, warhead effectiveness, and evaluation of fleet tactics, readiness and training. Scoring systems include both surface and airborne scalar and vector scoring.	0.970	1.040	1.296	0.000	1.296

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0604258N: <i>Target Systems Development</i>		PROJECT 0610: <i>Wpn Sys T&E Trng Dev/Proc</i>		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2009 Accomplishments:</i> Scoring Systems completed the design/development, First Article Testing (FAT), and Qualification Testing (QT) for the Telemetry (TM) Antenna on the BQM-74 Target. Cross Bow live fire testing completed for the Vector Doppler Scoring (VDOPS) Small Business Innovation Research (SBIR) program.</p> <p><i>FY 2010 Plans:</i> Plan to complete the design/development, First Article Testing (FAT), and Qualification Testing (QT) for the Telemetry (TM) Antenna on the Multi-Stage Supersonic Target (MSST).</p> <p><i>FY 2011 Base Plans:</i> Continue pursuing alternative Test Set Repair sources.</p>						
Accomplishments/Planned Programs Subtotals		26.068	22.671	15.190	0.000	15.190
C. Other Program Funding Summary (\$ in Millions) N/A						
D. Acquisition Strategy N/A						
E. Performance Metrics						
EFFORT	PERFORMANCE REQUIREMENT	OBJECTIVE	THRESHOLD	TEST RESULT		
QF-4 Full Scale Target	Flight Termination Sys.- Reliable & effective auto & manual failsafe fast destruct, orbit destruct, & destruct receiver capability	Achieve requirement	Threshold=objective	Satisfactory		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0604258N: <i>Target Systems Development</i>		PROJECT 0610: <i>Wpn Sys T&E Trng Dev/Proc</i>	
AST - Air Superiority Target (QF-16)	Capable of carrying, operating and monitoring required payloads	Achieve requirement	Threshold=objective	TBD	

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0604258N: <i>Target Systems Development</i>				PROJECT 0612: <i>Surface Targets Development</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0612: <i>Surface Targets Development</i>	2.302	1.212	1.420	0.000	1.420	1.431	1.455	1.488	1.518	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification This project develops seaborne targets and their related target augmentation systems in support of air-to-surface and surface-to-surface weapons test and evaluation and fleet training. This project unit includes \$0.011 Million for the Acquisition Workforce in FY2009.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Surface Targets Development <i>FY 2009 Accomplishments:</i> Developed Low Cost Modular Target (LCMT), a tow target to replace three more expensive tow targets; Fast Attack Craft Target (FACT) transitioned to production program; Developed new Harpoon target based on LCMT to replace QST-35 Harpoon configuration; Developed instrumentation and provided craft in support of Special Operations Command (SOCOM) Combatant Craft Medium project; Supported demonstration of autonomous UAV/USV control for Broad Area Maritime Surveillance (BAMS); Integrated 3 axis solid state gyro into target autopilots to improve performance; Conducted at sea IR (Infrared) measurements of targets;							2.291	1.212	1.420	0.000	1.420

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy			DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0604258N: Target Systems Development	PROJECT 0612: Surface Targets Development			
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Similarly, conducted RCS (radar cross section) measurements of target platforms at sea to assist in threat characterization; FY 2010 Plans: Create, tune, and test navigation algorithms and modes for SeaCAN targets including waypoint modes and formation control. Monitor developments in command & control Review capabilities of inventory WRT threat, weapons test schedules and Fleet training requirements. Re-baseline Radar Cross Section (RCS) for HSMST and SDST with augmentation. Develop packages to tailor RCS. Develop a realistic human target including IR signature and vulnerability. Perform signature characterization of all powered targets including IR and EO regimes. Investigate building tow targets from polyethylene. Develop deployable tow for SDST. Develop steerable tow as force multiplier. FY 2011 Base Plans: Continued development of complex-word Command and control interfaces; Monitor evolving threats in small-craft world and evolve target platforms/configurations to address threats; Develop signature management techniques to address evolving threats; Develop prototypes of polyethylene target platforms; Enhanced capabilities (sensors) for human target simulator to include lethality scoring;					
ACQUISITION WORKFORCE FUND FY 2009 Accomplishments: Funded DoD Acquisition Workforce Fund.	0.011	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	2.302	1.212	1.420	0.000	1.420

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0604258N: <i>Target Systems Development</i>				PROJECT 0612: <i>Surface Targets Development</i>			

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

<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u> <u>Base</u>	<u>FY 2011</u> <u>OCO</u>	<u>FY 2011</u> <u>Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• OPN/5455: ASW Range SE	17.086	7.234	7.121	0.000	7.121	6.144	7.228	7.357	7.490	0.000	59.660

D. Acquisition Strategy
N/A

E. Performance Metrics
Review capability of inventory with respect to threat, weapons test schedules and fleet training requirements. OBJECTIVE: Available inventory of seaborne targets to meet fleet requirements.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0604759N: Major T&E Investment							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	51.167	51.629	37.522	0.000	37.522	39.441	36.364	37.460	38.481	Continuing	Continuing
2195: T & E Investment	41.393	44.658	37.522	0.000	37.522	39.441	36.364	37.460	38.481	Continuing	Continuing
9999: Congressional Adds	9.774	6.971	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	30.763
A. Mission Description and Budget Item Justification											
<p>This project improves visibility and commonality of Test and Evaluation (T&E) resources across the Service for Major T&E investment funding. These funds correct major deficiencies, improve T&E capabilities, and increase T&E support effectiveness. The T&E Investment project provides improved test capabilities at the following test facilities: the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center (NAVUNSEAWARCEN DET AUTECH), Andros Island, Bahamas; the Nanoose and Dabob ranges of the Naval Undersea Warfare Center Division Keyport (NAVUNSEAWARCENDIV Keyport), Keyport, WA; the Sea Range, Land Range, Electronic Combat Range, Targets, Ordnance T&E Facility, Test Wing Pacific, and the Air Vehicle Modification and Instrumentation facility located at the Naval Air Warfare Center Weapons Division (NAVAIRWARCENWPNDIV), Point Mugu, CA and China Lake, CA; and the Atlantic Test Range, Air Combat Environment T&E Facility, Electromagnetic Environmental Effects, Air Vehicle Modification and Instrumentation facility, Test Wing Atlantic, Targets, and the Propulsion Systems Evaluation Facility (PSEF) located at the Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Patuxent River, MD and the test capabilities located at the Pacific Missile Range Facility, Kauai, HI.</p>											
<p>This program element includes \$.207 million for the Defense Acquisition Development Fund (DAWDF) in FY 2009.</p>											

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0604759N: Major T&E Investment			
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	51.525	44.844	0.000	0.000	0.000
Current President's Budget	51.167	51.629	37.522	0.000	37.522
Total Adjustments	-0.358	6.785	37.522	0.000	37.522
• Congressional General Reductions		-0.215			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		7.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.712	0.000			
• SBIR/STTR Transfer	-1.069	0.000			
• Program Adjustments	0.000	0.000	37.522	0.000	37.522
• Rate/Misc Adjustments	-0.001	0.000	0.000	0.000	0.000
Congressional Add Details (\$ in Millions, and Includes General Reductions)					
Project: 9999: Congressional Adds				FY 2009	FY 2010
Congressional Add: Joint Mission Battle-Space to Support Net-Ready Key Performance Parameters				0.000	1.992
Congressional Add: NETWORK EXPANSION & INTEGRATION OF NAVY/NASA RDT&E				4.787	0.000
Congressional Add: Air Combat Environment Test and Evaluation Facilit				2.992	0.000
Congressional Add: Improved Interoperability R&D to Support NAVAIR an				1.995	4.979
Congressional Add Subtotals for Project: 9999				9.774	6.971
Congressional Add Totals for all Projects				9.774	6.971
Change Summary Explanation					
Technical: Not applicable.					
Schedule: Not applicable.					

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0604759N: Major T&E Investment	
FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0604759N: <i>Major T&E Investment</i>				PROJECT 2195: <i>T & E Investment</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2195: <i>T & E Investment</i>	41.393	44.658	37.522	0.000	37.522	39.441	36.364	37.460	38.481	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification <p>This project improves visibility and commonality of Test and Evaluation (T&E) resources across the Service for Major T&E investment funding. These funds correct major deficiencies, improve T&E capabilities, and increase T&E support effectiveness. The T&E Investment project provides improved test capabilities at the following test facilities: the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center (NAVUNSEAWARCEN DET AUTEC), Andros Island, Bahamas; the Nanoose and Dabob ranges of the Naval Undersea Warfare Center Division Keyport (NAVUNSEAWARCENDIV Keyport), Keyport, WA; the Sea Range, Land Range, Electronic Combat Range, Targets, Ordnance T&E Facility, Test Wing Pacific, and the Air Vehicle Modification and Instrumentation facility located at the Naval Air Warfare Center Weapons Division (NAVAIRWARCENWPNDIV), Point Mugu, CA and China Lake, CA; and the Atlantic Test Range, Air Combat Environment T&E Facility, Electromagnetic Environmental Effects, Air Vehicle Modification and Instrumentation facility, Test Wing Atlantic, Targets, and the Propulsion Systems Evaluation Facility (PSEF) located at the Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Patuxent River, MD and the test capabilities located at the Pacific Missile Range Facility, Kauai, HI.</p> <p>This project unit includes \$.207 million for the Defense Acquisition Development Fund (DAWDF) in FY 2009.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
UNDERSEA RANGE INVESTMENTS						11.064	9.989	16.324	0.000	16.324	
<p>This effort funds the modernization, upgrades, and new test capabilities required at the Navy's Major Range Test Facility Base (MRTFB) undersea ranges Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center (NAVUNSEAWARCEN DET AUTEC), Andros Island, Bahamas; the Nanoose and Dabob ranges of the Naval Undersea Warfare Center Division Keyport (NAVUNSEAWARCENDIV Keyport), Keyport, WA.</p>											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0604759N: Major T&E Investment		PROJECT 2195: T & E Investment		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: <ul style="list-style-type: none">- Completed the development of new range post-processing software and modernized hardware at AUTC.- Continued the modernization and upgrade of voice and data communications equipment at AUTC.- Continued the modernization and upgrade of acoustic acquisition, tracking and processing systems and hydrophone arrays at Nanoose & Dabob.- Continued the development and installation of broadband capable bottom mounted targets at Nanoose and Dabob.- Continued the minor upgrade and modernization of test capabilities at AUTC, Nanoose and Dabob.						
FY 2010 Plans: <ul style="list-style-type: none">- Continue all efforts of FY 2009, less those noted as completed above.- Complete the modernization and upgrade of voice and data communications equipment at AUTC.- Initiate the refurbishment and service life extension of a range vessel at AUTC. This effort includes conducting a survey of the vessel in FY10 in preparation for a dry dock period in FY11 and FY12.- Initiate the modernization and upgrade of the aircraft sonobuoy simulation and stimulation capability at AUTC.- Initiate the modernization and upgrade of the electronic warfare (EW) simulator capability at AUTC.- Initiate the modernization and upgrade of the optical tracking and surveillance system at Nanoose and Dabob.						
FY 2011 Base Plans: <ul style="list-style-type: none">- Continue all efforts of FY 2010, less those noted as complete above.- Continue the refurbishment and service life extension of a range vessel at AUTC. This effort includes costs incurred during the dry dock period with the majority of that cost in FY11.- Complete the modernization and upgrade of the aircraft sonobuoy simulation and stimulation capability at AUTC.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0604759N: Major T&E Investment		PROJECT 2195: T & E Investment		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<ul style="list-style-type: none">- Complete the modernization and upgrade of the electronic warfare (EW) simulator capability at AUTECH.- Complete the modernization and upgrade of acoustic acquisition, tracking and processing systems and hydrophone arrays at Nanoose & Dabob.- Initiate the overhaul of a range craft. This effort includes cost for the craft to be in dry dock in FY11.- Initiate the acquisition of a new range recovery system at Nanoose and Dabob.						
OPEN AIR RANGE INVESTMENTS This effort funds the modernization and upgrades of existing capabilities and the development of new test capabilities required at the MRTFB open air ranges at the Naval Air Warfare Center Aircraft Division (AD), Patuxent River, MD, Naval Air Warfare Center Weapons Division (WD), Point Mugu, CA and China Lake, CA and Pacific Missile Range Facility (PMRF), Kauai, HI. FY 2009 Accomplishments: <ul style="list-style-type: none">- Completed the modernization and upgrade of the mobile radio communications system at WD.- Completed the modernization and upgrade of the Time Space Position Information (TSPI) tracking radars at WD.- Completed the modernization and upgrade of the communications links from San Nicolas Island to the mainland at WD.- Completed the upgrade of digital video capabilities at WD.- Completed the modernization of the Global Positional System (GPS) aircraft tracking systems at AD and WD.- Completed the modernization and upgrade of video capabilities at WD.- Continued the modernization and upgrade of the range timing and sensor interface system at WD.- Continued the modernization and upgrade of the telemetry antenna systems at WD.- Continued the development of a Range Capabilities Master Plan (RCMP) at WD.- Continued the clean up of expended depleted uranium at WD.		23.476	20.596	18.239	0.000	18.239

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0604759N: Major T&E Investment		PROJECT 2195: T & E Investment	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<ul style="list-style-type: none">- Continued the equipment procurement of aircraft machining and prototyping equipment and procure network equipment and computer aided software at AD.- Continued the modernization and upgrade of the Multiple Target Instrumented Radar (MIR) at AD.- Continued the modernization and upgrade of the airborne telemetry, optics, and flight termination capabilities for the range support aircraft at WD.- Continued the minor upgrade and modernization of test capabilities at AD and WD.- Initiated the modernization and upgrade of communication and fiber infrastructure at WD.- Initiated the development of a Range Capabilities Master Plan (RCMP) at AD.- Initiated the modernization of the Kineto Tracking Mounts (KTM) at WD.- Initiated and completed the development of a plan for an automated aircraft maintenance system at AD.- Initiated and completed T-2 support at AD. <p>FY 2010 Plans:</p> <ul style="list-style-type: none">- Continue all efforts of FY 2009, less those noted as completed above.- Complete the modernization and upgrade of the range timing and sensor interface system at WD.- Complete the modernization and upgrade of the telemetry antenna systems at WD.- Complete the development of a Range Capabilities Master Plan (RCMP) at AD and WD.- Complete the equipment procurement of aircraft machining and prototyping equipment and procure network equipment and computer aided software at AD.- Complete the modernization and upgrade of the Multiple Target Instrumented Radar (MIR) at AD.- Initiate the modernization and upgrade of crypto equipment at AD and WD.- Initiate the modernization and upgrade of communications and data fiber and equipment at locations around the bay at AD.- Initiate the modernization of optical and radar tracking equipment, telemetry systems and the Mobile Aerial Target Support System (MATSS) at PMRF.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0604759N: Major T&E Investment		PROJECT 2195: T & E Investment		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: - Continue all efforts of FY 2010, less those noted as complete above. - Complete the modernization and upgrade of communications and data fiber and equipment at locations around the bay at AD. - Initiate the development and installation of a remote telemetry system for San Nicolas Island at WD.						
TEST FACILITIES INVESTMENTS This effort funds the modernization and upgrades of existing capabilities and the development of new test capabilities required at the MRTFB test facilities at the Naval Air Warfare Center Aircraft Division (AD), Patuxent River, MD, and Naval Air Warfare Center Weapons Division (WD), Point Mugu, CA and China Lake, CA. FY 2009 Accomplishments: - Initiated the development of a simulation environment visualization and debriefing system and software at AD. - Initiated the development of high power Radio Frequency (RF) carts at AD. - Initiated the modernization and upgrade of the gas turbine engine rotor spin facility at AD. - Initiated the modernization and upgrade of the warhead insensitive munitions and safety test site at WD. - Continued the minor upgrade and modernization of test capabilities at AD and WD. - Continued the modernization and upgrade of aircraft and test instrumentation capability at AD. FY 2010 Plans: - Continue all efforts of FY 2009. - Complete the development of a simulation environment visualization and debriefing system and software at AD. - Complete the development of high power Radio Frequency (RF) carts at AD. - Complete the modernization and upgrade of the gas turbine engine rotor spin facility at AD.		6.646	14.073	2.959	0.000	2.959

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0604759N: <i>Major T&E Investment</i>		PROJECT 2195: <i>T & E Investment</i>	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<ul style="list-style-type: none"> - Complete the modernization and upgrade of aircraft and test instrumentation capability at AD. - Initiate and complete the modernization of laboratory test equipment in the Electromagnetic Interference Laboratory and Electromagnetic Environmental Effects facility at AD. - Initiate and complete the modernization of the large x-ray machine in the Non-Destructive Test and Evaluation facility at WD. - Initiate the development of a Common Data Link test capability at AD. <p><i>FY 2011 Base Plans:</i></p> <ul style="list-style-type: none"> - Continue all efforts of FY 2010, less those noted as completed above. - Complete the modernization and upgrade of the warhead insensitive munitions and safety test site at WD. - Complete the development of a Common Data Link test capability at AD. 					
DAWDF REALIGNMENT <i>FY 2009 Accomplishments:</i> - DAWDF Realignment	0.207	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	41.393	44.658	37.522	0.000	37.522
C. Other Program Funding Summary (\$ in Millions) N/A					
D. Acquisition Strategy Not Applicable.					
E. Performance Metrics Successfully achieve Initial Operational Capability of 8-15 Improvement and Modernization projects per year and have 90% of test capabilities scheduled in support of Navy acquisition test programs within 180 days.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0604759N: <i>Major T&E Investment</i>				PROJECT 9999: <i>Congressional Adds</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	9.774	6.971	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	30.763
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Congressional Add.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010			
Congressional Add: Joint Mission Battle-Space to Support Net-Ready Key Performance Parameters <i>FY 2010 Plans:</i> Initiate prototype effort to develop an interactive joint mission battle-space to support test and evaluation of the net-ready key performance parameter.							0.000	1.992			
Congressional Add: NETWORK EXPANSION & INTEGRATION OF NAVY/NASA RDT&E <i>FY 2009 Accomplishments:</i> This is a continuing project that designs and develops (including environmental permits) fiber optic replacement of some of the existing microwave links between NASA instrumentation and the Atlantic Test Range.							4.787	0.000			
Congressional Add: Air Combat Environment Test and Evaluation Facilit							2.992	0.000			

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
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B. Accomplishments/Planned Program (\$ in Millions)		
	FY 2009	FY 2010
<i>FY 2009 Accomplishments:</i> Funds provided for the upgrade of Air Combat Environment Test and Evaluation Facility. Upgrade WKS2000 workstation at Air Combat Environment Test and Evaluation Facility (ACETEF) to PC-based Linux OS and port existing software to current industry standards. Integrate waveform visualization components and audio components in to Electronic Warfare Environment (EWEnv) Graphical User Interface (GUI); develop a preliminary translation capability from Electronic Warfare Integrated Reprogramming (EWIR) to the EWEnv database format; install EWEnv in the Man Flight Simulator (MFS) lab and integrate with the F-18 simulator. Develop and integrate into MFS F-18 E/F simulation High Level Architecture (HLA) compatible ALR-67(v3) model; APG-73 and APG-79 Active Electronically Scanned Array (AESA) radar model with air-to-air (A/A) and air-to-ground (A/G) modes; ASQ-228(v2) Advanced Tactical Forward Looking Infra-Red (ATFLIR) capability with tracking hardware, avionics integration and atmospheric model.		
Congressional Add: Improved Interoperability R&D to Support NAVAIR an <i>FY 2009 Accomplishments:</i> Funds provided to upgrade the Ship Self Defense System (SSDS) and Cooperative Engagement Capability (CEC) Sensor Network at the Surface/Aviation Interoperability Laboratory (SAIL). <i>FY 2010 Plans:</i> This is a continuing project provided to upgrade the Ship Self Defense System (SSDS) and Cooperative Engagement Capability (CEC) Sensor Network at the Surface/Aviation Interoperability Laboratory (SAIL).	1.995	4.979
Congressional Adds Subtotals	9.774	6.971

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604759N: <i>Major T&E Investment</i>	PROJECT 9999: <i>Congressional Adds</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy Not required for Congressional Adds.		
E. Performance Metrics Not required for Congressional Adds.		

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy	DATE: February 2010
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APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				PE 0605152N: <i>Studies & Analysis Supt - Navy</i>							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	14.817	12.321	8.149	0.000	8.149	11.425	11.236	10.673	10.910	Continuing	Continuing
0133: <i>National Acad Sci/Stud Board</i>	1.583	1.697	1.201	0.000	1.201	1.757	1.735	1.659	1.694	Continuing	Continuing
2092: <i>Naval Warfare Studies</i>	12.899	8.851	6.309	0.000	6.309	8.799	8.656	8.218	8.414	Continuing	Continuing
2097: <i>Manpower Personnel & Training</i>	0.335	0.777	0.639	0.000	0.639	0.869	0.845	0.796	0.802	Continuing	Continuing
9999: <i>Congressional Adds</i>	0.000	0.996	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.685

A. Mission Description and Budget Item Justification

This program provides analytical support to the Secretary of the Navy and the Chief of Naval Operations as a basis for major policy, planning and acquisition program execution decisions. It supports research and development strategy development and planning. It supports studies in the areas of manpower, personnel, training, and aviation. It also develops analytical tools for evaluating effectiveness of U.S. weapons against potential foreign threat ships and submarines.

B. Program Change Summary (\$ in Millions)

	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>
Previous President's Budget	8.044	11.422	0.000	0.000	0.000
Current President's Budget	14.817	12.321	8.149	0.000	8.149
Total Adjustments	6.773	0.899	8.149	0.000	8.149
• Congressional General Reductions		-0.051			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	-0.050			
• Congressional Adds		1.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	7.005	0.000			
• SBIR/STTR Transfer	-0.232	0.000			
• Program Adjustments	0.000	0.000	8.149	0.000	8.149

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy		DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>	

<p><u>Congressional Add Details (\$ in Millions, and Includes General Reductions)</u></p> <p>Project: 9999: <i>Congressional Adds</i></p> <p style="padding-left: 40px;">Congressional Add: <i>Joint Heavy-Lift Rotocraft Research</i></p> <p><u>Change Summary Explanation</u></p> <p>Technical: Not applicable.</p> <p>Schedule: Not applicable.</p> <p>FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.</p>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="padding: 5px;">FY 2009</th> <th style="padding: 5px;">FY 2010</th> </tr> <tr> <td style="padding: 5px;">0.000</td> <td style="padding: 5px;">0.996</td> </tr> <tr> <td style="padding: 5px;">0.000</td> <td style="padding: 5px;">0.996</td> </tr> <tr> <td style="padding: 5px;">0.000</td> <td style="padding: 5px;">0.996</td> </tr> </table>	FY 2009	FY 2010	0.000	0.996	0.000	0.996	0.000	0.996
FY 2009	FY 2010								
0.000	0.996								
0.000	0.996								
0.000	0.996								

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>				PROJECT 0133: <i>National Acad Sci/Stud Board</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0133: <i>National Acad Sci/Stud Board</i>	1.583	1.697	1.201	0.000	1.201	1.757	1.735	1.659	1.694	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification This project supports the core program for the Naval Studies Board. As agreed upon between the Chief of Naval Operations (CNO) and the President of the National Academy of Sciences and with appropriate attention to the influence of the domestic economy, national objectives, social imperatives and anticipated military requirements, the Naval Studies Board will conduct and report upon surveys, investigations, and analyses in the field of scientific research and development applicable to the operation and function of the Navy. Reports consist of a briefing to the Assistant Secretary of the Navy (Research Development and Acquisition) (ASN (RD&A)) and the CNO and staff, and written technical reports.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
National Acad Sci/Stud Board <i>FY 2009 Accomplishments:</i> - Continued research efforts and investigations in areas of interest to the Navy. - Initiated and completed a new study on climate change on U.S. naval forces. - Initiated a new study on small vessels. - Completed study on information assurance selected by the CNO during FY09. - Provided Acquisition Workforce support. <i>FY 2010 Plans:</i> - Continue research efforts and investigations in areas of interest to the Navy. - Complete studies initiated in FY09. - Initiate two new studies to be selected by the CNO during FY10.							1.575	1.697	1.201	0.000	1.201

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>		PROJECT 0133: <i>National Acad Sci/Stud Board</i>				
B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2011 Base Plans:</i> - Continue research efforts and investigations in areas of interest to the Navy. - Complete studies initiated in FY10. - Initiate new studies to be selected by the CNO during FY11.								
DAWDF <i>FY 2009 Accomplishments:</i> DAWDF Realignment				0.008	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals				1.583	1.697	1.201	0.000	1.201
C. Other Program Funding Summary (\$ in Millions)								
N/A								
D. Acquisition Strategy								
N/A								
E. Performance Metrics								
Conduct and report upon surveys, investigations, and analyses in the field of scientific research and development applicable to the operations and function of the Navy in a timely manner.								

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>				PROJECT 2092: <i>Naval Warfare Studies</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2092: <i>Naval Warfare Studies</i>	12.899	8.851	6.309	0.000	6.309	8.799	8.656	8.218	8.414	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification This project supports detailed mission, capability, and technical analysis of future naval warfighting requirements. This work provides the analytical basis for integration and prioritization of overall military capability requirements and acquisition programs in support of executing the Naval Capability Development Process and development/delivery of Mission Capability Packages, Naval Capability Packages, and Integrated Strategic Capability Plans for Chief of Naval Operations.											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Naval Warfighting Assessments <i>FY 2009 Accomplishments:</i> Coordinated and prioritized all OPNAV analysis efforts. Supported future Naval warfighting capability assessments, including cost-to-capability assessments, and mission-level modeling and simulation. Analyzed integration across all warfare areas, and assessments of legacy and future Programs of Record contribution to future warfighting requirements. Integrated Naval warfighting requirements into the Joint Capability Integration and Development System process. Provided the analytical underpinning for investment recommendations to Chief of Naval Operations (CNO). Served as the analytics basis to integrate and prioritize overall warfighting capability requirements and acquisition programs to support the Naval Capability Development Process. Supported the development of Mission Capability Packages, Naval Capability Packages, Integrated Strategic Capability Plans, and capabilities-based and balanced Integrated Sponsors' Program Proposals. Led Navy's analytic engagement with the Office of the Secretary of Defense (OSD) and Joint Staff, including coordination of OPNAV participation in Joint Analytical Agenda. Assessed magnitude gaps and analyzed programmatic solutions. Reviewed approximately 40 to 45 FY09 tasks for technical executability,						10.027	6.401	5.325	0.000	5.325	

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605152N: Studies & Analysis Supt - Navy		PROJECT 2092: Naval Warfare Studies		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
deconflicted internally, and eliminated redundancy with work previously done. Provided programtic recommendation in support of PR-11. Produced and delivered briefings and assessments for CNO within the overall Navy program development processes and delivered timely results on urgent operational and/or POM issues.						
FY 2010 Plans: Coordinate and prioritize all OPNAV analysis efforts. Support future Naval warfighting capability assessments, including cost-to-capability assessments, and mission-level modeling and simulation. Analyze integration across all warfare areas, and and assessments of legacy and future Programs of Record contribution to future warfighting requirements. Integrate Naval warfighting requirements into the Joint Capability Integration and Development System process. Provide the analytical underpinning for investment recommendations to Chief of Naval Operations (CNO). Serve as the analytics basis to integrate and prioritize overall warfighting capability requirements and acquisition programs to support the Naval Capability Development Process. Support the development of Mission Capability Packages, Naval Capability Packages, Integrated Strategic Capability Plans, and capabilities-based and balanced Integrated Sponsors' Program Proposals. Support the Navy in its effort as lead for analytic engagement with OSD and Joint Staff, including coordination of OPNAV participation in Joint Analytical Agenda. Assess magnitude gaps and analyze programmatic solutions. Review approximately 40 tasks for FY10 Integrated Analytic Agenda in support of POM-12 technical executability, deconflict internally, and eliminate redundancy with work previously done. Prioritize FY10 tasks to address issues of greatest concern to leadership and with greatest impact on probrams/ capabilities. Tasks approvided for studies include 37 tasks for decision superiority, 21 tasks for global maritime security, 13 tasks for sea control, and 5 tasks for power projection. Produce and deliver FY10 Analytical Agenda briefings and assessments for CNO within the overall Navy program development processes and to deliver timely results on urgent operational and/or POM issues.						
FY 2011 Base Plans: Continue FY10 Plan.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605152N: Studies & Analysis Supt - Navy		PROJECT 2092: Naval Warfare Studies	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Portfolio Management Decision Support System Portfolio Management Decision Support System: An analytic portfolio management methodology to aid Navy leadership with investment programming decision support. FY 2009 Accomplishments: Provided an assessment process that fosters informed, understandable, repeatable investment decisions with consistent, pedigreed, and retrievable information. Assessed programs of record and their proposed modifications (legacy and future) on their capability to contribute to future warfighting requirements. FY 2010 Plans: Provide an assessment process that fosters informed, understandable, repeatable investment decisions with consistent, pedigreed, and retrievable information. Assess programs of record and their proposed modifications (legacy and future) on their relative contribution to future warfighting requirements. FY 2011 Base Plans: Continue FY10 plan.	2.823	2.450	0.984	0.000	0.984
DAWDF Realignment FY 2009 Accomplishments: Acquisition Workforce	0.049	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	12.899	8.851	6.309	0.000	6.309

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>	PROJECT 2092: <i>Naval Warfare Studies</i>
<p><u>C. Other Program Funding Summary (\$ in Millions)</u> N/A</p> <p><u>D. Acquisition Strategy</u> Not applicable.</p> <p><u>E. Performance Metrics</u> Portfolio Management Decision Support System (PMDSS) is an analytic Portfolio Management Methodology used to aid Navy leadership with both investment and divestment programming decisions. This methodology provides an assessment process that fosters informed, understandable, repeatable investment decisions with consistent, pedigreed, and retrievable information. The focus of this effort is to refine the system to identify programs as potential candidates for divestment. It provides leadership and resource sponsors with a starting point for their offset decision process as well as an issue ranking capability. PMDSS will include linkage of programs to N3/N5 strategic imperatives, programs mapped to warfare areas, program interdependencies annotated, and balance factors that can be adjusted to reflect Navy Leadership Priorities.</p> <p>The effort expands on PMDSS by capturing and mapping issues/funding adjustments, and providing a system capable of identifying fiscal interdependencies and consideration to risk in order to increase accuracy in calculating programmatic risk.</p> <p>Naval Warfighting Assessment - Review 40 tasks for Integrated Analytic Agenda in support of technical executability, deconflict internally, and eliminate redundancy with work previously done. Complete 37 tasks for decision superiority, 21 tasks for global maritime security, 13 tasks for sea control, and 5 tasks for power projection. Produce and deliver Analytical Agenda briefings and assessments.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>				PROJECT 2097: <i>Manpower Personnel & Training</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2097: <i>Manpower Personnel & Training</i>	0.335	0.777	0.639	0.000	0.639	0.869	0.845	0.796	0.802	Continuing	Continuing
Quantity of RDT&E Articles	4	9	9	0	9	0	0	0	0		
A. Mission Description and Budget Item Justification <p>The Chief of Naval Personnel has a continuing need for studies and analysis of Manpower and Personnel (M&P) policies and programs and critical M&P issues that have Navy-wide implications. This project provides an essential management tool to: (a) assess the effectiveness of existing M&P policies and programs; (b) identify needs for new policies and programs; (c) determine the required manpower and training mix relative to changing demographic, societal and legislative/regulatory actions, and to evolving strategic and geopolitical factors; (d) study the impact of M&P programs on Navy accession, attrition, retention, and performance; and, to (e) develop, validate and/or refine a broad range of M&P forecasting models. The program permits Navy to more effectively utilize Research and Development expertise to respond to emergent M&P issues on a continuing basis. This program is funded under RDT&E operational systems development because it encompasses engineering and development of new end-items prior to production approval decision.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Manpower Personnel & Training						0.334	0.777	0.639	0.000	0.639	
<i>FY 2009 Accomplishments:</i> Conducted a cost-benefit analysis of Naval Post Graduate School (NPS) vs. Civilian Institution School (CIVINS) for graduate degrees -Assessed effectiveness of Active and Reserve Recruiting merger -Assessed manpower/personnel growth of DDG-51 and CG-47 mid-life upgrade programs -Evaluated and assessed various manpower models and associated algorithms											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy			DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605152N: Studies & Analysis Supt - Navy	PROJECT 2097: Manpower Personnel & Training			
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: Assess Return on Investment (ROI) for Special and Incentive pays (Assignment Incentive Pay, Sea Duty Incentive Pay, Selective Re-enlistment Bonus, Critical Skills Retention Bonus, etc) - Assess impact of Individual Augmentation and Global Support Assignments detailing on enlisted and officer retention - Assess Roadmap implementation and status of obtaining FIT 2016 - Assess the potential use and determine appropriate areas to employ Smart Card/CAC Technology. - Assess Elasticities of Professional Recruiting Model - Assess viability and means to achieve Billet Based Distribution - Assess/propose updates and implementation for replacement of Navy Manpower Requirements System - Assess Intelligent Workbook and Navy Enterprise Resource Planning Navy Manpower and Budget System - Assess alternate testing methods for predicting/forecasting Human Performance FY 2011 Base Plans: Continue FY 10 PLAN.					
DAWDF Realignment FY 2009 Accomplishments: DAWDF Realignment	0.001	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	0.335	0.777	0.639	0.000	0.639

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>	PROJECT 2097: <i>Manpower Personnel & Training</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy N/A		
E. Performance Metrics <p>This PE provides funding to support continuing need for studies and analysis of issues critical to decisions required by the Chief of Naval Personnel and his staff regarding manpower, personnel, training and education policies and programs that have far-reaching implications to service members and the Navy budget. This PE supports research of both Naval Postgraduate School faculty and students and in FY-10 will begin the formulation of focused economic research, to include behavioral economics. This focus will provide continuing analysis and research to facilitate the data gathering and synthesis to provide consistent and timely update to economic indicators to use in the numerous models that support management decisions within the MPTE arena that have significant impact on the efficient use of the nearly \$27B Manpower & Personnel, Navy budget TOA. The economic research will consolidate the data necessary to perform elasticity estimations and maintain this data for subsequent estimations. To gather the data necessary to perform such estimations, would conservatively cost more than \$300K on each such occasion. The MPTE enterprise uses dozens of models, most of which require elasticity updates. Consolidating the data repository to support this analysis will result in a cost avoidance of more than \$1M and this does not include any of the actual model revisions.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>				PROJECT 9999: <i>Congressional Adds</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	0.000	0.996	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.685
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Congressional Add											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010			
Congressional Add: Joint Heavy-Lift Rotocraft Research <i>FY 2010 Plans:</i> Research and develop technology that increases structural, aerodynamic, flight control, and propulsion efficiencies for the Navy's Heavy-Lift Helicopter Program.							0.000	0.996			
Congressional Adds Subtotals							0.000	0.996			
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy Not required for Congressional Adds											
E. Performance Metrics Not required for Congressional Adds											

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy	DATE: February 2010
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APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				PE 0605154N: <i>Center For Naval Analyses</i>							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	46.050	44.399	49.165	0.000	49.165	49.761	50.853	52.000	53.072	Continuing	Continuing
0031: <i>MCOAG</i>	7.423	7.458	7.742	0.000	7.742	7.903	8.110	8.293	8.463	Continuing	Continuing
0148: <i>Center For Naval Analyses (CNA)</i>	38.627	36.941	41.423	0.000	41.423	41.858	42.743	43.707	44.609	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Center for Naval Analyses (CNA) is the Department of the Navy's (DoN) only Federally Funded Research and Development Center (FFRDC). CNA provides independent, objective, and expert analyses based on its unique access to sensitive data and hands-on exposure to fleet operations gained through its world-wide field program. CNA's research program is centrally funded by this program element and is primarily concentrated along one Marine Corps category and thirteen Navy categories of study called product areas. These product areas are structured to enhance CNA's focus of research and analysis upon the major present and future needs and issues of the Navy and the Marine Corps. Because of rapid advances in technology, changes in the fleet, the increasing complexity of weapon systems, and reductions in manpower, force structure, budgets, the current security environment, and Department of Defense (DoD) transformation, the Navy and Marine Corps have a greater need for analyses that are sophisticated, relevant, and timely. CNA is highly qualified to meet that need.

B. Program Change Summary (\$ in Millions)

	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>
Previous President's Budget	47.500	49.821	0.000	0.000	0.000
Current President's Budget	46.050	44.399	49.165	0.000	49.165
Total Adjustments	-1.450	-5.422	49.165	0.000	49.165
• Congressional General Reductions		-0.206			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	-5.216			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	-0.049	0.000			
• SBIR/STTR Transfer	-1.401	0.000			
• Program Adjustments	0.000	0.000	49.165	0.000	49.165

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605154N: <i>Center For Naval Analyses</i>	
<p><u>Change Summary Explanation</u></p> <p>Technical: Not applicable.</p> <p>Schedule: Not applicable.</p> <p>FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605154N: <i>Center For Naval Analyses</i>				PROJECT 0031: <i>MCOAG</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0031: <i>MCOAG</i>	7.423	7.458	7.742	0.000	7.742	7.903	8.110	8.293	8.463	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification This project supports the Marine Corps portion of the DoN CNA Research Program, and is managed as an element of the Marine Corps Studies System. This program provides the Marine Corps with independent and objective research and analysis of specific issues/topics appropriately performed by a FFRDC. As a result of the findings and recommendations of the Fiscal Year 1997 Defense Science Board, the Marine Corps refocused the type of support CNA provides. The CNA maintains a varied number of field representatives for the Operational Forces Commanders and eight (8) program areas for CNA to establish and maintain. The program areas are linked to the Marine Corps Advocacy (prepotency), which are: (1) Policy and Operations; (2) Systems and Tactics; (3) Research, Development and Acquisition; (4) Infrastructure and Readiness; (5) Manpower, Medical and Training; (6) Resources, Planning and Assessments; (7) Capabilities, Force Structure and Systems and (8) Intelligence, Surveillance and Reconnaissance. Scientific Analyst support provides six scientific analysts for the following six focus areas: Deputy Commandant (DC), Plans, Policies and Operations; DC Aviation; DC Installation and Logistics; DC Programs and Resources; DC Manpower Reserve Affairs; and Director, Manpower Plans (MP) - Manpower and Reserve Affairs (M&RA). The program continues analytical support for field exercises, Ad Hoc and Quick Response study requirements.											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
MARINE CORPS OPERATIONS AND ANALYSIS GROUP						7.423	7.458	7.742	0.000	7.742	
<i>FY 2009 Accomplishments:</i> - Continued and completed the following efforts from the FY08 Marine Corps Studies System Master Plan (MCSSMP): MV-22 Aviation Logistics Support, Weapons Tactics and Instructor Training Oct-Nov 07 (WTI08-01), Weapons Tactics and Instructor Training Feb-Apr 08 (WTI08-02), Korean Integrated Training Program (KITP) Combined Amphibious Exercise, Security Cooperation Marine Air Ground Task Force (SC MAGTF), Marine Corps Enterprise Materiel Readiness Study, USMC Strategic Vision Implications Study, Safety of Flight, Marine Corps Forces South (MARFORSOUTH) Headquarters											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605154N: Center For Naval Analyses		PROJECT 0031: MCOAG		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Relocation, The Effect of Naval Post Graduate School (NPS) on the Promotion of Marine Corps Officers. - Initiated the following efforts from the FY09 MCSSMP: Setting and Building a Balanced Force; MAGTF Combat Airspace Management and Training; Ground Force Training Utilizing M&S; Amphibious Warfare Capability; MCTAG Development Analysis; Combat Airspace and Integration in Support of the MAGTF; Operationalizing Measures of Time to Train. - Provided formal study and analysis support to the operating forces and headquarters elements included in the annual MCSSMP. - Provided eleven scientific analysts (SA) for direct analytical support to Marine Corps Headquarters staff elements: DCMC Plans, Policies, and Operations 1 SA; DCMC Installations and Logistics 1 SA; DCMC Manpower and Reserve Affairs 3 SA; DCMC Aviation 1 SA; and DCMC Programs and Resources 2 SA; DCMC Development and Integration 2 SA. - Provided seven Field Representatives for direct analytical support to the Commander Marine Forces Pacific (COMMARFORPAC), Commander Marine Forces Atlantic (COMMARFORLANT), Commanding General I Marine Expeditionary Force (CG I MEF), Commanding General II Marine Corps Expeditionary Force (CG II MEF), Commanding General III Marine Expeditionary Force (CG III MEF), and Commanding General, Marine Air Weapons Training Squadron (MAWTS), Commanding General Marine Corps Forces Special Operations (COMMARSOC). - Provided analysis support to operating forces exercises, ad hoc support for immediate analytical requirements, and other support functions which include: general concept development, quick response studies, CNA self-initiated analysis efforts, administrative support, liaison, travel, and contract award fee. FY 2010 Plans: - Continue all efforts of FY09 less those noted as completed above. - Initiate high priority study and analysis projects approved in FY10 MCSSMP. - Provide eleven scientific analysts for direct analytical support to Marine Corps Headquarters staff elements: ACMC; DCMC Plans, Policies, and Operations; DCMC Installations and Logistics; DCMC						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605154N: <i>Center For Naval Analyses</i>		PROJECT 0031: <i>MCOAG</i>		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p>Manpower and Reserve Affairs (x2); DCMC Aviation; and DCMC Programs and Resources, CD&I, TECOM, MARFORRES, AND RA.</p> <ul style="list-style-type: none"> - Provide seven Field Representatives for direct analytical support to the Commander Marine Forces Pacific (COMMARFORPAC), Commander Marine Forces Atlantic (COMMARFORLANT), Commanding General I Marine Expeditionary Force (CG I MEF), Commanding General II Marine Corps Expeditionary Force (CG II MEF), Commanding General III Marine Expeditionary Force (CG III MEF), and Commanding General, Marine Air Weapons Training Squadron (MAWTS). - Provide analysis support to operating forces exercises, ad hoc support for immediate analytical requirements, and other support functions which include: general concept development, quick response studies, CNA self-initiated analysis efforts, administrative support, liaison, travel, and contract award fee. <p><i>FY 2011 Base Plans:</i></p> <ul style="list-style-type: none"> - Continue all efforts of FY10. - Initiate high priority study and analysis projects approved in FY11 MCSSMP. 						
Accomplishments/Planned Programs Subtotals		7.423	7.458	7.742	0.000	7.742
C. Other Program Funding Summary (\$ in Millions) N/A						
D. Acquisition Strategy N/A						
E. Performance Metrics The Marine Corps' portion of the CNA program is executed via the Marine Corps Studies System (MCSS) Annual Plan which is reviewed and updated on a quarterly basis. The MCSS maintains a comprehensive listing of all CNA studies performed for the Marine Corps. The MCSS ensures there are no duplicate analytical efforts within the Marine Corps. Additionally, the Operations Analysis Division of Marine Corps Combat Development Command (MCCDC) provides analytical review of all						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605154N: <i>Center For Naval Analyses</i>	PROJECT 0031: <i>MCOAG</i>
<p>CNA products for the Marine Corps and integrates the results and recommendations into a quarterly newsletter for research and analysis. Other evaluation processes are as follows:</p> <p>A) Contract Status Meetings: The Marine Corps participates in the DoN Contract Status Meetings. As part of the CNA oversight process, the Contracting Officer chairs a monthly meeting with the COTR, the Marine Corps, and members of the CNA Business Support Group to provide guidance regarding contract management. Issues range from reviewing the Defense Technical Information Center (DTIC) database requirements to emphasize the contractual requirement that all ongoing research be submitted to DTIC to ensure against duplication to reviewing CNA's cost effectiveness and efficiency.</p> <p>B) Award Fee Evaluation Process: As required by CNA's contract with DoN, the Marine Corps participates in the CNA evaluation on a semi-annual basis throughout the entire five year performance period of Contract N00014-05-D-0500. Over 28 Marine Corps sponsors of CNA deliverables provide input regarding CNA's value to their respective organizations. Evaluations cover CNA's support to Marine Corps leadership and management, timeliness and quality of research, as well as cost effectiveness and efficiency. The Marine Corps' evaluation contributes to CNA's overall performance rating that is the primary basis for determining the amount, if any, of the available award fee earned by CNA.</p> <p>C) Marine Corps Three-Star Flag Officer Review: The Commanding General, Marine Corps Combat Development Command (MCCDC) and the Director, Operations Analysis Division meet several times per month to review the current fiscal year's research program and provide guidance to CNA regarding their future research requirements for the Marine Corps. These high level meetings are essential to provide CNA with Marine Corps' guidance to ensure that the research conducted is of the greatest value to the Marine Corps. The meetings also serve as the roadmap for research during the upcoming fiscal year. The Marine Corps' research plan is consolidated with the DoN's Annual Plan that is submitted to the Deputy Chief of Naval Operations for Integration of Capabilities and Resources (N8) for final review and acceptance.</p> <p>D) CNA Comprehensive Review: Prior to contract renewal, CNA, as a FFRDC, must be evaluated to ensure that the DoN wants to renew their contract for an additional five years. The Marine Corps conducts a comprehensive review of sponsors' technical needs and mission requirements, consideration of alternative sources, efficiency and effectiveness, and management and cost effectiveness that contributes to DoN's establishment of criteria and sponsorship agreement.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605154N: Center For Naval Analyses				PROJECT 0148: Center For Naval Analyses (CNA)			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0148: Center For Naval Analyses (CNA)	38.627	36.941	41.423	0.000	41.423	41.858	42.743	43.707	44.609	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
This project supports the Navy's portion of the CNA Research Program, which is primarily concentrated along thirteen Navy categories of study called product areas. These product areas include the following: 1) Policy and Operations; 2) Resources, Planning, and Assessments; 3) Research, Development, and Acquisition; 4) Infrastructure and Readiness; 5) Manpower, Medical, and Training; 6) Systems and Tactics; 7) Capabilities, Force Structure, and Systems; 8) Intelligence, Surveillance, and Reconnaissance; 9) Quadrennial Defense Review (QDR); 10) Navy Field Program; 11) Navy Scientific Analyst Program; 12) Navy Quick Response Projects; and (13) CNA Initiated Projects. CNA's analyses have resulted in substantial improvements in force structure, fleet effectiveness, and significant cost avoidance.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
CENTER FOR NAVAL ANALYSES, NAVY							38.627	36.941	41.423	0.000	41.423
FY 2009 Accomplishments: - Continued to address issues of major importance to Navy leadership in the above research areas. CNA's Research Program was continually updated to support the Navy efficiently and effectively. Support for the CNA field program, which assigns analysts to thirty four locations around the world, including at sea, continued to comprise approximately 20% of the funding. Acquisition Workforce Fund: - Funded DoD Acquisition Workforce Fund.											
FY 2010 Plans: - Continue all efforts of FY09.											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605154N: <i>Center For Naval Analyses</i>		PROJECT 0148: <i>Center For Naval Analyses (CNA)</i>				
B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2011 Base Plans:</i> - Continue all efforts of FY10.								
Accomplishments/Planned Programs Subtotals				38.627	36.941	41.423	0.000	41.423
C. Other Program Funding Summary (\$ in Millions)								
N/A								
D. Acquisition Strategy								
N/A								
E. Performance Metrics								
<p>CNA is reviewed throughout the research year on several different levels to ensure that research produced is not duplicated elsewhere. The primary (and most effective) method of review for duplication is the Contracting Officer's Technical Representative (COTR) review and approval of each and every project proposal submitted by CNA. This method is highly effective in providing the necessary oversight to ensure that duplication of effort does not occur. The Marine Corps Studies System (MCSS) maintains a comprehensive listing of all CNA studies performed for the USMC. The MCSS ensures there are no duplicate analytical efforts within the USMC. Additionally, the Studies and Analysis Division of Marine Corps Combat Development Command (MCCDC) provides analytical review of all CNA products for the USMC and integrates the results and recommendations into a quarterly newsletter and an annual plan for research and analysis. Other evaluation processes are as follows:</p> <p>A) DoN Contract Status Meetings - as part of the CNA oversight process, the ONR Contracting Officer chairs a monthly meeting with the COTR, the USMC, and members of the CNA Business Support Group to provide guidance regarding contract management. Issues range from reviewing the Defense Technical Information Center (DTIC) database requirements to emphasize the contractual requirement that all ongoing research be submitted to DTIC to ensure against duplication to reviewing CNA's cost effectiveness and efficiency.</p> <p>B) Award Fee Evaluation Process - as required by CNA's contract with DoN, CNA is evaluated on a semi-annual basis by the government throughout the entire five year performance period of Contract N00014-05-D-0500. Over 200 sponsors of CNA deliverables provide input regarding CNA's value to their respective organizations. CNA's support to DoN leadership and management, their timeliness and quality of research, as well as their cost effectiveness and efficiency are evaluated. CNA's overall performance rating is the primary basis for determining the amount, if any, of the available award fee earned by CNA.</p>								

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605154N: <i>Center For Naval Analyses</i>	PROJECT 0148: <i>Center For Naval Analyses (CNA)</i>
<p>C) Two-Star Flag Officers and VCNO Corporate Board Meetings - DoN Two-Star and Three-Star Flag officers and their equivalent civilian counterparts meet several times a year to review the current fiscal year's research and provide guidance to CNA regarding their future research for DoN. These high level meetings are essential to provide CNA with DoN's guidance to ensure that the research conducted is of the greatest value to DoN. The meetings also serve as the catalyst for the formation of the CNA Annual Plan; CNA's roadmap for research during the upcoming fiscal year. The CNA Annual Plan is then submitted to the VCNO Corporate Board for their final review and acceptance.</p> <p>D) CNA Comprehensive Review - prior to contract renewal, CNA, as a FFRDC, must be evaluated to ensure that the DoN wants to renew their contract for an additional five years. DoN recently completed an exhaustive review of sponsors' technical needs and mission requirements; DoN's consideration of alternative sources; CNA's efficiency and effectiveness; CNA's management and cost effectiveness, as well as the establishment criteria and sponsorship agreement. The CNA Comprehensive Review was approved by ASN (RDA) and accepted by OSD (AT&L).</p>		

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605502N: Small Business Innovative Research							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	402.074	1.593	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2,959.775
0000: UNDIST	16.534	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	56.686
1812: NAVAIR SBIR Program	143.618	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	787.815
1813: SPAWAR SBIR Program	41.573	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	173.566
1814: NAVSEA SBIR Program	61.464	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	437.228
1824: CMC SBIR Program	17.657	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.579
1862: SSPO SBIR Program	1.854	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	12.107
1863: NAVSUP SBIR Program	0.800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.781
1864: CNR SBIR Program	46.645	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	987.291
1865: SBIR Administration	4.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	19.019
2016: NAVFAC SBIR Program	0.800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.100
2204: Small Business Tech Transfer Program	20.056	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	224.465
2240: Navy Dual Use Technology Program	0.656	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.632
2241: SBIR ADMIN - SPAWAR	2.521	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.304
2242: SBIR ADMIN - NAVSEA	5.080	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	35.315
2243: SBIR ADMIN - NAVAIR	8.765	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	39.506
2244: SBIR ADMIN - NAVFAC	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.183
2245: SBIR ADMIN - NAVSUP	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.207
2248: SBIR ADMIN - SSPO	0.112	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.735

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A. Mission Description and Budget Item Justification

The Small Business Research and Development Enhancement Act of 1992 as amended, (15 U.S.C. 638 paragraphs (f)(1-2), (n)(1-2)), and (y)(1) and (4) and reauthorization, The National Defense Authorization Act of 2010 (PL 110-235, Title VIII Secs. 847 and 848), requires "...each Federal agency that has an extramural budget for research or research and development, in excess of \$1,000,000,000..." "shall expend with small business concerns not less than the percentage of that extramural budget specified in subparagraph (B)..." in the case of paragraphs (f) and (n) and the services within the Department of Defense in the case of paragraph (y) for specific small business research initiatives. This Program Element is funded in accordance with these initiatives and The National Defense Authorization Act of 2010 (PL 110-235, Secs. 847 and 848)."

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
1319: Research, Development, Test & Evaluation, Navy		PE 0605502N: Small Business Innovative Research			
BA 6: RDT&E Management Support					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	0.399	0.000	0.000	0.000	0.000
Current President's Budget	402.074	1.593	0.000	0.000	0.000
Total Adjustments	401.675	1.593	0.000	0.000	0.000
• Congressional General Reductions		-0.007			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		1.600			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	401.676	0.000			
• Rate/Misc Adjustments	-0.001	0.000	0.000	0.000	0.000
Congressional Add Details (\$ in Millions, and Includes General Reductions)					
Project: 9999: Congressional Adds				FY 2009	FY 2010
Congressional Add: Wave Energy Harvesting for Buoy Applications				0.000	1.593
Congressional Add: Autonomous Power Management for Distributed Operat				0.399	0.000
Congressional Add Subtotals for Project: 9999				0.399	1.593
Congressional Add Totals for all Projects				0.399	1.593
Change Summary Explanation					
Technical: Not applicable.					
Schedule: Not applicable.					
FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 0000: <i>UNDIST</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0000: <i>UNDIST</i>	16.534	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	56.686
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Innovative Research Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
UNDIST <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							16.534	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							16.534	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 1812: <i>NAVAIR SBIR Program</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
1812: <i>NAVAIR SBIR Program</i>	143.618	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	787.815
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
NAVAIR SBIR PROGRAM <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							143.618	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							143.618	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 1813: <i>SPAWAR SBIR Program</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
1813: <i>SPAWAR SBIR Program</i>	41.573	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	173.566
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Innovative Research Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SPAWAR SBIR Program <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							41.573	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							41.573	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 1814: <i>NAVSEA SBIR Program</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
1814: <i>NAVSEA SBIR Program</i>	61.464	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	437.228
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Innovative Research Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
NAVSEA SBIR Program <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							61.464	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							61.464	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 1824: <i>CMC SBIR Program</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
1824: <i>CMC SBIR Program</i>	17.657	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	90.579
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy/Marine Small Business Innovative Research Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
CMC SBIR Program <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							17.657	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							17.657	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 1862: <i>SSPO SBIR Program</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
1862: <i>SSPO SBIR Program</i>	1.854	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	12.107
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Innovative Research Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SSPO SBIR Program <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							1.854	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							1.854	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 1863: <i>NAVSUP SBIR Program</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
1863: <i>NAVSUP SBIR Program</i>	0.800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.781
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Innovative Research Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
NAVSUP SBIR Program <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							0.800	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							0.800	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 1864: <i>CNR SBIR Program</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
1864: <i>CNR SBIR Program</i>	46.645	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	987.291
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Innovative Research Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
CNR SBIR Program <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							46.645	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							46.645	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 1865: <i>SBIR Administration</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
1865: <i>SBIR Administration</i>	4.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	19.019
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Administration support for the Navy Small Business Innovative Research Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SBIR Administration <i>FY 2009 Accomplishments:</i> N/A							4.613	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							4.613	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 2016: <i>NAVFAC SBIR Program</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2016: <i>NAVFAC SBIR Program</i>	0.800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.100
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Innovative Research Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
NAVFAC SBIR Program <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							0.800	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							0.800	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 2204: <i>Small Business Tech Transfer Program</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2204: <i>Small Business Tech Transfer Program</i>	20.056	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	224.465
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Technical Transfer Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Small Business Tech Transfer Program <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							20.056	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							20.056	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 2240: <i>Navy Dual Use Technology Program</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2240: <i>Navy Dual Use Technology Program</i>	0.656	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.632
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Dual Use Technology Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Navy Dual Use Technology Program <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							0.656	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							0.656	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 2241: <i>SBIR ADMIN - SPAWAR</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2241: <i>SBIR ADMIN - SPAWAR</i>	2.521	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.304
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Administration support of the Navy Small Business Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SBIR ADMIN - SPAWAR <i>FY 2009 Accomplishments:</i> N/A							2.521	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							2.521	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 2242: <i>SBIR ADMIN - NAVSEA</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2242: <i>SBIR ADMIN - NAVSEA</i>	5.080	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	35.315
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Administration support of the Navy Small Business Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SBIR ADMIN - NAVSEA <i>FY 2009 Accomplishments:</i> N/A							5.080	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							5.080	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 2243: <i>SBIR ADMIN - NAVAIR</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2243: <i>SBIR ADMIN - NAVAIR</i>	8.765	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	39.506
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Administration support of the Navy Small Business Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SBIR ADMIN - NAVAIR <i>FY 2009 Accomplishments:</i> N/A							8.765	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							8.765	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 2244: <i>SBIR ADMIN - NAVFAC</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2244: <i>SBIR ADMIN - NAVFAC</i>	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.183
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Administration support of the Navy Small Business Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SBIR ADMIN - NAVFAC <i>FY 2009 Accomplishments:</i> N/A							0.050	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							0.050	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 2245: <i>SBIR ADMIN - NAVSUP</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2245: <i>SBIR ADMIN - NAVSUP</i>	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.207
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Administration support of the Navy Small Business Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SBIR ADMIN - NAVSUP <i>FY 2009 Accomplishments:</i> N/A							0.050	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							0.050	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 2248: <i>SBIR ADMIN - SSPO</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2248: <i>SBIR ADMIN - SSPO</i>	0.112	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.735
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Administration support of the Navy Small Business Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SBIR ADMIN - SSPO <i>FY 2009 Accomplishments:</i> N/A							0.112	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							0.112	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 2813: <i>SBIR - NSMA</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2813: <i>SBIR - NSMA</i>	3.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	29.640
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Innovative Research Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SBIR - NSMA <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							3.200	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							3.200	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 2814: <i>SBIR ADMIN - NSMA</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2814: <i>SBIR ADMIN - NSMA</i>	0.566	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.887
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Administration support for the Navy Small Business Innovative Research Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SBIR ADMIN - NSMA <i>FY 2009 Accomplishments:</i> N/A							0.566	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							0.566	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 3201: <i>SBIR CPP - NAVAIR</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3201: <i>SBIR CPP - NAVAIR</i>	1.419	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.730
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Innovative Research Program's Commercialization Pilot Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SBIR CPP - NAVAIR <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							1.419	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							1.419	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 3202: <i>SBIR CPP - SPAWAR</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3202: <i>SBIR CPP - SPAWAR</i>	0.408	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.118
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Innovative Research Program's Commercialization Pilot Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SBIR CPP - SPAWAR <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							0.408	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							0.408	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 3203: <i>SBIR CPP - NAVSEA</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3203: <i>SBIR CPP - NAVSEA</i>	0.604	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.911
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Innovative Research Program's Commercialization Pilot Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SBIR CPP - NAVSEA <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							0.604	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							0.604	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 3204: <i>SBIR CPP - MARINE CORPS</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3204: <i>SBIR CPP - MARINE CORPS</i>	0.173	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.447
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Innovative Research Program's Commercialization Pilot Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SBIR CPP - MARINE CORPS <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							0.173	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							0.173	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 3205: <i>SBIR CPP - ONR</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3205: <i>SBIR CPP - ONR</i>	1.593	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.667
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Innovative Research Program's Commercialization Pilot Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SBIR CPP - ONR <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							1.593	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							1.593	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 3213: <i>NAVAIR STTR Program</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3213: <i>NAVAIR STTR Program</i>	17.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	23.032
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Innovative Research Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
NAVAIR STTR Program <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							17.032	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							17.032	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 3231: <i>SBIR Counterdrug</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3231: <i>SBIR Counterdrug</i>	1.332	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.332
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Innovative Research Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SBIR Counterdrug <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							1.332	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							1.332	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 3233: <i>SPAWAR STTR Program</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3233: <i>SPAWAR STTR Program</i>	2.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.500
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Supports the Navy Small Business Innovative Research Program.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SPAWAR STTR Program <i>FY 2009 Accomplishments:</i> The Navy program facilitated the use of small businesses to develop innovative Research and Development in addressing Navy needs. The successful implementation of various technologies developed enhanced Navy Platform and/or Weapon systems.							2.500	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							2.500	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics none											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>				PROJECT 9999: <i>Congressional Adds</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	0.399	1.593	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.992
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Congressional Interest Items not included in other Projects.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010			
Congressional Add: Wave Energy Harvesting for Buoy Applications <i>FY 2010 Plans:</i> This effort supports Wave Energy Harvesting for Buoy Applications research.							0.000	1.593			
Congressional Add: Autonomous Power Management for Distributed Operat <i>FY 2009 Accomplishments:</i> This effort supported Autonomous Power Management for Distributed Operation research.							0.399	0.000			
Congressional Adds Subtotals							0.399	1.593			
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 9999: <i>Congressional Adds</i>
<u>E. Performance Metrics</u> none		

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605804N: Technical Information Services							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	16.023	20.749	0.662	0.000	0.662	0.705	0.719	0.733	0.750	Continuing	Continuing
0835: Tech Info System	0.711	0.732	0.662	0.000	0.662	0.705	0.719	0.733	0.750	Continuing	Continuing
2296: Federal Lab Consortium	0.452	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.234
9999: Congressional Adds	14.860	20.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	106.430

A. Mission Description and Budget Item Justification

The Technical Information Services program provides support to achieve affordability in the development of Navy systems by reducing life-cycle costs through the facilitation of advanced technology associations between U.S. industry and the Navy. Warfighting effectiveness is enhanced through strategic relationships with industry to commercialize the science and technology developed by the Naval Research Enterprise and to gain: strategic understanding of industry Independent Research and Development Programs and plans; access concepts and technologies; and access to business practices within the civil sector.

B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	15.571	0.735	0.000	0.000	0.000
Current President's Budget	16.023	20.749	0.662	0.000	0.662
Total Adjustments	0.452	20.014	0.662	0.000	0.662
• Congressional General Reductions		-0.086			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		20.100			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.452	0.000			
• Program Adjustments	0.000	0.000	0.662	0.000	0.662

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

Project: 9999: Congressional Adds

FY 2009	FY 2010

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy		DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605804N: <i>Technical Information Services</i>	
<u>Congressional Add Details (\$ in Millions, and Includes General Reductions)</u>		FY 2009	FY 2010
Congressional Add: <i>Hawaii Technology Development Venture</i>		0.000	9.959
Congressional Add: <i>Technology Transfer Office</i>		0.000	1.494
Congressional Add: <i>Virtual Business Accelerator for the Silicon Prairie</i>		0.000	1.593
Congressional Add: <i>COMMERCIALIZATION OF ADVANCED TECHNOLOGY</i>		2.493	1.992
Congressional Add: <i>HTDV</i>		9.973	0.000
Congressional Add: <i>INTEGRATED MANUFACTURING ENTERPRISE</i>		2.394	4.979
Congressional Add Subtotals for Project: 9999		14.860	20.017
Congressional Add Totals for all Projects		14.860	20.017
<u>Change Summary Explanation</u>			
Technical: Not applicable.			
Schedule: Not applicable.			
FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.			

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010															
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605804N: <i>Technical Information Services</i>				PROJECT 0835: <i>Tech Info System</i>															
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost												
0835: <i>Tech Info System</i>	0.711	0.732	0.662	0.000	0.662	0.705	0.719	0.733	0.750	Continuing	Continuing												
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0														
<p>A. Mission Description and Budget Item Justification</p> <p>The goal for this project is to enhance warfighter effectiveness by: leveraging industry independent Research and Development science and technology base; developing strategic partnerships with industry to transition private sector technology; and transferring appropriate Navy-developed innovative concepts and inventions to the private sector for purposes of commercialization. (Public Law 96-480, Federal Technology Transfer Act of 1986)</p> <p>This project also provides the Department of the Navy (DoN) interface to the Office of the Deputy Under Secretary of Defense for Science and Technology, Office of Technology Transition, and to the Assistant Secretary of Commerce for Technology Policy for matters relating to policy and reporting requirements for technology transfer.</p> <p>B. Accomplishments/Planned Program (\$ in Millions)</p> <table border="1"> <thead> <tr> <th></th> <th>FY 2009</th> <th>FY 2010</th> <th>FY 2011 Base</th> <th>FY 2011 OCO</th> <th>FY 2011 Total</th> </tr> </thead> <tbody> <tr> <td> TECHNICAL INFORMATION SERVICES Technical Information Services supports the spin-in and spin-out of research and development performed by Navy laboratories and industry. This program develops the tools and provides management oversight of the DoN Domestic Technology Transfer (T2) Program. <i>FY 2009 Accomplishments:</i> - Continued to maintain the network tracking of technology transfer efforts required for Congressional reporting. - Continued to increase outreach and marketing efforts. </td> <td align="right">0.711</td> <td align="right">0.732</td> <td align="right">0.662</td> <td align="right">0.000</td> <td align="right">0.662</td> </tr> </tbody> </table>													FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	TECHNICAL INFORMATION SERVICES Technical Information Services supports the spin-in and spin-out of research and development performed by Navy laboratories and industry. This program develops the tools and provides management oversight of the DoN Domestic Technology Transfer (T2) Program. <i>FY 2009 Accomplishments:</i> - Continued to maintain the network tracking of technology transfer efforts required for Congressional reporting. - Continued to increase outreach and marketing efforts.	0.711	0.732	0.662	0.000	0.662
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total																		
TECHNICAL INFORMATION SERVICES Technical Information Services supports the spin-in and spin-out of research and development performed by Navy laboratories and industry. This program develops the tools and provides management oversight of the DoN Domestic Technology Transfer (T2) Program. <i>FY 2009 Accomplishments:</i> - Continued to maintain the network tracking of technology transfer efforts required for Congressional reporting. - Continued to increase outreach and marketing efforts.	0.711	0.732	0.662	0.000	0.662																		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605804N: Technical Information Services		PROJECT 0835: Tech Info System		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<ul style="list-style-type: none">- Continued the pilot program of leveraging Master of Business Administration technology commercialization course to perform intellectual property assessments, conduct market studies and find potential licensing partners.- Continued three new pilot programs: Revising the Defense Technology Transfer Information System (DTTIS) database; revising the Office of Naval Research (ONR) technology transfer website; and leveraging with the Naval Research Enterprise Intern Program (NREIP) to fund student interns to support the Navy Office of Research and Technology Application (ORTA) activities.- Completed revising the DTTIS database.- Completed revising the ONR technology transfer website.- Initiated and complete SECNAVINST 5700 revision.- Initiated two new pilot programs to support T2 efforts at ORTAs across Navy laboratories. <p>Acquisition Workforce Fund:</p> <ul style="list-style-type: none">- Funded DoD Acquisition Workforce Fund. <p><i>FY 2010 Plans:</i></p> <ul style="list-style-type: none">- Continue all efforts of FY 2009, less those noted as completed above.- Complete leveraging MBA technology commercialization course to perform intellectual property assessments, conduct market studies and find potential licensing partners.- Initiate effort for Phase II of DTTIS database to include patent licensing tracking.- Initiate effort for Phase II of ONR technology transfer website to include content management.- Initiate two new pilot programs to support T2 efforts at ORTAs across Navy laboratories. <p><i>FY 2011 Base Plans:</i></p> <ul style="list-style-type: none">- Continue all efforts of FY 2010, less those noted as completed above.- Initiate development of a database to capture value of technology transfer to the Navy and, if possible, platform insertion information.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605804N: <i>Technical Information Services</i>		PROJECT 0835: <i>Tech Info System</i>				
B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<ul style="list-style-type: none"> - Initiate effort to raise visibility of Navy technologies through a more widely defined publications program. - Initiate study to analyze trends of Cooperative Research and Development Agreements in the Navy Defense Technology Transfer Information System (NDTTIS). - Initiate two new pilot programs to support T2 efforts at ORTAs across Navy laboratories. 								
Accomplishments/Planned Programs Subtotals				0.711	0.732	0.662	0.000	0.662
C. Other Program Funding Summary (\$ in Millions)								
N/A								
D. Acquisition Strategy								
N/A								
E. Performance Metrics								
Demonstrate support for technological transitions from the Naval Research Enterprise into industrial and commercial enterprises supporting Navy programs of record and warfighter needs, by being responsive to Offices of Research and Technology Applications focal points for technology transfer in their development of Cooperative Research and Development Agreements (CRADA), and reducing transaction/information exchange timeframes by 25%.								

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605804N: <i>Technical Information Services</i>				PROJECT 2296: <i>Federal Lab Consortium</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2296: <i>Federal Lab Consortium</i>	0.452	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.234
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification The Federal Laboratory Consortium for Technology Transfer (FLC) was established by Congress under the Federal Technology Transfer Act of 1986 (P.L. 99-502, 20 October 1986, as amended). The FLC, in cooperation with federal laboratories and the private sector, provides services to enhance the transfer of federally-developed technology to include activities such as: developing and administering technology transfer training courses and materials; assisting Federal agencies and laboratories in their technology transfer programs; and providing a clearinghouse for technology transfer requests.											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Federal Lab Consortium						0.452	0.000	0.000	0.000	0.000	
The Federal Laboratory Consortium for Technology Transfer (FLC) was established by Congress under the Federal Technology Transfer Act of 1986 (P.L. 99-502, 20 October 1986, as amended). The FLC, in cooperation with federal laboratories and the private sector, provides services to enhance the transfer of federally-developed technology to include activities such as: developing and administering technology transfer training courses and materials; assisting Federal agencies and laboratories in their technology transfer programs; and providing a clearinghouse for technology transfer requests.											
FY 2009 Accomplishments: - Provided services to enhance the transfer of federally-developed technology.											
Accomplishments/Planned Programs Subtotals						0.452	0.000	0.000	0.000	0.000	

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
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C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy N/A		
E. Performance Metrics In accordance with the Federal Technology Transfer Act of 1986 (P.L. 99-502, 20 October 1986, as amended), disseminated funding judiciously.		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605804N: <i>Technical Information Services</i>				PROJECT 9999: <i>Congressional Adds</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	14.860	20.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	106.430
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Congressional Interest Items not included in other Projects.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010			
Congressional Add: Hawaii Technology Development Venture							0.000	9.959			
<i>FY 2010 Plans:</i> The effort supports Hawaii Technology Development Venture research.											
Congressional Add: Technology Transfer Office							0.000	1.494			
<i>FY 2010 Plans:</i> This effort supports Technology Transfer Office research.											
Congressional Add: Virtual Business Accelerator for the Silicon Prairie							0.000	1.593			
<i>FY 2010 Plans:</i> This effort supports Virtual Business Accelerator for the Silicon Prairie research.											
Congressional Add: COMMERCIALIZATION OF ADVANCED TECHNOLOGY							2.493	1.992			

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
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B. Accomplishments/Planned Program (\$ in Millions)		
	FY 2009	FY 2010
<p><i>FY 2009 Accomplishments:</i> This effort supported the development of commercial and alternative applications of government-sponsored technologies and developed high-tech solutions using advances in technology from academia and the private sector for use in government defined priority issues. CAT executed product development awards and provided business development expertise and market identification and analysis to small businesses.</p> <p><i>FY 2010 Plans:</i> Continue support of commercialization of advanced technology research.</p>		
<p>Congressional Add: HTDV</p> <p><i>FY 2009 Accomplishments:</i> This effort supported the assessment for operational relevance of Hawaii Technology Development Venture (HTDV) technologies and, as appropriate, provided operational forces coordination, test planning and control for candidate technologies. Provided experimentation and demonstration planning/design and directed the execution and assessment of these activities, developed scenarios and test conditions as required, served as liaison between U.S. Marine Corps Forces, Pacific and other Marine Corps activities, and trained and educated the Science and Technology community on warfighter requirements and operations.</p>	9.973	0.000
<p>Congressional Add: INTEGRATED MANUFACTURING ENTERPRISE</p> <p><i>FY 2009 Accomplishments:</i> This effort supported the demonstration of remanufacturing as a discipline to provide low cost logistic crafts for littoral warfare.</p>	2.394	4.979

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605804N: <i>Technical Information Services</i>	PROJECT 9999: <i>Congressional Adds</i>	
B. Accomplishments/Planned Program (\$ in Millions)			
		FY 2009	FY 2010
<i>FY 2010 Plans:</i> Continues support of Integrated Manufacturing Enterprise research.			
Congressional Adds Subtotals		14.860	20.017
C. Other Program Funding Summary (\$ in Millions)			
N/A			
D. Acquisition Strategy			
N/A			
E. Performance Metrics			
Congressional add			

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605853N: Management, Technical & Intl Supt							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	49.255	60.181	58.329	0.000	58.329	59.000	60.159	60.842	61.978	Continuing	Continuing
0149: International Coop RDT&E	3.912	5.603	5.273	0.000	5.273	4.716	4.864	4.474	4.548	Continuing	Continuing
1767: Naval War Col Strategic Studies Supt	4.115	4.607	4.438	0.000	4.438	4.506	4.573	4.666	4.753	Continuing	Continuing
2221: JT Mission Assessment Studies	21.741	25.223	27.963	0.000	27.963	28.484	28.875	29.378	29.896	Continuing	Continuing
3025: Mid-Range Financial Improvement Plans	1.532	1.587	1.436	0.000	1.436	1.532	1.566	1.601	1.635	Continuing	Continuing
3028: Operations Integration Group	0.000	4.418	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.418
3039: CHENG	17.955	18.743	19.219	0.000	19.219	19.762	20.281	20.723	21.146	Continuing	Continuing
A. Mission Description and Budget Item Justification											
International Cooperative RDT&E: This project provides program management, execution, and support to implement a broad range of cooperative Naval Research and Development, Test and Evaluation initiatives to improve coalition interoperability, harmonize U.S. Navy requirements with allied and friendly nations, and identify cooperative international opportunities, and improve coalition interoperability. In addition, it develops coherent approaches in coordination with Combatant Commanders, Chief of Naval Operations (CNO) and appropriate Partner nations, to sea-based missile defense, command, control, communications, computers and intelligence (C4I), and cooperative acquisition programs while also identifying technology to support the Global Maritime Partnership Initiative.											
Naval War College research, analysis and gaming activities serve as a focal point, stimulus, and major source of strategic and operational thought within the Navy, Joint and Interagency communities. These efforts generate strategic and operational alternatives, quantitative analysis, war gaming and political military assessments, and provide recommendations to the CNO and Navy Component Commanders regarding the formulation and execution of maritime options for the President of the United States. The War Gaming Department plans, designs, executes, analyzes and reports on the Navy's Title 10 war games. These war games provide analytical input to the Navy's Strategic Plan, assessments of future concepts, and recommendations to the Navy's Quadrennial Defense Review, force design, and strategy process. The War Gaming Department also designs, executes and analyzes war games for the Fleet Commanders on their Theater Security Cooperation Plans and operational warfighting issues.											

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>
<p>Assessment Program: Provides capability based planning assessment for Joint Capabilities Integration and Development System, conducts analysis to affect warfighting capability trades and enterprise resources, identifies needs, gaps, and overlaps, and assesses alternative solutions to Joint needs. Supports both the development and use of modeling, simulation and analytically based warfare and provides business analyses and analytic tools that are the basis for decision making with respect to Concepts of Operations; Command, Controls, Communications, Computers, Intelligence, Surveillance and Reconnaissance systems (FORCENet); warfare systems (Sea Strike, Sea Shield, and Sea Basing) and their architectures; force structure; and the Navy's core "organize, train, and equip mission" (the Warfare and Provider Enterprises). Manages Office of the Chief of Naval Operations (OPNAV) support to Office of the Secretary of Defense/Navy's analytic agenda. Provides overarching Planning, Programming, Budgeting and Execution System (PPBES) analyses and guidance for PPBES which provides gap analysis and investment strategy and Total Obligation Authority allocation. Provides independent capability analysis directly to Chief of Naval Operations (CNO) and assists in structuring follow-on OPNAV analyses. The program coordinates Navy's position for the Enhanced Planning Process and conducts Net Assessments. This program serves as the lead campaign analysis group for OPNAV and Chief of Naval Operations Investment Strategy assessments, all of which prove analytical underpinnings/basis for programmatic decisions of the Navy's top leadership regarding the integration of all Navy warfare and support requirements. This program supports "A Cooperative Strategy for 21st Century Seapower 21" as modified by the CNO Maritime Strategy which charts a course for the Navy, Coast Guard and Marine Corps to work collectively and with international partners to prevent crises from occurring or reacting quickly should one occur to avoid negative impact to the United States. This program is dual-hatted as the head of CNO's Capability Analysis Group and serves the CNO directly as an independent assessor providing a broad-view perspective across the Navy staff, with an integrated look at both warfighting and warfighting support programs. Program supports the world class modeling efforts to attain a level of modeling and simulation capability that is world class and establishes OPNAV as a leader in the Department of Defense modeling and simulation community. Provides the CNO alternatives in assessing the implications imbedded within resource decisions in a quantified context of costs versus capability versus risk. This program provides independent analytic support to Navy leadership in conjunction with various executive level decision forums. The Assessment Program develops tools and analytical methodologies that assist in evaluating Navy programs and provides technical leadership for the analysis functional area of Naval Modeling and Simulation.</p> <p>Mid-Range Financial Improvement Plans: This project supports the Research Development Test & Evaluation, Navy (RD TEN) portion of the larger DoD and Navy-wide effort to implement the Financial Improvement Plan. Corrective actions required to resolve known deficiencies and determine resource requirements (people and systems) have been identified. Funding is for the sustainment of clean and auditable statements for RD TEN.</p> <p>CHENG: Funds the Assistant Secretary of the Navy for Research, Development and Acquisition Chief Engineer to develop and implement architecture-based systems engineering processes, methods and tools that assure integrated and interoperable systems are delivered to the fleet. This project provides the mission-oriented technical basis for implementing capability-based acquisition management within the Department of Navy (DON) to engineer and field Navy and Marine Corps combat systems, weapon systems, and command, control, communication, computer and intelligence programs that must operate as family-of-systems (FoS) or system-of-systems (SoS). The focus of this project is on identifying the functions, relationships, and connections between systems at both the force and unit level and across warfare mission areas, and encompasses three key elements: Systems Engineering to provide the framework for making engineering decisions by warfighting</p>		

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
1319: Research, Development, Test & Evaluation, Navy		PE 0605853N: Management, Technical & Intl Supt			
BA 6: RDT&E Management Support					
capability at the FoS/SoS level and supports consistent engineering and investment decision-making across Navy and Marine Corps programs within capability-based acquisition portfolios. Naval Collaborative Engineering Environment development and implementation as a DON enterprise resource for Naval integration and interoperability information to enable collaboration and decision support among Fleet organizations, Program Executive Offices, Program Managers, Systems Commands, prime contractors, Resource/Warfare Sponsors and Comptroller organizations. Standards, Policies and Guidelines engineering and technical staff to implement DON, OSD and Joint integration and interoperability and Anti-Tamper requirements.					
Operations Integration Group: Classified					
FY 2011 OCO - N/A					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	51.213	60.590	0.000	0.000	0.000
Current President's Budget	49.255	60.181	58.329	0.000	58.329
Total Adjustments	-1.958	-0.409	58.329	0.000	58.329
• Congressional General Reductions		-0.250			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	-0.159			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	-0.800	0.000			
• SBIR/STTR Transfer	-1.158	0.000			
• Program Adjustments	0.000	0.000	58.329	0.000	58.329
Change Summary Explanation					
Technical: Not applicable.					
Schedule: Not applicable.					
FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>				PROJECT 0149: <i>International Coop RDT&E</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0149: <i>International Coop RDT&E</i>	3.912	5.603	5.273	0.000	5.273	4.716	4.864	4.474	4.548	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project provides program management, execution, and support to implement a broad range of cooperative Naval Research and Development, Test and Evaluation (RDT&E) initiatives to improve coalition interoperability, harmonize U.S. Navy requirements with allied and friendly nations, identify cooperative international opportunities, and improve coalition interoperability. In addition, it develops coherent approaches in coordination with Combatant Commanders (COCOMs), Chief of Naval Operations (CNO) and appropriate Partner nations, to sea-based missile defense, command, control, communications, computers and intelligence (C4I), and cooperative acquisition programs while also identifying technology to support the Global Maritime Partnership Initiative.

The project scope was expanded from primarily North Atlantic Treaty Organization (NATO)-centric to include Overseas Contingency Operations (OCO), and Maritime Domain Awareness (MDA) emphasis. Relationships have been, and are being initiated with a greatly expanded and diverse group of maritime countries, particularly those with nascent and littoral navies, located in new regions critical to U.S. security. The project was restructured internally to both maintain ongoing international relationships and projects, while preparing to facilitate support for a global network of maritime nations under MDA and increase OCO-related support requirements.

Ongoing cooperative RDT&E programs, projects and exchanges are pursued to identify cooperative acquisition programs, enhance OCO efforts and MDA development, fill capability gaps, improve US/coalition interoperability, and set standardization with international partners. Such efforts have resulted in:

1. Negotiating and developing approximately 57 international RDT&E Agreements annually with allied and friendly nations;
2. Executing over 300 Information Exchange Annexes (IEAs) with foreign partners;
3. Improving IEA information dissemination with allied and friendly countries and within Department of the Navy (DoN);
4. Coordinating Office for the Chief of Naval Operations (OPNAV) inputs to the Office of the Under Secretary of Defense (OUSD) Acquisition, Technology, and Logistics (AT&L) Foreign Comparative Test (FCT) Program, and Coalition Warfare Program (CWT) as well as the DoN Technology Transfer Security Assistance Review Boards (TTSARB).
5. Represent the US Navy in Office of the Secretary of Defense (OSD) directed Armaments Cooperation Forums, including the Conference of NATO Armaments Directors' groups {NATO Naval Armaments Group (NNAG)}, and Senior National Representative-Maritime (SNR-M);
6. Funding of various international RDT&E support databases including Technical Project Officer (TPO), International Agreement Generators, Information/Data Exchange Agreements, and Project Agreements/Memorandums of Understanding;
7. Leading the Engineering and Scientist Exchange Program (ESEP).

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605853N: Management, Technical & Intl Supt		PROJECT 0149: International Coop RDT&E	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
International Coop RDT&E FY 2009 Accomplishments: - Maintained internal DoN international databases to support international cooperative activities and projects with allies. Assessed functional ability to integrate DoN international databases across OPNAV departments to improve leveraging of program dollars, fielding of better products and speeding delivery. -Continued to support Maritime Theater Missile Defense Forum that obtained \$8.1M in R&D monies from partner nation contributions. The multi-lateral forum (9 Maritime Partner countries and the US Navy) entered into four international agreements (Battle Management, Command, Control, Communications, Computers and Intelligence (BMC4I); Distributed Engineering Plant, Open Architecture and Modeling and Simulation (M&S). The Maritime Theater Missile Defense Forum has a goal of an at-sea capability demonstration in 2015. - Continued US Navy International Bench, a new internet-based connector and composeable tool to enhance collaboration between US military and agency personnel engaged in international work. - Continued to coordinate US Navy's participation in OUSD AT&L's Foreign Comparative Test (FCT) Program and the Coalition Warfare Program (CWP) selection processes to meet emerging military capability requirements. - Continued execution of over 300 Information/Data Exchange Agreements (IEA/DEA) with more than 30 countries. - Continued execution and support of placement of US Navy and partner nation engineers and scientists under OSD's Engineer and Scientist Exchange Program (ESEP). - Funded various evolving potential cooperative exchanges and projects contributing to MDA/MSA and irregular warfare including Multi-Mission Aircraft, Broad Area Maritime Surveillance, Submarine Littoral Weapons System, and Swimmer Engagement.	3.889	5.603	5.273	0.000	5.273

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>		PROJECT 0149: <i>International Coop RDT&E</i>	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<ul style="list-style-type: none"> - Coordinated US Navy support to OUSD (AT&L) International Cooperation office. - Supported new CNO-initiated Strategy Dialogue with Australia, including Air and Expeditionary Warfare Working Groups for mutual development of requirements and projects. - Supported NATO Naval Armaments Group (NNAG) and Five Power Groups on cooperative programs including harbor protection, electronic warfare, and Defense Against Terrorism (DAT) trials. <p><i>FY 2010 Plans:</i></p> <ul style="list-style-type: none"> - Continue all efforts of FY09. <p><i>FY 2011 Base Plans:</i></p> <ul style="list-style-type: none"> - Continue all efforts of FY10. 					
Acquisition Workforce Fund-2009 <i>FY 2009 Accomplishments:</i> - Provided Acquisition Workforce support.	0.023	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	3.912	5.603	5.273	0.000	5.273
C. Other Program Funding Summary (\$ in Millions) N/A					
D. Acquisition Strategy N/A					
E. Performance Metrics The Navy International Cooperative RDT&E project supports the implementation of many international cooperative program activities throughout the Department of the Navy (DoN) RDT&E communities. The project funds DoN participation in NATO and OSD lead Armaments Cooperation as well as DoN lead international cooperation that promotes coalition interoperability and set standards with international partners. The focused activities under this project maximize the DoN's efforts by leveraging international technologies and funding to fill capabilities gaps, gain access to foreign research and testing data, and avoid duplication of research and development					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
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efforts. The performance goals/metrics are, in cooperation with Maritime Partner nations, to set and harmonize requirements, utilize respective technologies, encourage financial contributions and facilities use, and support forums and work that reduce DoN funding requirements.		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>				PROJECT 1767: <i>Naval War Col Strategic Studies Supt</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
1767: <i>Naval War Col Strategic Studies Supt</i>	4.115	4.607	4.438	0.000	4.438	4.506	4.573	4.666	4.753	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Naval War College (NWC) research, analysis and gaming activities serve as a focal point, stimulus, and major source of strategic and operational thought within the Navy, Joint and Interagency communities. These efforts generate strategic and operational alternatives, tactical imperatives, quantitative analysis, war gaming, political-military assessments, and provide recommendations to the Chief of Naval Operations (CNO), Fleet Commanders and numbered Fleet Commanders regarding the formulation and execution of maritime options for the President of the United States.

This project provides research, analysis and war gaming to meet the needs of the Secretary of the Navy, the Chief of Naval Operations, and Fleet Commanders. Performance is measured in terms of both the quantity and quality of war games, analysis and the extent to which demand for war games and research products can be accommodated within funding levels. Results of research products and war games are evaluated through customer feedback and the extent to which findings are incorporated into follow-on research and practical applications such as Navy doctrine, operational tactics, and programming decisions made during the Planning, Programming, Budgeting & Execution (PPBE) process.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Strategic Studies Naval War College (NWC) conducts research in strategic studies in response to tasking from the Secretary of the Navy (SECNAV), Chief of Naval Operation (CNO), Fleet Commanders, numbered Fleet Commanders, and Combatant Commanders. NWC also hosts the activities of the CNO's Strategic Studies Group (SSG). The CNO SSG is a select group of senior naval officers handpicked by the CNO, who report to him in the development of revolutionary warfighting and operational concepts, such as Sea Strike and FORCEnet.	1.116	1.133	1.083	0.000	1.083

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2009 Accomplishments:</i></p> <ul style="list-style-type: none">- Continued to conduct research and analysis projects and provide supporting events for OPNAV, the numbered Fleets, Navy Component Commanders, and the Combatant Commanders. Projects in direct support of numbered fleet commanders are expected to grow in scope.- Continued to support the OPNAV Staff on tasked research projects.- CNO SSG tasking from the CNO to SSG XXVIII to generate revolutionary operating and warfighting concepts for integration of unmanned systems into the maritime force for 2028 and beyond with CNO approving at least fifty percent of the SSG concepts.- Initiated revolutionary operating and warfighting concepts for 2035 and beyond under CNO tasking. <p><i>FY 2010 Plans:</i></p> <ul style="list-style-type: none">- Continue to conduct research and analysis projects and provide supporting events for Office of the Chief of Naval Operations (OPNAV), the numbered Fleets, Navy Component Commanders, and the Combatant Commanders.- Continued to support the OPNAV Staff on operational and strategic level of war tasked research projects.- CNO SSG tasking from the CNO to SSG XXIX to generate revolutionary operating and warfighting concepts for 2035 and beyond with CNO approving at least sixty percent of the SSG concepts.- Initiate revolutionary operating and warfighting concepts for 2035 and beyond under CNO tasking. <p><i>FY 2011 Base Plans:</i></p> <ul style="list-style-type: none">- Continue all NWC strategic study efforts efforts of FY 10.- CNO SSG tasking from the CNO to SSG XXX to generate revolutionary operating and warfighting concepts for 2035 and beyond with CNO approving at least seventy percent of the SSG concepts.					
Naval War Gaming Support This project provides research, analysis and war gaming to meet the needs of the Secretary of the Navy, the Chief of Naval Operations, and Fleet Commanders. Performance is measured in terms of	1.737	2.205	2.060	0.000	2.060

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
both the quantity and quality of war games, analysis and the extent to which demand for war games and research products can be accommodated within funding levels.						
FY 2009 Accomplishments: <ul style="list-style-type: none">- Continued to conduct 55-60 major war games and related events in support of OPNAV, the numbered Fleets, Fleet Commanders, and the Combatant Commanders.- Continued to conduct operational research and experimentation for Joint Force Maritime Component Commander (JFMCC) concept development via JFMCC Center of Excellence.- Continued to conduct analytical research on key operational challenges such as theater Anti Submarine Warfare (ASW), submarine payloads, seaborne maritime missile defense, global maritime security, maritime homeland defense, maritime domain awareness, and Sea Basing.- Continued to conduct research supporting war games co-sponsored with Naval Warfare Development Command (NWDC) and US Joint Forces Command.- Continued to develop advanced war gaming analytical methods and tools.- Continued to conduct analytic research on effects based operations and systems thinking for Naval Forces Europe (NAVEUR) and Navy Component for Central Command (NAVCENT).- Continued to conduct research in advanced adaptive Command and Control (C2) for Office of Naval Research (ONR).- Continued to develop educational materials for Naval Operations Planners Course (NOPC).- Continued to conduct high level policy analytic research and gaming addressing Proliferation Security Initiatives for Office of the Secretary of Defense (OSD).- Continued to support CNO Maritime Strategy and operational concepts through analytical war gaming.						
FY 2010 Plans: <ul style="list-style-type: none">- Continue to conduct 55-60 major war games and related events in support of SECNAV, CNO, COCOMs, NCCs, OPNAV, numbered fleet commanders, other USN and USMC operational commanders, the US Intelligence Community and other departments and agencies of the USG.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy			DATE: February 2010			
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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<ul style="list-style-type: none">- Continue to design, execute, analyze and report on a Title 10 War Game (Global), alternating annually between one classified and one unclassified war game, in support of the Cooperative Strategy for 21st Century Seapower. These games will lead to follow-on research and analytical efforts that will feed the succeeding Title 10 War Games as part of the process of continual gaming in support of strategy development and force design.- Continue to conduct research, games, and workshops in support of force design efforts of N81 and the QDR Team.- Continue to conduct operational research, experimentation and assessment activities to support the ability of Navy Combined and Joint Force Maritime Component Commanders (C/JFMCC) and Naval Component Commanders via concept development and analysis of the Maritime Operations Center concept.- Continue to conduct research and analysis in support of Fleet Commanders and Combatant Commanders in response to their needs for operational planning, analysis and war gaming to respond to emerging operational requirements.- Continue to conduct analytical research on key operational challenges such as sea control, deterrence, logistics, maritime domain awareness, cyber, sea basing, command relationships, maritime homeland defense, maritime security, and command and control.- Continue to conduct research and development by supporting war games co-sponsored with Navy Warfare Development Command (NWDC) and US Joint Forces Command.- Continue to develop, evaluate and implement advanced war gaming analytical methods and tools to support the needs of OPNAV, operational commanders, and other Department of Defense Agencies.- Continue to conduct analytic research on systems thinking for OPNAV and fleet commanders.- Continue to conduct research, analysis, and war gaming on Command and Control (C2) and command relationships for OPNAV and Fleet Commanders.- Continue to research and develop advaced war gaming educational materials for Naval Operations Planners Course (NOPC).- Continue to conduct high level research, analysis, and gaming addressing Proliferation Security Initiatives for Office of the Secretary of Defense (OSD).						

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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<ul style="list-style-type: none">- Continue to support CNO's concepts and initiatives through research, analysis, and war gaming.- Continue to support the Navy's Strategic Planning Process and to increase support to the NSP.- Continue to conduct, research, and analyze maritime homeland security and maritime homeland defense related concepts in support of the Cooperative Strategy for the 21st Century Seapower. <p>FY 2011 Base Plans: Continue all efforts of FY 10.</p>					
Warfare Analysis and Research <p>FY 2009 Accomplishments:</p> <ul style="list-style-type: none">- Continued to conduct major decision events in support of Office of the Chief of Naval Operations (OPNAV), the numbered Fleets, Fleet Commanders, and the Combatant Commanders. Projects were in direct support of warfighting analysis requirements for numbered fleet commanders and were expanded to include Commander Seventh Fleet (C7F) with particular focus on India and the Indian Ocean.- Conducted analytical research on key strategic and operational challenges such as maritime ballistic missile defense, proliferation security initiative, global maritime security, maritime situational awareness, maritime operations headquarters, interconnectivity, and multi-service force deployment.- Continued additional evaluation of concepts and decision events in conjunction with war gaming center.- Conducted research targeted at the strategic and policy level decision making within China- Continued to provide direct support to NWC student research groups and war gaming.- 30-40 major decision are conducted in support of there efforts. <p>FY 2010 Plans:</p> <ul style="list-style-type: none">- Continue to conduct major decision events in support of OPNAV, the numbered Fleets, Fleet Commanders, and the Combatant Commanders. Projects were in direct support of warfighting	0.490	0.501	0.499	0.000	0.499

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
analysis requirements for numbered fleet commanders and were expanded to include Commander Seventh Fleet (C7F) with particular focus on India and the Indian Ocean. - Conduct analytical research on key strategic and operational challenges such as maritime ballistic missile defense, proliferation security initiative, global maritime security, maritime situational awareness, maritime operations headquarters, interconnectivity, and multi-service force deployment. - Continue additional evaluation of concepts and decision events in conjunction with war gaming center. - Conduct research targeted at the strategic and policy level decision making within China. - Continue to provide direct support to NWC student research groups and war gaming. - 30-40 major decision events will be conducted in support of there efforts. FY 2011 Base Plans: - Continue all efforts of FY 10.						
NWC Student Research Projects Selected, top performing Naval War College (NWC) students (senior Naval and other DoD officers) to conduct focused research and analysis of current and future strategic and operational challenges and tactical imperatives. These students are organized under the supervision of the Mahan Scholars Program and the Halsey Group Program faculty. FY 2009 Accomplishments: - Conducted focused research, analysis and war gaming of current and future strategic/operational challenges and tactical imperatives by the Halsey Group and Mahan Scholars programs. . - Research groups continued to conduct focused research, analysis and free-play war gaming of current and future operational challenges and tactical imperatives arising from regional threats, homeland defense and access denial efforts at the high end of the conflict spectrum in the Pacific, European Command (EUCOM), Central Command (CENTCOM) and Northern Command		0.152	0.155	0.171	0.000	0.171

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
(NORTHCOM) area of responsibility (AOR). Research and analysis efforts continued in those areas above, and was expanded to include a detailed focus on counter-targeting, operational deception, and countering information denial and missile defense at the theater joint operational level. - Conducted research for Deputy Secretary of Defense (DEPSECDEF) on matters tasked to the College. FY 2010 Plans: - Conducted focused research, analysis and war gaming of current and future strategic/operational challenges and tactical imperatives by the Halsey Group and Mahan Scholars programs. - Research groups continued to conduct focused research, analysis and free-play war gaming of current and future operational challenges and tactical imperatives arising from regional threats, homeland defense and access denial efforts at the high end of the conflict spectrum in the Pacific, European Command (EUCOM), Central Command (CENTCOM) and Northern Command (NORTHCOM) area of responsibility (AOR). Research and analysis efforts continued in those areas above, and was expanded to include a detailed focus on counter-targeting, operational deception, and countering information denial and missile defense at the theater joint operational level. - Conducted research for Deputy Secretary of Defense (DEPSECDEF) on matters tasked to the College. FY 2011 Base Plans: Continue all efforts of FY 10						
Maritime Headquarters (MHQ)/Maritime Operations (MOC) Analysis Formerly JFMCC/Worldwide Naval Component Commanders (WNCC). Naval War College (NWC) conducts research and analysis at the operational level of war, including direct support for the Maritime Headquarters (MHQ) with Maritime Operations Center (MOC) and Combined/Joint Forces Maritime Component Commander (C/JFMCC) activities. These activities include support for concept and doctrine development of numbered fleet war games, exercises, education, research and analysis.		0.600	0.613	0.625	0.000	0.625

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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: - Conducted research and analysis projects and provide support of MHQ with MOC and C/JFMCC activities and direct support for the numbered Fleet Commanders. Efforts include assist team visits in support of analysis and definition of maritime operational processes, including execution battle management, tasking subordinates, operational level planning and operational/effects assessment. - Initiated research into the required competencies for Maritime Staff Operations Course for officer and enlisted personnel to successful operate at the operational level of war.					
FY 2010 Plans: - Conduct research and analysis projects and provide support of MHQ with MOC and C/JFMCC activities and direct support for the numbered Fleet Commanders. Efforts include assist team visits in support of analysis and definition of maritime operational processes, including execution battle management, tasking subordinates, operational level planning and operational/effects assessment. - Initiate research into the required competencies for Maritime Staff Operations Course for officer and enlisted personnel to successful operate at the operational level of war.					
FY 2011 Base Plans: Continue all efforts of FY 10.					
Acquisition Workforce Fund FY 2009 Accomplishments: Funded Acquisition Workforce Fund.	0.020	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	4.115	4.607	4.438	0.000	4.438

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C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy N/A		
E. Performance Metrics <p>NWC Research and Analysis Metrics: NWC supports the Navy's strategic and operational planning through the design, execution, analysis and reporting of strategic and operational level research and analysis. The focus of these studies will alternate annually between classified and unclassified studies in support of the Cooperative Strategy for 21st Century Seapower, with the analytical results informing follow-on research and analysis as part of the process of continual gaming in support of strategy development and force design. Other research and analytical war games and workshops will be conducted to inform the Navy Quadrennial Defense Review (QDR) team in support of their efforts to provide the Navy's position to the QDR. Further research and analysis will be conducted to support the Fleet Commanders and Combatant Commanders in response to their needs for operational planning, analysis and war gaming of emergent operational requirements. The studies, workshops, and war games for OPNAV and the fleet commanders on will focus operational challenges, such as sea control, deterrence, logistics, maritime domain awareness, sea basing, cyber, command relationships, maritime homeland defense, maritime security, and command and control (C2). Operational research and analysis in support of the Navy's Combined and Joint Force Maritime Component Commanders Course will provide key insights informing the maritime operational level of command and the concept development of the Maritime Operations Center. NWC also conducts extensive research and analysis on measures of effectiveness and systems thinking for the fleet commanders as well as research and analytical support to OPNAV on the Navy's Strategic Planning Process (NSPP). NWC conducts strategic and operational level research and analysis in support of the Office of the Secretary of Defense and the Department of State in the area of the Proliferation Security Initiative.</p> <p>Strategic Studies Metrics: Naval War College (NWC) conducts research in strategic studies in response to tasking from the Secretary of the Navy (SECNAV), Chief of Naval Operation (CNO), Fleet Commanders, numbered Fleet Commanders, and Combatant Commanders. NWC also hosts the activities of the CNO's Strategic Studies Group (SSG). The CNO SSG is a select group of senior naval officers handpicked by the CNO, who report to him in the development of revolutionary warfighting and operational concepts, such as Sea Strike and FORCEnet.</p> <p>War Gaming Metrics: Results of research products and war games are evaluated through customer feedback and the extent to which findings are incorporated into follow-on research and practical applications such as Navy doctrine, operational tactics, and programming decisions made during the Planning, Programming, Budgeting & Execution (PPBE), Quadrennial Defense Review (QDR), and Navy Strategic Planning Process (NSPP) processes. Each year Naval War College (NWC) develops and executes 50-60 major war games and associated events to explore and analyze military, political, informational and economic aspects of differing strategic and operational scenarios and tactical imperatives. Naval War College (NWC) conducts strategic and operational war gaming and research in direct support or Office of the Chief of Naval Operations (OPNAV), the numbered Fleets, Fleet Commanders, and the Combatant Commanders. The intent of the research is to</p>		

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<p>provide Navy and DoD leadership with researched and analytical information to make decisions on current and future operational and strategy plans, concepts and force structure.</p> <p>Warfare Analysis Metrics: Each year, 30-40 events provide support to efforts that explore and analyze a wide range of issues and their associated factors which address future needs of the Service. These issues and decisions can then be further tested and evaluated in conjunction with NWC wargaming center.</p> <p>Halsey/Mahan Metrics: The Halsey and Mahan Scholars groups research four specific directed projects and several independent research projects on real world operational and functional challenges. The results of the research are provided to the OPNAV Staff, operational fleets and Combatant Commanders and provided input into operational plans and procurement priorities.</p> <p>Maritime Operation Centers Metrics: NWC is responsible for development of Professional Military Education for Naval Component Commanders and Numbered Fleet Staff personnel, and the Numbered Fleet Commander, including education and research initiatives in support of concept of operations development, training and C/JFMCC advisory and assist team. Research results and analysis are intended to improve the operational level of war leadership, command and control of the Navy Maritime Operation Centers.</p>		

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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2221: <i>JT Mission Assessment Studies</i>	21.741	25.223	27.963	0.000	27.963	28.484	28.875	29.378	29.896	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Assessment Program, provides capability based planning assessment for Joint Capabilities Integration and Development System (JCIDS), conducts analysis to affect warfighting capability trades and enterprise resources, identifies needs, gaps, and overlaps, and assesses alternative solutions to Joint needs. Supports both the development and use of modeling, simulation and analytically based warfare and provider business analyses and analytic tools that provide the basis for decision making with respect to Concepts of Operations (CONOPS); Command, Controls, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) systems (FORCENet); warfare systems (Sea Strike, Sea Shield, and Sea Basing) and their architectures; force structure; and the Navy's core "organize, train, and equip mission" (the Warfare and Provider Enterprises). Manages Office of the Chief of Naval Operations (OPNAV) support to Office of the Secretary of Defense (OSD)/Navy's analytic agenda. Provides overarching Planning, Programming and Budgeting System (PPBES) analyses and guidance for Planning, Programming, Budgeting and Execution System (PPBES) which provides gap analysis and investment strategy and Total Obligation Authority (TOA) allocation. Provides independent capability analysis directly to Chief of Naval Operations (CNO) and assists in structuring follow-on OPNAV analyses. The program coordinates Navy's position for the Enhanced Planning Process and conducts Net Assessments. This program serves as the lead campaign analysis for Office of the Chief of Naval Operations (OPNAV) and Chief of Naval Operations Investment Strategy assessments, all of which prove analytical underpinnings/basis for programmatic decisions of the Navy's top leadership regarding the integration of all Navy warfare and support requirements. This program supports "A Cooperative Strategy for 21st Century Seapower 21" as modified by the CNO Maritime Strategy which charts a course for the Navy, Coast Guard and Marine Corps to work collectively with each other and international partners to prevent crises from occurring or reacting quickly should one occur to avoid negative impact to the United States. This program is dual-hatted as the head of CNO's Capability Analysis Group and serves the CNO directly as an independent assessor providing a broad-view perspective across the Navy staff apart from resource sponsors, with an integrated look at both warfighting and warfighting support programs. Program supports the world class modeling efforts to attain a level of modeling and simulation capability that is world class and establishes OPNAV as a leader in the Department of Defense (DoD) modeling and simulation community. Provides the CNO alternatives in assessing the implications imbedded within resource decisions in a quantified context of costs versus capability versus risk. This program provides independent analytic support to Navy leadership in conjunction with various executive level decision forums. The Assessment Program develops tools and analytical methodologies that assist in evaluating Navy programs and provides technical leadership for the analysis functional area of Naval Modeling and Simulation.

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

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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
JT Mission Assessment Studies Capabilities-Based Assessment (CBA) - The CBA is the Joint Capabilities Integration and Development System analysis process that includes three phases: the Functional Area Analysis (FAA), the Functional Needs Analysis (FNA), and the Functional Solution Analysis (FSA). The results of the CBA are used to develop a joint capabilities document (based on the FAA and FNA) or initial capabilities document (based on the full analysis). CBA funding provides the resource sponsors the means to develop the analytic underpinning required by Chairman of the Joint Chiefs of Staff Instruction 3170.01G to support the determination of Naval warfighting capabilities and force structure needed to support the Joint Requirements Oversight Council/Joint Capabilities Integration and Development System requirements validation process and to inform Program Objective Memorandum programming decisions. FY 2010 Plans: CBA is a process designed to address future warfighting requirements and analysis needs. CBA efforts will improve the quality of Analysis of Alternatives generated, complement the warfare integration task, and increase the capability to respond to questions regarding the generation of requirements to address capability-based assessments. FY 2011 Base Plans: Continue FY10 CBA efforts. The additional funds in FY11 are required to initiate FY11 CBAs supporting future Naval capability requirements for next-generation shipbuilding, aviation, and weapons systems. Provide analysis support for N8F Resource Sponsor development of Integrated Sponsor Program Proposal supporting Guidance to Develop the Force irection. The additional funding in FY11 will also cover PMDSS implementation and operation costs. PMDSS was funded as part of PE 0605152N Project 2092 previously..	0.000	3.141	6.515	0.000	6.515
Navy Standard Scenarios with Warfare and Warfare Support Analyses	1.520	1.551	1.582	0.000	1.582

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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2009 Accomplishments:</i> Developed, updated and maintained detailed level Navy Standard scenarios based on Defense Planning Guidance. Developed alternative scenarios in support of Quadrennial Defense Review, Joint studies, and Navy resource analyses. Developed, updated and maintained analytic baselines for the Major Combat Operations based on Defense Planning Guidance. Developed framework and common set of processes to ensure that essential elements of warfare analyses, including scenarios, operational concepts, tactics, capabilities of platforms and systems (for Navy, Joint, coalition and threat forces), key assumptions and input data are defined and traceable to government approved/ provided source material. Developed measures of performance and measures of effectiveness and recommended appropriate modeling/methodology to support analyses. Developed scenarios and operational concepts based on government inputs that were sufficiently detailed for use in naval and joint campaign analyses. At the mission level, scripted operational or tactical situations for use in effectiveness analyses in specific warfare mission areas. Developed details required to execute analysis of designated Defense Planning Scenarios and their respective Multi Service Force Deployment Plans.</p> <p><i>FY 2010 Plans:</i> Continue all efforts of FY09.</p> <p><i>FY 2011 Base Plans:</i> Continue all efforts of FY10.</p>					
Capability Based Assessments with Campaign Mission Analyses Analytical and Technical Support	2.864	2.922	3.105	0.000	3.105
<p><i>FY 2009 Accomplishments:</i> Assessed capability sponsors' products for Navy senior leadership decision forums. Performed collaborative assessment with capability sponsors. Proactively participated in Capability Sponsors' Integrated Processing Teams (IPTs). Presented opposing analytically-based points of view to the Chief of Naval Operations (CNO) and Navy senior leadership. Provided analytically-based decision</p>					

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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
recommendations to CNO for both warfighting and support areas. Developed CNO Investment strategy recommendations and perform assessments for Program Review and Program Objective Memorandum. Assessed capability sponsor's products for senior leadership decision forums. Conducted Verification, Validation & Accreditation of warfare, performance, and pricing models. Conducted Overseas Contingency Operation Capabilities-Based Assessment that provided a rapid and scalable process to utilize a Concept of Operation and developed investment strategy and a capability roadmap. Conducted Tactical Aircraft Recapitalization alternatives and Theater Ballistic Missile Defense cost capability trade off assessments. Conducted independent assessment of Anti-Submarine Warfare. Conducted weapons safety and sea basing capabilities assessments. Conducted Intelligence-Surveillance-Reconnaissance (ISR) and Meteorological and Oceanographic (METOC) assessment to determine the optimal mix of naval ISR and METOC sensors, platforms, and processing, analysis and fusion disposition to support Major Combat Operations (MCOs), the Overseas Contingency Operation (OCO), and intelligence preparation of the environment for both MCOs and OCO. Performed Capabilities-Based Assessments (CBAs) to meet the requirements of current and future scenarios, and make strategic decisions within a constrained economic framework. Performed rigorous, time critical naval and joint campaign and mission-level analyses, usually based on modeling and simulation that illuminated complex warfare issues that supported decision-making in the Planning, Programming, Budgeting Executing process. Performed analyses and provided technical and engineering support, including, joint campaign analysis that examined the ability to counter a range of coordinate threat capabilities, high level tradeoffs between service capabilities, or impact of large-scale architecture, mission-level effectiveness analyses that determined system capabilities; conducted analyses of alternative force structures that determined the ability to meet peacetime deployment or steady-state requirements and respond to transition to war and contingency operations; Conducted cost analyses; cost-effectiveness analyses; and analyses of new technologies in support of Sponsor Program Proposal, Navy Program Objectives Memorandum or Warfare Capability Plan. Developed innovative analysis techniques that evaluated the effectiveness of operations on the Long War focus on Irregular Warfare and Sea Shaping (influence) activities such as Theater Security Cooperation. Provided rigorous business case assessments of complex issues relating to the					

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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
warfighting support processes, Manpower and Personnel, Training and Education, Infrastructure, both afloat and ashore Readiness, Naval Medical Program and provider enterprise operations. Performed analyses for accreditation of models, used estimate cost and performance of performance-based modeled programs such as the Flying Hour Program, ship operations, ship and aircraft maintenance, spares, facilities, and base operation support. FY 2010 Plans: Continue all efforts of FY09. FY 2011 Base Plans: Continue all efforts of FY10.					
Campaign Analysis-Modeling and Simulation FY 2009 Accomplishments: Developed and maintained common baselines from which campaign excursions and mission-level analyses are executed. Identified, developed, and improved data and modeling. Led Navy's participation in Office of the Secretary of Defense (OSD)/Joint Staff analytic agenda, baseline development, and collection of data. Provided coordination across the Navy. Brokered agreed upon assumptions, Concept of Operations, scenarios and data. Led campaign analysis for Office of the Chief of Naval Operations (OPNAV). Conducted modeling and simulation support for ongoing OPNAV missile defense analysis requirements. FY 2010 Plans: Continue all efforts of FY09. FY 2011 Base Plans: Continue all efforts of FY10.	6.582	6.367	5.914	0.000	5.914
OSD/Joint Staff Study Analysis and Assessment with Investment Strategy Development	1.857	2.251	2.126	0.000	2.126

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605853N: Management, Technical & Intl Supt		PROJECT 2221: JT Mission Assessment Studies		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: Coordinated/led OSD/Navy's Analytic Agenda in Defense Planning Scenario, Multi-Service Force Deployment, Enhanced Planning Process, Strategic Planning Guidance, and participated in Capability Sponsors' Integrated Processing Teams. Provided overarching Planning, Programming and Budgeting System analyses and guidance. Provided analytically-based decision recommendations to Chief of Naval Operations for Joint warfighting and support areas. Conducted net assessments and provided independent analytic support to Navy leadership in conjunction with various executive level decision forums. Served as the Navy's lead to Joint Requirements Oversight Council, Joint Capabilities Board, and Functional Capabilities Board. Provided the lead requirements and acquisition for Office of the Chief Naval Operations. Coordinated/led Navy role in Defense Planning Guidance, Program Decision Memoranda, Quadrennial Defense Review, and Defense Science Board studies. Participated in Office of the Secretary of Defense and Joint Staff analysis assessment and provided structure for coordination across the Navy. Coordinated and supported Joint Analytical Model Improvement Program. Developed new analytic techniques for informing resource allocation decision; conducted all campaign and warfare mission level analyses and developed investment strategy.						
FY 2010 Plans: Continue all efforts of FY09.						
FY 2011 Base Plans: Continue all efforts of FY10.						
World Class Modeling, Simulation, and Capability Analysis FY 2009 Accomplishments: Provided the Navy with concise and innovative Modeling and Simulation (M&S) analyses and assessment to help optimize Navy Programs and investment decisions. Supported next generation research that emphasizes combat modeling, simulation, war gaming, and analysis in support of strategic, operational, and resource decision making and emphasizes the development of pricing		8.810	8.991	8.721	0.000	8.721

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>		PROJECT 2221: <i>JT Mission Assessment Studies</i>		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p>performance models that relate investments and manpower to output performance and readiness. Evaluated new models that are able to capture Command, Control, Communication, Computers, Intelligence, Surveillance & Reconnaissance interaction with sea based forces, and the challenges of new form of threat including terrorist, disruptive, and catastrophic. Supported Fleet readiness and logistics M&S. Conducted Verification, Validation, and Accreditation of select Navy models. Improved the ability to model emerging security challenges and operations concepts (Irregular, Catastrophic, Disruptive challenges). Developed optimization models that work across multiple warfare areas. Improved the traceability of data through the modeling hierarchy. Refined the linkages between cost and mission performance in performance-modeled acquisition programs. Conducted Joint mission warfare Modeling and Simulation (M&S) in the Sea Strike, FORCEnet Sea Shield, and Sea Basing mission areas. Conducted mission level warfare M&S of Joint Capability Areas.</p> <p><i>FY 2010 Plans:</i> Continue all efforts of FY09.</p> <p><i>FY 2011 Base Plans:</i> Continue all efforts of FY10.</p>						
<p>Acquisition Workforce Fund-2009</p> <p><i>FY 2009 Accomplishments:</i> Provided Acquisition Workforce Support.</p>		0.108	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals		21.741	25.223	27.963	0.000	27.963
C. Other Program Funding Summary (\$ in Millions)						
N/A						
D. Acquisition Strategy						
N/A						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 2221: <i>JT Mission Assessment Studies</i>
<p>E. Performance Metrics</p> <p>The overall goal of Project 2221 is for N81 to conduct analysis to support the CNO decisions needed to turn strategy and guidance into the fleet we need within acceptable risk. METRIC: Risks are balanced across capability that delivers the right capabilities within the resources available to Navy. Joint Mission Assessment Studies supports the development of platform specific studies and Capability Based Assessments (CBAs), an analytical effort resulting in Functional Area Analysis (FAA), Functional Needs Analysis (FNA), and Functional Solutions Analysis (FSA). Efforts provide added analytical rigor relative to program's maturation under the Joint Capabilities, Integration, and Development System (JCIDS) and support warfare integration initiatives.</p> <p>Warfare and Warfare Support Analyses: Goal: To ensure that essential elements of warfare analyses, including scenarios, operational concepts, tactics, capabilities of platforms and systems (for Navy, Joint, coalition and threat forces), key assumptions and input data are defined and traceable to government approved source material. METRIC: Consistency with other ongoing analyses as directed, develop measures of performance (MOPs) and effectiveness (MOEs) and recommend appropriate modeling/methodology to support analysis. Models/methodology used reflected study objects, level of fidelity required and time constraints.</p> <p>Campaign and Mission Analyses Analytic and Technical Support & Warfare Risk Analysis and Assessment: Goal: To provide analyses and technical and engineering support including, but not limited to, joint campaign analysis that examines the ability to counter a range of coordinated threat capabilities, high level tradeoffs between Service capabilities, or impact of large-scale architecture, force structure of modernization decision; mission-level effectiveness analyses to determine system capabilities; analyses of alternative force structures to determine ability to meet peacetime deployment or steady-state requirements and respond to transition to war and contingency operations; cost-effectiveness and analyses; Acquisition Category Program Office and SYSCOM assessments; and analyses of new technologies. METRIC: Develop analysis plans; determine proposed alternatives for analysis; and research performance data on current and future threats, coalition and own force systems; perform technology investigations and forecasts; develop or obtain cost data for current or planned systems; develop and use Cost Estimating Relationships (CERS) to determine cost for conceptual or future systems for which no cost data is available; identify analysis assumptions, limitations and uncertainties; use established models or develop new models or methodologies to perform analyses; and interpret and analyze results.</p> <p>Campaign Analysis - Modeling and Simulation: Goal: Develop and maintain a standard set of models for use in warfare analyses and analyses performed to support Planning Strategy that work at the campaign, mission, and engagement levels. METRIC: A combination of model design statements, model study reports, system specifications, updated model reports, model/database documents, model verification and validation plans, code and POA&M reports developed or updated that encompass all aspects of Sea Power 21 to include at a minimum air, land, sea, and C4ISR.</p> <p>Joint Assessments and Integration and Investment Strategy Development: Goal: Conduct assessments to determine shortfalls and redundancies in existing or planned operational or support capabilities; identify key issues including deficiencies in warfighting capability; determine priorities for needed capabilities; assesses affordability of high payoff systems and technologies; assess effectiveness and affordability of alternative force structures; and formulate investment strategies. Continue development and refinement of Navy program planning to determine the warfighting wholeness and cost effectiveness of alternative Navy strategies. METRIC: Identify shortfalls and redundancies in existing or planned capabilities. Determine the impact of variations in warfare systems and architectures in threat, U.S. and combined forces and strategies. Provide engineering and analytic support for the assessment and transition of technology for is in the Investment Strategy.</p> <p>World Class Modeling, Simulation, and Capability Analysis: Goal: Development of new models or model upgrades to meet requirements identified by the World Class Modeling (WCM) requirements process that support the POM decision-making process, with the goal of creating a state-of-the art set of models for use in warfare</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 2221: <i>JT Mission Assessment Studies</i>
<p>and warfare support analyses. METRIC: Develop model design documents, model study reports, system specifications, updated model reports, mode documentation, model verification and validation plans, code, POA&M reports, and technical reports.</p> <p>Joint Mission Assessment Studies: Goal: Provides an objective, repeatable and transparent method for ranking funding issue papers submitted by Resource Sponsors to the Director of Naval Warfare Integration, N8F. METRIC: Issues are ranked according to their contribution to a series of attributes: Program Health; Warfighting Capability; Safety; Leadership Focus; Fiscal Responsibility; Naval Capability Needs.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>				PROJECT 3025: <i>Mid-Range Financial Improvement Plans</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3025: <i>Mid-Range Financial Improvement Plans</i>	1.532	1.587	1.436	0.000	1.436	1.532	1.566	1.601	1.635	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification <p>One of DoD's and Navy's priority goals is to gain a clean and auditable financial statement. The Office of the Secretary of Defense (OSD) Comptroller, in his 8 August 2003 memorandum, directed the Military Departments and Defense Agencies, in coordination with the Defense Finance and Accounting Service (DFAS), to prepare a comprehensive mid-range financial improvement plan to identify measurable steps to ensure each material line is auditable, and ensure all major deficiencies are resolved.</p> <p>This project supports the Research, Development, Test and Evaluation, Navy (RDT&E,N) portion of the larger DoD and Navy-wide effort to implement the Financial Improvement Plan (FIP). Corrective actions required to resolve known deficiencies and determine resource requirements (people and systems) are being identified.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Mid-Range Financial Improvement Plans						1.524	1.587	1.436	0.000	1.436	
<i>FY 2009 Accomplishments:</i> - Continued performing obligation validations ensuring accuracy. - Continued revising the accounts receivable process to more accurately record collections. - Continued eliminating problem disbursements older than 120 days, narrowing to 60 days, and potentially narrowing even further. - Continued to be proactive in executing the first and second phases (discovery and correction) of the Office of Management and Budget Circular No. A-123 process which requires Federal agencies take responsibility for conducting a rigorous assessment of internal controls over financial reporting.											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>		PROJECT 3025: <i>Mid-Range Financial Improvement Plans</i>				
B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<ul style="list-style-type: none"> - Initiated and submitted the assertion for the following three segments: Financial Reporting, Civilian Pay and Reimbursable Work Orders. <p><i>FY 2010 Plans:</i></p> <ul style="list-style-type: none"> - Continue all efforts of FY09. <p><i>FY 2011 Base Plans:</i></p> <ul style="list-style-type: none"> - Continue all efforts of FY10. 								
Acquisition Workforce Fund-2009 <i>FY 2009 Accomplishments:</i> <ul style="list-style-type: none"> - Provided Acquisition Workforce support. 				0.008	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals				1.532	1.587	1.436	0.000	1.436
C. Other Program Funding Summary (\$ in Millions)								
N/A								
D. Acquisition Strategy								
N/A								
E. Performance Metrics								
Financial records are compliant in accordance with the Chief financial Officers Act.								

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>				PROJECT 3028: <i>Operations Integration Group</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3028: <i>Operations Integration Group</i>	0.000	4.418	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.418
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Classified program details are held at a higher classification.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Operations Integration Group <i>FY 2010 Plans:</i> Classified program details are held at a higher classification.							0.000	4.418	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals							0.000	4.418	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics Details held at a higher classification.											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>				PROJECT 3039: <i>CHENG</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3039: <i>CHENG</i>	17.955	18.743	19.219	0.000	19.219	19.762	20.281	20.723	21.146	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Project 3039 funds the Assistant Secretary of the Navy (ASN) for Research, Development and Acquisition (RD&A), ASN RD&A Chief Engineer (RDA CHENG) to develop and implement architecture-based systems engineering processes, methods and tools that assure integrated and interoperable systems are delivered to the fleet. This project provides the mission-oriented technical basis for implementing capability-based acquisition management within the Department of Navy (DoN) to engineer and field Navy and Marine Corps combat systems, weapon systems, and command, control, communications, computers and intelligence (C4I) programs that must operate as family-of-systems (FoS) or system-of-systems (SoS). The focus of this project is on identifying the functions, relationships, and connections between systems at both the force and unit level and across warfare mission areas, and encompasses three key elements: Systems Engineering to provide the framework for making engineering decisions by warfighting capability at the FoS/SoS level and supports consistent engineering and investment decision-making across Navy and Marine Corps programs within capability-based acquisition portfolios. Naval Collaborative Engineering Environment development and implementation as a DON enterprise resource for Naval integration and interoperability information to enable collaboration and decision support among Fleet organizations, Program Executive Offices, Program Managers, Systems Commands, prime contractors, Resource/Warfare Sponsors and Comptroller organizations. Standards, Policies and Guidelines engineering and technical staff to implement DoN, Office of the Secretary of Defense (OSD) and Joint integration and interoperability and Anti-Tamper initiatives.											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Standards, Policy, and Guidelines <i>FY 2009 Accomplishments:</i> Continued alignment of standards, policy, and guidelines across the Naval Enterprise and with OSD and Joint Service organizations - added alignment with law. Investigated Aggregation of Systems and the application of Systems Engineering Processes and Practices to them across the Naval Enterprise, particularly those involved in Information Assurance (IA) and Integration and Interoperability.						5.000	5.030	5.150	0.000	5.150	

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605853N: Management, Technical & Intl Supt		PROJECT 3039: CHENG	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Continued ISP and NR-KPP Implementation Plans in support of Integration and Interoperability management. Established Net Ready Key Performance Parameter (NR-KPP) processes and practices to support the implementation of net-centric requirements for clarifying and resolving policy and guidance issues. Continued representing ASN RD&A in Systems Engineering and related forums, such as ASD NII Interoperability, Information Technology, Architecture, et al sessions, Joint policy sessions, and OSD ATL policy sessions. Continued roadmap for acquisition programs on how policies and programs fit together and added investigation and resolution of policy issues, particularly for NR-KPP, ISP, and Information Assurance. FY 2010 Plans: Continue all efforts of FY09 above until completion is indicated. Execute guidance resulting from completion of FY09 efforts. FY 2011 Base Plans: Continue all efforts of FY10.					
Acquisition Workforce Fund-2009 FY 2009 Accomplishments: Provided Acquisition Support.	0.090	0.000	0.000	0.000	0.000
Naval Collaborative Engineering Environment (NCEE) FY 2009 Accomplishments: N/A FY 2010 Plans: N/A	2.371	2.765	2.848	0.000	2.848

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>		PROJECT 3039: <i>CHENG</i>	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2011 Base Plans:</i> N/A					
Systems Engineering <i>FY 2009 Accomplishments:</i> N/A <i>FY 2010 Plans:</i> N/A <i>FY 2011 Base Plans:</i> N/A	10.494	10.948	11.221	0.000	11.221
Accomplishments/Planned Programs Subtotals	17.955	18.743	19.219	0.000	19.219
C. Other Program Funding Summary (\$ in Millions) N/A					
D. Acquisition Strategy N/A					
E. Performance Metrics Standards, Policy, and Guidelines: - Alignment of SPGs across the Naval Enterprise and with OSD and Joint organizations will support standard acquisition implementation and improve compatibility and interoperability thereby lowering development and maintenance costs across programs - Aggregating systems for the purpose of conducting certification and accreditation and consolidating mandatory documentation for aggregations versus individual systems will optimize (cost tradeoffs and focus on high priority issues) certifications, reduce paperwork and associated costs, and put attention on systems engineering, IA, and ISPs for systems in their aggregated operational state vice just the individual system development state. Document costs for major programs are \$1 to \$3.5					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 3039: <i>CHENG</i>
<p>Million per system. An aggregation may include 15 or more systems with four or more being major systems. Aggregation presents a high potential for Return on Investment.</p> <p>- NR-KPP processes will clarify requirements and capabilities (including their metrics) that acquisition programs need to develop systems. This clarification will eliminate guesses in terms of operational needs, thereby reducing the risk of program failure and reducing program and life-cycle costs.</p> <p>Naval Collaborative Engineering Environment (NCEE): Number of customers/ users.</p> <p>Percentage of time the tool is available.</p> <p>Number of tools integrated into the system.</p> <p>Systems Engineering:</p> <p>Reviews and comment on all ACAT I system engineering plans presented to ASN (RDA) within 30 days of receipt to provide system engineering and system of system system engineering guidance to the Acquisition Program Manager.</p> <p>Review 80% of the MDAP Gate reviews held in FY10 to provide software acquisition process improvement guidance, system of systems engineering guidance and integration and interoperability management guidance to the Acquisition Program Managers.</p>		

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605856N: Strategic Technical Support							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	3.504	3.618	3.451	0.000	3.451	3.512	3.623	3.703	3.780	Continuing	Continuing
0128: Mgmt/Tech Supt Strategic	1.301	1.351	1.293	0.000	1.293	1.319	1.361	1.390	1.420	Continuing	Continuing
1038: Acoustic & Non-Acoustic Analysis Supt	2.203	2.267	2.158	0.000	2.158	2.193	2.262	2.313	2.360	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program element supports technical studies and analyses as directed by the Director for Submarine Warfare to support major policy and procurement decisions. This program is divided into two elements to support decision making in the areas of submarine and antisubmarine warfare and undersea surveillance.

B. Program Change Summary (\$ in Millions)					
	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>
Previous President's Budget	3.585	3.633	0.000	0.000	0.000
Current President's Budget	3.504	3.618	3.451	0.000	3.451
Total Adjustments	-0.081	-0.015	3.451	0.000	3.451
• Congressional General Reductions		-0.015			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-0.081	0.000			
• Program Adjustments	0.000	0.000	3.451	0.000	3.451

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy		DATE: February 2010
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FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605856N: <i>Strategic Technical Support</i>				PROJECT 0128: <i>Mgmt/Tech Supt Strategic</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0128: <i>Mgmt/Tech Supt Strategic</i>	1.301	1.351	1.293	0.000	1.293	1.319	1.361	1.390	1.420	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
This project provides analytical support to the Director, Submarine Warfare Division as a basis for major policy, planning and acquisition program decisions. It supports the development of the Submarine Force strategic vision to guide research and development investment strategy and future planning. Additionally, this line supports studies in the area of submarine and undersea surveillance missions, force structure, payloads and sensors and force employment.											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
MANAGEMENT AND TECHNICAL SUPPORT, STRATEGIC						1.301	1.351	1.293	0.000	1.293	
<i>FY 2009 Accomplishments:</i> - Continued to examine specific applications for submarine mine countermeasures and develop a strategy for ensuring submarine access to contested areas of the world. - Continued to assess the strategic deterrence (conventional and nuclear) force structure, security, and capability in the Navy. - Continued to perform an in-depth review of undersea warfare research and development requirements, past and present, and propose an investment strategy to maximize future capabilities. - Continued to assess implications of current and developing technologies on undersea warfare in both near and far term systems and develop strategic concepts to guide future acquisitions through partnership with the Naval Postgraduate School. - Continued to assess the submarine forces capabilities in view of emerging technologies and changes in joint and naval strategies. This will be used to develop capability based ideas and concepts to guide research and development and science and technology efforts.											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605856N: <i>Strategic Technical Support</i>		PROJECT 0128: <i>Mgmt/Tech Supt Strategic</i>		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<ul style="list-style-type: none"> - Continued reviews of various submarine operations to assess the safety and security of the ships and missions assigned to identify the problems that require further analysis and study. <p>Acquisition Workforce Fund:</p> <ul style="list-style-type: none"> - Funded DoD Acquisition Workforce Fund. <p><i>FY 2010 Plans:</i></p> <ul style="list-style-type: none"> - Continue all efforts of FY09. <p><i>FY 2011 Base Plans:</i></p> <ul style="list-style-type: none"> - Continue all efforts of FY10. 						
Accomplishments/Planned Programs Subtotals		1.301	1.351	1.293	0.000	1.293
C. Other Program Funding Summary (\$ in Millions) N/A						
D. Acquisition Strategy N/A						
E. Performance Metrics This project supports studies in the area of undersea surveillance missions, sensor system, payloads, force employment, communications, acoustic performance prediction systems, environmental and medical effects of acoustics systems including installations/removals, operational security and future threat analysis. Project success is measured through analytical results and constant interaction with the contractors that enable the Director for Submarine Warfare to make decisions effectively.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605856N: <i>Strategic Technical Support</i>				PROJECT 1038: <i>Acoustic & Non-Acoustic Analysis Supt</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
1038: <i>Acoustic & Non-Acoustic Analysis Supt</i>	2.203	2.267	2.158	0.000	2.158	2.193	2.262	2.313	2.360	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification This project provides analytical support to the Director, Submarine Warfare Division and the Integrated Undersea Surveillance System (IUSS) Branch Head as a basis for major policy, planning, and acquisition program decisions. It supports studies in the area of undersea surveillance missions, sensor system, communications, acoustic performance prediction systems, environmental and medical effects of acoustic systems including installations/removals, operational security, and future threat analysis. Supports synthetic mission lay down simulations for IUSS strategic planning and resource allocation. Continues development/documentation of architecture for future undersea surveillance capabilities. Supports studies to determine long-term impact of IUSS active sensors on marine animals and development of SURTASS, LFA, and the Supplemental Environmental Impact Statement (EIS).											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
ACOUSTIC AND NON-ACOUSTIC ANALYSIS SUPPORT							2.203	2.267	2.158	0.000	2.158
<i>FY 2009 Accomplishments:</i> <ul style="list-style-type: none"> - Continued environmental compliance requirements and actions pertinent to Compact Low Frequency Active (CLFA) at-sea testing, training and operations. - Continued the SURTASS Engineering Measurements Program (SURTASS EMP) to provide for post-mission engineering analysis of SURTASS acoustic data. - Continued environmental compliance support for issuance of annual LOA under the MMPA and required quarterly reporting for SURTASS LFA vessels. - Continued analyses to estimate the long-term effects of SURTASS LFA on marine mammals. - Continued monitoring of undersea technology for application for future undersea surveillance capabilities. 											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605856N: <i>Strategic Technical Support</i>		PROJECT 1038: <i>Acoustic & Non-Acoustic Analysis Supt</i>		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p>- Continued assessment of current and future IUSS warfare areas and potential allied Navy contributions.</p> <p>Acquisition Workforce Fund:</p> <p>- Funded DoD Acquisition Workforce Fund.</p> <p><i>FY 2010 Plans:</i></p> <p>- Continue all efforts of FY09.</p> <p><i>FY 2011 Base Plans:</i></p> <p>- Continue all efforts of FY10.</p>						
Accomplishments/Planned Programs Subtotals		2.203	2.267	2.158	0.000	2.158
C. Other Program Funding Summary (\$ in Millions) N/A						
D. Acquisition Strategy N/A						
E. Performance Metrics This project supports studies in the area of undersea surveillance missions, sensor systems, acoustic performance prediction systems, environmental and medical effects of acoustics systems, and future threat analysis. In addition, it provides research and reports necessary to support Surveillance Towed Array Sonar Systems (SURTASS) Low Frequency Active (LFA) sonar compliance with Federal, State and Local environmental laws required for continued SURTASS LFA operations, analysis of undersea technology for application for future undersea surveillance capabilities, and assessment of current and future Integrated Undersea Surveillance System (IUSS) warfare areas and potential allied Navy contributions. To this goal, research is conducted by educational and research institutions renown for their expertise in the area, and by marine mammal biologists with extensive background in specific areas of underwater acoustics. This approach is deemed the most cost effective and efficient course of action for the Navy.						

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605861N: RDT&E Science & Tech Mgmt							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	70.089	70.648	72.094	0.000	72.094	75.406	72.260	73.444	74.692	Continuing	Continuing
0135: ONR Science & Technology Mgmt	67.465	67.207	66.603	0.000	66.603	67.573	69.019	70.127	71.304	Continuing	Continuing
2353: DFAS Billings	2.624	3.441	3.159	0.000	3.159	3.170	3.241	3.317	3.388	Continuing	Continuing
3234: Office of Naval Research - N-ERP	0.000	0.000	2.332	0.000	2.332	4.663	0.000	0.000	0.000	0.000	6.995
A. Mission Description and Budget Item Justification											
This program element (PE) covers Office of Naval Research (ONR) corporate expenses including salaries, utilities, printing, supplies, materials, Information Technology (IT), general support equipment and other day-to-day logistical costs. The vast majority of these items represent fixed costs associated with Scientists and Engineers supporting the Navy's Science and Technology (S&T) Programs.											
The Defense Finance and Accounting Service (DFAS) Billings project (2353) funds accounting services provided to ONR and Navy Research and Development (R&D) activities.											
The Office of Naval Research Navy ERP project 3234 provides funding to support site implementation costs for ONR transition to Navy's Enterprise Resource Planning (ERP).											

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
1319: Research, Development, Test & Evaluation, Navy		PE 0605861N: RDT&E Science & Tech Mgmt			
BA 6: RDT&E Management Support					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	69.724	70.942	0.000	0.000	0.000
Current President's Budget	70.089	70.648	72.094	0.000	72.094
Total Adjustments	0.365	-0.294	72.094	0.000	72.094
• Congressional General Reductions		-0.294			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.365	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Program Adjustments	0.000	0.000	72.094	0.000	72.094
Change Summary Explanation					
Technical: Not applicable.					
Schedule: Not applicable.					
FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605861N: <i>RDT&E Science & Tech Mgmt</i>				PROJECT 0135: <i>ONR Science & Technology Mgmt</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0135: <i>ONR Science & Technology Mgmt</i>	67.465	67.207	66.603	0.000	66.603	67.573	69.019	70.127	71.304	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project supports ONR leadership, management and direction for the Naval S&T program. This project funds ONR Corporate salaries, utilities, supplies, and other fixed costs at ONR Headquarters and field offices. ONR sponsors scientific advances, which lead to Future Naval Capabilities (FNC's), supporting the Fleet's ability to operate from a position of technological superiority. Functions performed include (1) scientific and technical direction of the nationwide 6.1 basic research program with colleges, universities, non-profit organizations and Naval Laboratories and Warfare Centers; (2) scientific and technical direction of the 6.2 applied research program through the Naval R&D laboratories and Warfare Centers and industry; (3) scientific and technical direction of the Naval 6.3 advanced technology development program through the Navy's R&D laboratories, Warfare Centers and industry; (4) management, resource formulation, program assessment, and contract negotiation/administration of the Navy basic research, applied research and advanced technology development program; and (5) coordination of the Navy's Technology Base program within the context of total DoD/Government (e.g., National Science Foundation, National Academy of Sciences) R&D initiatives in order to maximize scientific advances. This project also supports ONR management and direction for the following Navy-wide programs: Small Business Innovation Research, Naval Research Advisory Committee, Navy Patent Program, Historically Black Colleges and Universities/Minority Institutions Program, Navy Manufacturing Technology Program and the Ballistic Missile Submarine Nuclear (SSBN) Security Technology Program. In addition, this project supports ONR's Navy-wide responsibilities in the negotiation and establishment of indirect cost rates for DoD-assigned universities and performance of contract administration for all DoD contracts/grants at all colleges and universities.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
S&T MANAGEMENT SUPPORT	67.465	67.207	66.603	0.000	66.603
This project provides for all basic costs and support of ONR Headquarters and its field activities in support of the entire Navy S&T program. Almost all the funds in this project are fixed costs, such as salaries, and communications. Specifically, it pays the salaries of Scientific and Engineering					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605861N: <i>RDT&E Science & Tech Mgmt</i>		PROJECT 0135: <i>ONR Science & Technology Mgmt</i>		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p>and corporate business personnel who direct the execution of the Navy's basic research, applied research, and advanced technology development programs at the nation's universities/colleges, Navy laboratories, Warfare Centers, and private industry.</p> <p><i>FY 2009 Accomplishments:</i></p> <ul style="list-style-type: none"> - Provided for all basic costs and support of ONR Headquarters and its field activities in support of the entire Navy S&T program. <p><i>FY 2010 Plans:</i></p> <ul style="list-style-type: none"> - Continue all efforts of FY 2009. <p><i>FY 2011 Base Plans:</i></p> <ul style="list-style-type: none"> - Continue all efforts of FY 2010. 						
Accomplishments/Planned Programs Subtotals		67.465	67.207	66.603	0.000	66.603
C. Other Program Funding Summary (\$ in Millions) N/A						
D. Acquisition Strategy N/A						
E. Performance Metrics This PE funds operating costs for ONR's mission. Program performance is measured by attaining financial benchmarks for planned obligations vs. actual obligations and planned expenditures vs. actual expenditures.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605861N: <i>RDT&E Science & Tech Mgmt</i>				PROJECT 2353: <i>DFAS Billings</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2353: <i>DFAS Billings</i>	2.624	3.441	3.159	0.000	3.159	3.170	3.241	3.317	3.388	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification This project provides funding for accounting services provided to the Office of Naval Research and other Navy research and development activities by the Defense Finance and Accounting Service (DFAS). B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
TRANSACTIONS PROCESSED IN SUPPORT OF DON R&D							2.624	3.441	3.159	0.000	3.159
This project funds the DFAS bill for transactions processed in support of Department of the Navy R&D activities. Specific services include payroll, transportation, commercial invoices, travel, maintenance of trial balances, associated accounting and reporting. <i>FY 2009 Accomplishments:</i> - Funded the DFAS bill for transactions processed in support of Department of the Navy R&D activities. <i>FY 2010 Plans:</i> - Continue all efforts of FY 2009. <i>FY 2011 Base Plans:</i> - Continue all efforts of FY 2010.											
Accomplishments/Planned Programs Subtotals							2.624	3.441	3.159	0.000	3.159

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605861N: <i>RDT&E Science & Tech Mgmt</i>	PROJECT 2353: <i>DFAS Billings</i>
<p><u>C. Other Program Funding Summary (\$ in Millions)</u> N/A</p> <p><u>D. Acquisition Strategy</u> N/A</p> <p><u>E. Performance Metrics</u> This PE funds operating costs for ONR's mission. Program performance is measured by attaining financial benchmarks for planned obligations vs. actual obligations and planned expenditures vs. actual expenditures.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605861N: <i>RDT&E Science & Tech Mgmt</i>				PROJECT 3234: <i>Office of Naval Research - N-ERP</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3234: <i>Office of Naval Research - N-ERP</i>	0.000	0.000	2.332	0.000	2.332	4.663	0.000	0.000	0.000	0.000	6.995
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification This project provides funding to support site implementation costs for the Office of Naval Research transition to Navy's Enterprise Resource Planning (ERP).											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
OFFICE OF NAVAL RESEARCH NAVY ERP							0.000	0.000	2.332	0.000	2.332
<i>FY 2011 Base Plans:</i> - This project is to fund expenses associated with ERP implementation at ONR.											
Accomplishments/Planned Programs Subtotals							0.000	0.000	2.332	0.000	2.332
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											
E. Performance Metrics This PE funds operating costs for ONR's mission. Program performance is measured by attaining financial benchmarks for planned obligations vs. actual obligations and planned expenditures vs. actual expenditures.											

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605863N: RDT&E Ship & Aircraft Support							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	172.492	194.012	95.332	0.000	95.332	139.491	112.462	169.130	168.776	Continuing	Continuing
0568: RDT&E Acft Flt Hours	33.151	33.955	33.854	0.000	33.854	35.332	35.374	36.433	37.456	Continuing	Continuing
0569: RDT&E Acft Supt	45.116	35.701	33.003	0.000	33.003	33.447	33.398	34.188	34.924	Continuing	Continuing
2924: SDTS	10.052	9.076	8.543	0.000	8.543	8.958	8.939	8.045	4.503	Continuing	Continuing
3206: T&E Enterprise	84.173	115.280	19.932	0.000	19.932	61.754	34.751	90.464	91.893	Continuing	Continuing
A. Mission Description and Budget Item Justification											
This continuing program provides support for ships and aircraft required to accommodate Research, Development, Test and Evaluation (RDT&E) of new systems. The RDT&E ship and aircraft inventory is required to adequately test new and improved weapon systems, stay current with threats, and increase warfighting capability of the fleet. The program provides integrated logistics support for aircraft at selected field activities; provides depot-level rework of aircraft, engines, and components for the Navy inventory of RDT&E aircraft; and provides support for ships and aircraft bailed to contractors for Navy RDT&E projects. Costs covered under this element include aircrew training and proficiency, fuel, supplies, equipment, repair, Aviation Depot Level Repairables (AVDLR), overhaul of ships and aircraft, as well as organizational, intermediate, and depot maintenance of ships and aircraft in the Navy RDT&E inventory.											

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
1319: Research, Development, Test & Evaluation, Navy		PE 0605863N: RDT&E Ship & Aircraft Support			
BA 6: RDT&E Management Support					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	194.034	193.353	0.000	0.000	0.000
Current President's Budget	172.492	194.012	95.332	0.000	95.332
Total Adjustments	-21.542	0.659	95.332	0.000	95.332
• Congressional General Reductions		-0.802			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	-18.738	0.000			
• SBIR/STTR Transfer	-2.804	0.000			
• Program Adjustments	0.000	0.000	95.332	0.000	95.332
• Rate/Misc Adjustments	0.000	1.461	0.000	0.000	0.000
Change Summary Explanation					
Technical: Not applicable.					
Schedule: Not applicable.					
FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605863N: <i>RDT&E Ship & Aircraft Support</i>				PROJECT 0568: <i>RDT&E Acft Flt Hours</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0568: <i>RDT&E Acft Flt Hours</i>	33.151	33.955	33.854	0.000	33.854	35.332	35.374	36.433	37.456	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification RDT&E Aircraft Flight Hours. This non-acquisition project supports direct flight hour costs, including organizational and intermediate level maintenance, as well as associated consumables, including petroleum, oil, and lubricants (POL). These flight hours are used for post-maintenance test flights, aircrew training, and the accomplishment of pilot proficiency requirements (approximately 3 hours per pilot per month), in support of Research and Development programs at four Naval Air Systems Command/Naval Surface Warfare Center/Office of Naval Research (NAVAIR/NSWC/ONR) flight activities.											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
RDT&E Acft Flt Hours <i>FY 2009 Accomplishments:</i> Provided organizational and intermediate-level maintenance, supply and Petroleum, Oil and Lubricants (POL) in support of RDT&E aircraft operations. <i>FY 2010 Plans:</i> Continuing to provide in the plan organizational and intermediate-level maintenance, supply and Petroleum, Oil and Lubricants (POL) in support of RDT&E aircraft operations. <i>FY 2011 Base Plans:</i> Continuing to provide in the plan organizational and intermediate-level maintenance, supply and Petroleum, Oil and Lubricants (POL) in support of RDT&E aircraft operations.						32.763	33.955	33.854	0.000	33.854	
DAWDF Realignment						0.388	0.000	0.000	0.000	0.000	

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605863N: <i>RDT&E Ship & Aircraft Support</i>		PROJECT 0568: <i>RDT&E Acft Flt Hours</i>				
B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2009 Accomplishments:</i> DAWDF Realignment								
Accomplishments/Planned Programs Subtotals				33.151	33.955	33.854	0.000	33.854
C. Other Program Funding Summary (\$ in Millions) N/A								
D. Acquisition Strategy N/A								
E. Performance Metrics This RDT&E Aircraft program supports approximately 3 hours per pilot per month of post-maintenance test flights, aircrew training and the accomplishment of pilot proficiency requirements.								

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605863N: RDT&E Ship & Aircraft Support				PROJECT 0569: RDT&E Acft Supt			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0569: RDT&E Acft Supt	45.116	35.701	33.003	0.000	33.003	33.447	33.398	34.188	34.924	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
RDT&E Aircraft Support. This continuing project funds costs associated with Research, Development, Test and Evaluation (RDT&E) fixed and rotary wing aircraft which accommodate test and evaluation of aircraft/weapon systems. Testing aboard these platforms reduces the number of fleet units required to support RDT&E efforts. Included in these costs are Aviation Depot-Level Repairables (AVDLRs), which are spare and replacement aircraft parts and components to support overhead maintenance related flight operations, aircrew training, and proficiency flight hours. This project also funds airframe Standard Depot Level Maintenance (SDLM), the Integrated Maintenance Concept (IMC) and Phased Depot Maintenance (PDM), in-service repairs, emergency repairs, and engine repairs, as well as aircraft material condition and field inspections. Additionally, it funds Individual Material Readiness List (IMRL) tools and support equipment, and other systems for application to and compatibility with RDT&E requirements.											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Aircraft/Engine Maintenance and AVDLR/IMRL Support						43.877	34.101	31.330	0.000	31.330	
FY 2009 Accomplishments: Continuing the transition from ASPA/SDLM/MCAPP to the IMC/PDM program for depot maintenance requirements, while sustaining the following programs: AVDLR/IMRL, engine repairs, support of aircraft in the RDT&E inventory. Continuing operation and implementation of maintenance and material management programs at Naval Air Warfare Center activities.											
FY 2010 Plans: Continuing in plan the transition from ASPA/SDLM/MCAPP to the IMC/PDM program for depot maintenance requirements, while sustaining the following programs: AVDLR/IMRL, engine repairs,											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605863N: <i>RDT&E Ship & Aircraft Support</i>		PROJECT 0569: <i>RDT&E Acft Supt</i>		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
support of aircraft in the RDT&E inventory. Continuing operation and implementation of maintenance and material management programs at Naval Air Warfare Center activities. <i>FY 2011 Base Plans:</i> Continuing in plan the transition from ASPA/SDLM/MCAPP to the IMC/PDM program for depot maintenance requirements, while sustaining the following programs: AVDLR/IMRL, engine repairs, support of aircraft in the RDT&E inventory. Continuing operation and implementation of maintenance and material management programs at Naval Air Warfare Center activities.						
In-Service Repairs <i>FY 2009 Accomplishments:</i> Provided In-Service Repair (ISR) funds for emergent repair requirements to aircraft performing mission critical test and evaluation projects. <i>FY 2010 Plans:</i> Continue to provide in the plan In-Service Repair (ISR) funds for emergent repair requirements to aircraft performing mission critical test and evaluation projects. <i>FY 2011 Base Plans:</i> Continue to provide in the plan In-Service Repair (ISR) funds for emergent repair requirements to aircraft performing mission critical test and evaluation projects.		1.239	1.600	1.673	0.000	1.673
Accomplishments/Planned Programs Subtotals		45.116	35.701	33.003	0.000	33.003
C. Other Program Funding Summary (\$ in Millions) N/A						
D. Acquisition Strategy N/A						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605863N: <i>RDT&E Ship & Aircraft Support</i>	PROJECT 0569: <i>RDT&E Acft Supt</i>
<p><u>E. Performance Metrics</u></p> <p>The RDT&E Aircraft Support program goal is to provide the required funds to meet NAVAIR Aircraft Controlling Custodian (ACC) aircraft sustainment requirements. These sustainment costs include providing annual support for required Planned Depot Maintenance events, In-service Repairs (P&E, Repairs, Mods), Depot Engine Inductions, Individual Material Readiness List (IMRL) Repairs, along with the funding of management oversight of the aircraft and the Aviation Depot Level Repairable (AVDLR) costs associated with pilot readiness requirements.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605863N: <i>RDT&E Ship & Aircraft Support</i>				PROJECT 2924: <i>SDTS</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2924: <i>SDTS</i>	10.052	9.076	8.543	0.000	8.543	8.958	8.939	8.045	4.503	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification <p>This project provides for the maintenance of Hull Mechanical and Electrical (HM&E) and installed Combat Systems of the Self-Defense Test Ship (SDTS) in support of the Navy Research, Development, Test and Evaluation (RDT&E) of ship self-defense systems. Testing aboard this ship reduces the number of fleet units required to support RDT&E efforts.</p> <p>SDTS provides the capability to safely test self-defense weapon systems within their minimum range. A major cost of this project is regularly scheduled ship, combat system and remote control maintenance. The remainder of the funds are used for purchase of expendable supplies and routine equipment, fuel and petroleum products, repairs and supporting services. Most costs are fixed and are associated with simply having this platform in the inventory.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
SDTS						10.006	9.076	8.543	0.000	8.543	
<i>FY 2009 Accomplishments:</i> NAVSURFWARCENDIV Port Hueneme, CA will plan, schedule, and perform recurring maintenance onboard EDD 964 and continue to support installation of Enterprise Equipment for multiple ship classes (LHDs/CVNs, DDG 1000, and LCS) PHD will also determine the feasibility of multiple configurations in support of the Navy AAW SSD Enterprise Strategy.											
<i>FY 2010 Plans:</i> NAVSURFWARCENDIV Port Hueneme, CA SDTS will support documentation development for SDTS installations of multiple configurations and support preparation to modify top side and below deck equipment. SDTS will continue to conduct planning, scheduling, and performing of maintenance											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605863N: <i>RDT&E Ship & Aircraft Support</i>		PROJECT 2924: <i>SDTS</i>				
B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
onboard EDD 964 for HM&E, CS and remote control elements to provide the Navy a safe operational test asset. <i>FY 2011 Base Plans:</i> NAVSURFWARCENDIV Port Hueneme, CA SDTS will continue to conduct planning, scheduling, and performing of routine Hull, Mechanical and Electrical (HM&E) and Combat System and Remote Control maintenance onboard EDD 964 to provide the Navy a safe operational test asset.								
DAWDF Defense Acquisition Workforce Development Fund <i>FY 2009 Accomplishments:</i> N/A				0.046	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals				10.052	9.076	8.543	0.000	8.543
C. Other Program Funding Summary (\$ in Millions)								
N/A								
D. Acquisition Strategy								
This line of accounting is for recurring combat system and ship maintenance.								
E. Performance Metrics								
Successfully remain safe, operational and available for testing and evaluation of systems. Successfully develop applicable operation and maintenance documentation and reporting of installations. Successfully timely report funding, schedule and technical delays and issues affecting test and evaluation availability status.								

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605863N: RDT&E Ship & Aircraft Support				PROJECT 3206: T&E Enterprise			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3206: T&E Enterprise	84.173	115.280	19.932	0.000	19.932	61.754	34.751	90.464	91.893	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The T&E Enterprise consolidates all Air Warfare (AW) Ship Self Defense (SSD) at-sea testing to across multiple class ships, beginning with CVN 74, LHD 8, LPD17, LHA 6, DDG 1000, CVN 78, and 2 versions of Littoral Combat Ship (LCS). This consolidated AW SSD test and evaluation approach meets the Probability of Raid Annihilation (PRA) (PRA is defined as a required surface ship defense against Anti-Ship Cruise Missiles), Self Defense Test Ship (SDTS), and lead/operational ship testing requirements for ESSM TEMP 1471, RAM Blk 2 TEMP 286-1, DDG 1000 TEMP 1560, CVN 78 TEMP 1610, CEC TEMP 1415, SSDS TEMP 1400, LHA 6 TEMP 1697, AN/SPQ-9B TEMP 1463, SEWIP TEMP 1658 (Block 1A), 0686, and LCS TEMP 1695 (TBD).

LHA 6 acquisition, installation and testing supports all big deck Amphibs and Carriers in the OA configuration as well RAM BLK 2 OPEVAL, SSDS OA with RAM BLK 2, First non AEGIS SEWIP and ESSM.

The T&E Enterprise merges common ship, element, and system requirements into the least number of test events while leveraging planned Combat System Ship Qualification Trials (CSSQTs) to accomplish Developmental Testing (DT) and Operational Testing (OT) requirements. All tests on the SDTS require the sharing of infrastructure, missile range allocations, execution time and underway time to eliminate duplicative testing.

T&E Enterprise preserves end-to-end mission Operational Testing in a realistic operational environment, capitalizing on Probability of Raid Annihilation M&S data validated with results of that Operational Testing, and ensuring a consistent approach across ship classes. Applicability of all test events are beneficial across multiple ship classes with the same variation under test.

The T&E Enterprise acquires equipment (FY09-10) for installation onboard the SDTS (FY10/11), conducts test and evaluation on the SDTS and lead/operational ships (FY09-FY15) and satisfies the Probability of Raid Annihilation (PRA) Testbed Model Development and test execution requirements (FY09-FY15).

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

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605863N: RDT&E Ship & Aircraft Support		PROJECT 3206: T&E Enterprise		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
T&E Enterprise		83.679	115.280	19.932	0.000	19.932
<p><i>FY 2009 Accomplishments:</i></p> <p>This effort continues acquisition of Enterprise equipment. DDG 1000 Mk 41/57 hybrid, and DDG 1000 TSCE. SSDS MK2 Mod 3b, SPS-48 E, CEC P3I, Mk 53 DLS & NULKA Mod 3, SEWIP SLQ 32 B (V2), LCS Electro-Optic Directors, LCS CS Modules, LCS EW Suites, LCS 57 Bofors Gun Mount, Enterprise Interfaces/Remote Control System/Mods. Establishing System Engineering planning, "components development, V&V Virtual Range Updates, Extensions, Integration and Testbed VV&A. Reporting execution strategies for Probability of Raid Annihilation Testbed development and test execution, and Lead and Operational Ship test and evaluation. Develop/implement/execute Test and Evaluation matrix. Execute testing and evaluation for LPD 17, CVN 74 and SDTS.</p>						
<p><i>FY 2010 Plans:</i></p> <p>The primary focus of 2010 for T&E Enterprise will be to conclude long lead acquisition of all combat system equipment needed for a leveraged installation period for the Self Defense Test Ship (SDTS). Ensure top side design coincides with the ordered/delivered Enterprise equipment onto the Self Defense Test Ship. Once equipment is in place installation services can begin and have been combined into a single window (where possible) in 2010 to reduce the duplication of multiple staging services (scaffolding, rigging, cabling, power generation, integration, etc.) PRA Testbed development, virtual range updates, and systems engineering will continue in support of LCS, LHA 6 and developed architecture will be documented for future support to CVN 78. Implementation, execution, of Enterprise test events will continue to effectively leverage resources and support changes in ship delivery schedules.</p>						
<p><i>FY 2011 Base Plans:</i></p> <p>The Enterprise effort shifts in 2011 to a test and evaluation focus for Enterprise ship classes onboard the Self Defense Test Ship (SDTS). Execution of test events will provide range time, threat and target build up, aircraft, use of the SDTS, DT/OT workups and applicable data analysis according to the Test and Evaluation Test Matrix. The PRA testbed will provide integration, components verification,</p>						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605863N: <i>RDT&E Ship & Aircraft Support</i>		PROJECT 3206: <i>T&E Enterprise</i>				
B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
validation and accreditation (VV&A) and documentation. FY11 does not accommodate acquisition, installation or lead ship testing and there for reduced when compared to FY10 and FY12.								
DAWDF Defense Acquisition Workforce Development Fund <i>FY 2009 Accomplishments:</i> N/A				0.494	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals				84.173	115.280	19.932	0.000	19.932
C. Other Program Funding Summary (\$ in Millions) N/A								
D. Acquisition Strategy Acquisition of test equipment assets for Enterprise Ship Classes. Acquisition of LHA 6 test equipment assets begins in FY09 and continues in FY10. Acquisition of systems is tailored to each ship class, however applicable and beneficial across multiple ship classes with the same variation being testing. DDG 1000 test equipment assets will be acquired through a direct contract.								
E. Performance Metrics Successfully complete required documentation and reporting for Enterprise installations and required check out and testing of installations. Successfully complete all Enterprise Operational Test Readiness Reviews (OTRR). Successfully complete required Enterprise developmental testing/operational testing DT/OT testing and combat system ship qualification trials (CSSQT) related tests. Successfully collect related test result data and distribute according.								

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY
1319: *Research, Development, Test & Evaluation, Navy*
BA 6: *RDT&E Management Support*

R-1 ITEM NOMENCLATURE
PE 0605864N: *Test & Evaluation Support*

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	350.514	369.154	376.418	0.000	376.418	358.005	362.759	368.401	375.546	Continuing	Continuing
0541: <i>AUTEC</i>	54.724	55.962	57.885	0.000	57.885	59.034	59.921	61.090	62.280	Continuing	Continuing
0566: <i>NAVAIR Environmental Compliance</i>	3.809	4.070	2.098	0.000	2.098	2.089	2.161	2.204	2.247	Continuing	Continuing
0653: <i>NAWC Weapons Division</i>	145.823	150.085	154.442	0.000	154.442	156.085	158.836	161.810	164.834	Continuing	Continuing
0654: <i>NAWC Acft Division</i>	112.333	116.049	122.604	0.000	122.604	102.145	104.109	105.923	107.806	Continuing	Continuing
2921: <i>Pacific Missile Range Facility</i>	5.954	5.119	5.227	0.000	5.227	3.330	1.438	0.109	0.111	Continuing	Continuing
2922: <i>MRTFB Maint & Repair</i>	15.520	25.368	21.300	0.000	21.300	22.236	23.043	23.756	24.498	Continuing	Continuing
3029: <i>T&E Policy Support</i>	0.691	0.755	0.782	0.000	0.782	0.782	0.789	0.804	0.820	Continuing	Continuing
3154: <i>Nanoose and Dabob Bay Ranges</i>	11.660	11.746	12.080	0.000	12.080	12.304	12.462	12.705	12.950	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program provides institutional maintenance and operations support for: the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center (NAVUNSEAWARCEN DET AUTEC), Andros Island, Bahamas; the Environmental Compliance Program; Naval Air Warfare Center Weapons Division (NAVAIRWARCENWPNDIV), Point Mugu and China Lake, CA; Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Patuxent River, MD; T&E related capabilities at the Pacific Missile Range Facility, Barking Sands, HI; Maintenance and Repair at NAVAIRWARCENWPNDIV and NAVAIRWARCENACDIV; and the Naval Undersea Warfare Center Keyport (NAVUNSEAWARCENKEYPORT) Nanoose and Dabob Bay Ranges. The Test and Evaluation (T&E) activities make up the Navy portion of the Department of Defense's Major Range and Test Facility Base (MRTFB). These activities are chartered to perform T&E for the development and acquisition of technology advanced weapons systems. Core T&E capabilities and capacity are operated to obtain weapons system performance documentation for acquisition program milestone decisions to provide operational forces with effective weapons systems. This program provides Navy Acquisition Program Managers required test capabilities; lowers cost of T&E; removes cost and scheduling impact of providing their own T&E resources; and retains the physical airspace, land space and sea space needed to conduct testing.

This Program Element includes \$1.688M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
1319: Research, Development, Test & Evaluation, Navy		PE 0605864N: Test & Evaluation Support			
BA 6: RDT&E Management Support					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	340.890	380.733	0.000	0.000	0.000
Current President's Budget	350.514	369.154	376.418	0.000	376.418
Total Adjustments	9.624	-11.579	376.418	0.000	376.418
• Congressional General Reductions		-1.579			
• Congressional Directed Reductions		-10.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	9.999	0.000			
• SBIR/STTR Transfer	-0.375	0.000			
• Program Adjustments	0.000	0.000	376.418	0.000	376.418
Change Summary Explanation					
Technical: Not applicable.					
Schedule: Not applicable.					
FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605864N: Test & Evaluation Support				PROJECT 0541: AUTECH			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0541: AUTECH	54.724	55.962	57.885	0.000	57.885	59.034	59.921	61.090	62.280	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

As a detachment of Naval Undersea Warfare Center (NUWC), Division Newport, the mission of the Atlantic Undersea Test and Evaluation Center (AUTECH) is to provide the US Navy an underwater range facility for full-spectrum test and evaluation of Undersea Warfare (USW) systems and for Fleet training and readiness assessment. The AUTECH Program Office is headquartered at Newport, RI. AUTECH's administrative offices are located at West Palm Beach, Florida. Test facilities are located at Andros Island, Sites 1 through 4, and the Berry Islands in the Bahamas. AUTECH aircraft make scheduled daily flights between West Palm Beach and Andros Town Airport.

AUTECH manages and, under service contract, maintains and operates a 500 square nautical miles deep-water and a 100 square nautical miles shallow-water acoustic tracking range; air-target tracking capabilities; sonobuoy simulation systems; electronic warfare threat simulation systems; fixed and rotary wing aircraft; aircraft ground support facilities; acoustic targets; torpedo retrieval and flushing capabilities; open-ocean range craft; marine support facilities; and, data processing and analysis capabilities.

Major test facilities on Andros Island are located at Site 1. The Command Control Building houses the range tracking displays and replay centers, the computer center, operations support functions, communications center, and the central timing system. The Range Support Facility houses a torpedo post-run workshop, Mark 46 /Mark 50 lightweight torpedo Intermediate Maintenance Activity (IMA), a Mark 30 undersea target IMA, a Mark 48 heavyweight torpedo R&D Turnaround facility and related technical facilities. The complex includes electrical and physical calibration labs, a complete electronics maintenance shop, a dive locker, a precision machine shop, and logistics support areas.

AUTECH has a 285-foot concrete pier with a controlling depth of 17 feet (5.2 meters) at mean low tide. An adjacent wharf is approximately 240 feet in length (72 meters) with a controlling depth of 15 feet at mean low tide. Power is available at both locations. Facilities at the pier/marine area include fully equipped machine /fabrication and marine overhaul shops. Also at Site 1, six Range User Buildings (RUBs) are maintained for assembling test equipment and equipment check-out during test mobilization or dockside periods. These staging areas are equipped with a variety of power sources, gantry cranes, compressed air and security features. A fully equipped range user hanger for ground maintenance and storage of helicopters is located at the AUTECH helicopter airstrip. Sites 2, 3, and 4 are small instrumented areas located south of Site 1 used to extend tracking of sonobuoys, communications, and air target track.

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605864N: Test & Evaluation Support		PROJECT 0541: AUTECH	
This Project includes \$.270M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.					
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Atlantic Undersea Test and Eval Ctr Facility AUTECH is a Test and Evaluation (T&E) facility for collecting selected underwater, surface and air tracking data on test participants. This project funds the overhead/institutional costs required to sustain the MRTFB capabilities at AUTECH in accordance with Department of Defense Directive 3200.11. FY 2009 Accomplishments: Atlantic Undersea Test and Evaluation Center Facility. Maintained and operated mission essential/core test support resources, instrumentation systems and marine craft required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Reimburses the Command for General and Administrative support services. FY 2010 Plans: Atlantic Undersea Test and Evaluation Center Facility. Continue to maintain and operate mission essential/core test support resources, instrumentation systems and marine craft required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Reimburses the Command for General and Administrative support services. FY 2011 Base Plans: Continue all efforts of FY2010.	43.404	44.912	46.835	0.000	46.835
Bahamian Lease Rental payments to the Bahamian government for use of land and ocean in the Bahamas.	11.050	11.050	11.050	0.000	11.050

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>		PROJECT 0541: <i>AUTEC</i>		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2009 Accomplishments:</i> Bahamian Lease. Provided rental payments to the Bahamian government for use of land and ocean in the Bahamas.						
<i>FY 2010 Plans:</i> Bahamian Lease. Continue to provide rental payments to the Bahamian government for use of land and ocean in the Bahamas.						
<i>FY 2011 Base Plans:</i> Continue all efforts of FY2010.						
DAWDF Realignment Defense Acquisition Workforce Development Fund (DAWDF) funding.		0.270	0.000	0.000	0.000	0.000
<i>FY 2009 Accomplishments:</i> DAWDF Realignment.						
Accomplishments/Planned Programs Subtotals		54.724	55.962	57.885	0.000	57.885
C. Other Program Funding Summary (\$ in Millions)						
N/A						
D. Acquisition Strategy						
N/A						
E. Performance Metrics						
Maintain MRTFB infrastructure in a ready state to provide between 2,500-2,900 range hours in support of multiple Navy and DoD acquisition programs and fleet training.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605864N: Test & Evaluation Support				PROJECT 0566: NAVAIR Environmental Compliance			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0566: NAVAIR Environmental Compliance	3.809	4.070	2.098	0.000	2.098	2.089	2.161	2.204	2.247	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
This continuing project supports environmental compliance, conservation and pollution prevention related efforts at the Navy Major Range and Test Facility Base (MRTFB) located at Patuxent River, MD, China Lake, CA, Point Mugu, CA, and Atlantic Undersea Test and Evaluation Center (AUTEC), Bahamas. The Navy MRTFB environmental projects include ongoing efforts to comply with Federal, State, and local environmental requirements.											
The MRTFB are test and evaluation facilities that provide for Department of Defense (DoD) test and evaluation support missions. Theses missions include: Weapons system testing, military operational squadron training on new weapon systems, and validation of performance or operational characteristics.											
This Project includes \$.019M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.											
B. Accomplishments/Planned Program (\$ in Millions)											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>		PROJECT 0566: <i>NAVAIR Environmental Compliance</i>		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p>Lake. Continue mandated monitoring of range operations environmental effects. Continue monitoring required for endangered species and marine mammals protection act compliance.</p> <p><i>FY 2010 Plans:</i> Environmental Compliance. Continue comprehensive air pollution meteorology studies at Point Mugu. Continue range contamination assessments at impact areas and lay down yards at China Lake. Continue mandated monitoring of range operations environmental effects. Continue monitoring required for endangered species and marine mammals protection act compliance.</p> <p><i>FY 2011 Base Plans:</i> Continue mandated monitoring of range operations environmental effects. Continue monitoring required for endangered species and marine mammals protection act compliance.</p>						
<p>DAWDF Realignment</p> <p>Defense Acquisition Workforce Development Fund (DAWDF) funding.</p> <p><i>FY 2009 Accomplishments:</i> DAWDF Realignment.</p>		0.019	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals		3.809	4.070	2.098	0.000	2.098
C. Other Program Funding Summary (\$ in Millions) N/A						
D. Acquisition Strategy N/A						
E. Performance Metrics Execute 15-20 environmental projects per year required to comply with existing laws, regulations, executive orders, and final governing standards.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>				PROJECT 0653: <i>NAWC Weapons Division</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0653: <i>NAWC Weapons Division</i>	145.823	150.085	154.442	0.000	154.442	156.085	158.836	161.810	164.834	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Project provides continuing maintenance and operational support for the Naval Air Warfare Center Weapons Division (NAVAIRWARCENWPNDIV) Test and Evaluation (T&E) capabilities. These capabilities include the Pacific Ranges and Facilities, consisting of China Lake Ranges and the Point Mugu Sea Range, aerial and surface targets, test instrumentation, and T&E aircraft. The Pacific Ranges use China Lake's 1.1 million acres of land and 17,000 square miles of military restricted (R-2508) airspace together with Point Mugu's 125,000 square miles of instrumented sea range and 36,000 square miles of controlled overlying airspace, and airfield and test instrumentation at San Nicolas Island to perform its T&E mission. Included in the China Lake ranges is the Electronic Combat Range (ECR), which provides outdoor free space development and operational testing of airborne electronic warfare (EW) systems and tactics against shipboard and land based air defense systems. These ranges perform metric radar, multilateration and optical tracking of test objects; command, control, and destruct for range safety purposes; communications; frequency interference control and analysis; collection processing and display of telemetered data; real-time data processing and display; and the operation of a sub scale aerial target launch capability. Other test capabilities include an outdoor High Power Microwave (HPM) measurement facility; propulsion, warhead, environmental, rocket motor, and other missile component test facilities; and gun ranges. This project funds costs that are not chargeable to customers.

This Project includes \$.725M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Pacific Ranges	63.333	63.942	65.958	0.000	65.958
In accordance with (IAW) Department of Defense Directive (DoDD) 3200.11., this project funds the overhead/institutional costs required to sustain the Major Range Test Facility Base (MRTFB) capabilities at the Pacific Ranges and Facilities located at China Lake and Point Mugu CA. These facilities provide safe, instrumented, controlled open air testing utilizing the Land Range, Sea Range, Electronic Combat Range, Air Vehicle Modification and Instrumentation, and San Nicholas Island.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605864N: Test & Evaluation Support		PROJECT 0653: NAWC Weapons Division		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: Pacific Ranges. Maintained and operated mission essential/core test support resources. These resources include test article instrumentation and/or modification for Flight Test Aircraft, Weapons Under Test and Aircraft Engines Undergoing Un-installed test. As well as, scheduling and control of air, land, sea and associated range operating areas required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.						
FY 2010 Plans: Pacific Ranges. Continue to maintain and operate mission essential/core test support resources. These resources include test article instrumentation and/or modification for Flight Test Aircraft, Weapons Under Test and Aircraft Engines Undergoing Un-installed test. As well as, scheduling and control of air, land, sea and associated range operating areas required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.						
FY 2011 Base Plans: Continue all efforts of FY2010.						
Navy Test Wing Pacific This project funds the overhead/institutional costs required to sustain the MRTFB capabilities of the Naval Test Wing Pacific located at China Lake and Point Mugu CA. These facilities provide the Navy's principal Pacific test activity for Naval Aviation Systems Team aircraft, engaged in or supporting T&E of aircraft, weapons and weapons systems.		24.899	25.163	25.940	0.000	25.940

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605864N: Test & Evaluation Support		PROJECT 0653: NAWC Weapons Division	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2009 Accomplishments:</i> Navy Test Wing Pacific. Maintained and operated mission essential/core test support resources associated with aircraft and related systems and flight test safety required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.</p> <p><i>FY 2010 Plans:</i> Navy Test Wing Pacific. Continue to maintain and operate mission essential/core test support resources associated with aircraft and related systems and flight test safety required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.</p> <p><i>FY 2011 Base Plans:</i> Continue all efforts of FY2010.</p>					
Threat/Target Systems This project funds the overhead/institutional costs required to sustain the MRTFB capabilities of the Threat/Target Systems facilities. These facilities provide the airborne and seaborne threats for test and evaluation. <i>FY 2009 Accomplishments:</i> Threat/Target Systems. Maintained and operated mission essential/core test support resources associated with airborne and seaborne targets required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.	11.835	11.964	12.302	0.000	12.302

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605864N: Test & Evaluation Support		PROJECT 0653: NAWC Weapons Division		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: Threat/Target Systems. Continue to maintain and operate mission essential/core test support resources associated with airborne and seaborne targets required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.						
FY 2011 Base Plans: Continue all efforts of FY2010.						
Test and Evaluation Ordnance This project funds the overhead/institutional costs required to sustain the MRTFB capabilities of the Test and Evaluation Ordnance facilities. These facilities provide test and evaluation of All-Up live ordnance and components.		3.300	3.342	3.459	0.000	3.459
FY 2009 Accomplishments: Test and Evaluation Ordnance. Maintained and operated mission essential/core test support resources associated propulsion, warhead, environmental, rocket motor, and other missile component test facilities required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.						
FY 2010 Plans: Test and Evaluation Ordnance. Continue to maintain and operate mission essential/core test support resources associated propulsion, warhead, environmental, rocket motor, and other missile component test facilities required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605864N: Test & Evaluation Support		PROJECT 0653: NAWC Weapons Division		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: Continue all efforts of FY2010.						
Staff This project funds the overhead/institutional costs required to sustain the Naval Air Warfare Center Weapons Division (NAWCWD) MRTFB Test and Evaluation capabilities. FY 2009 Accomplishments: Staff. Reimburses the Command for General and Administrative Support services. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. FY 2010 Plans: Staff. Continue to reimburse the Command for General and Administrative Support services. Continue to fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Additional funds for utility costs increases and implementation of DoD IG utility charging findings. FY 2011 Base Plans: Continue all efforts of FY2010.		41.731	45.674	46.783	0.000	46.783
DAWDF Realignment Defense Acquisition Workforce Development Fund (DAWDF) funding. FY 2009 Accomplishments: DAWDF Realignment.		0.725	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
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B. Accomplishments/Planned Program (\$ in Millions)					
				FY 2009	FY 2010
				FY 2011 Base	FY 2011 OCO
				FY 2011 Total	
Accomplishments/Planned Programs Subtotals				145.823	150.085
				154.442	0.000
				154.442	
C. Other Program Funding Summary (\$ in Millions)					
N/A					
D. Acquisition Strategy					
N/A					
E. Performance Metrics					
Maintain MRTFB infrastructure in a ready state to provide between 4,300-4,800 range hours, 125-150 aerial target presentations, 400-450 surface target presentations, 11,000-11,500 ordnance test hours, and over 6,000 flight hours in support of multiple Navy and DoD acquisition programs and fleet training.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605864N: Test & Evaluation Support				PROJECT 0654: NAWC Acft Division			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0654: NAWC Acft Division	112.333	116.049	122.604	0.000	122.604	102.145	104.109	105.923	107.806	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
This project provides funds for the maintenance and operations of the Naval Air Warfare Center Aircraft Division's (NAVAIRWARCENACDIV's) Major Range Test Facility Base (MRTFB) capabilities used to conduct test and evaluation for air platforms. NAVAIRWARCENACDIV has extensive airfield, flight test ranges, aircraft systems test facilities and simulation laboratories to support aircraft Research Development Test and Evaluation (RDT&E). This includes 50,000 square miles of airspace, 39,375 square miles of sea space, and 7,950 acres of land space. Product areas include aircraft systems flight test and evaluation, carrier suitability certification, test article preparation, installed system test and evaluation, and modeling and simulation support of the acquisition process. The Test and Evaluation (T&E) Group, Patuxent River, performs development and operational test and evaluation of manned and unmanned air vehicle systems, including mission systems, equipment, subsystems, components, and support systems. This project also provides test and evaluation facilities for air-breathing propulsion systems and extensive facilities for conducting both installed and uninstalled aircraft engine development and test and evaluation. This project funds costs that are not chargeable to customers.											
This Project includes \$.513M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Atlantic Ranges						23.957	25.106	25.065	0.000	25.065	
This project funds the overhead/institutional costs required to sustain the MRTFB capabilities associated with the Atlantic Ranges and Facilities and Air Vehicle Modification and Instrumentation . These facilities provide safe, instrumented, controlled flight testing and training in air, sea, and land arenas.											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605864N: Test & Evaluation Support		PROJECT 0654: NAWC Acft Division		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: Atlantic Ranges. Maintained and operated mission essential/core test support resources. These resources include test article instrumentation and/or modification for Flight Test Aircraft and Weapons Under Test as well as, ground and flight test instrumentation systems, range instrumentation systems and data processing and communication systems required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.						
FY 2010 Plans: Atlantic Ranges. Continue to maintain and operate mission essential/core test support resources. These resources include test article instrumentation and/or modification for Flight Test Aircraft and Weapons Under Test as well as, ground and flight test instrumentation systems, range instrumentation systems and data processing and communication systems required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Increase for the Aircraft Prototype Facility.						
FY 2011 Base Plans: Continue all efforts of FY2010.						
Electromagnetic Environmental Effects (E-Cubed) and Air Combat Environment Test and Evaluation Facility (ACETEF) This project funds the overhead/institutional costs required to sustain the MRTFB capabilities associated with Electromagnetic Environmental Effects (E-Cubed) and Air Combat Environment Test and Evaluation Facility . These facilities provide T&E support with integrated, interactive, and repeatable synthetic environments and reduce the risk and cost for programs with the use of installed systems tests to include simulation and stimulation tools, techniques and technologies.		21.598	21.469	21.326	0.000	21.326

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605864N: Test & Evaluation Support		PROJECT 0654: NAWC Acft Division		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: Electromagnetic Environmental Effects (E-Cubed) and Air Combat Environment Test and Evaluation Facility (ACETEF). Maintained and operated mission essential/core test support resources required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.						
FY 2010 Plans: Electromagnetic Environmental Effects (E-Cubed) and Air Combat Environment Test and Evaluation Facility (ACETEF). Continue to maintain and operate mission essential/core test support resources required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.						
FY 2011 Base Plans: Continue all efforts of FY2010.						
Propulsion Systems Test Facility This project funds the overhead/institutional costs required to sustain the MRTFB capabilities of the Propulsion System Evaluation facility. These facilities perform T&E of propulsion systems in the laboratories, engine test chambers and component test rigs of the Propulsion Systems Test Facility and the Aircraft T&E Facility. Propulsion Systems consists of engines, engine components and accessories.		4.545	4.589	4.469	0.000	4.469
FY 2009 Accomplishments: Propulsion Systems Test Facility. Maintained and operated mission essential/core test support resources required to meet customer test workload. Funds civilian labor, travel, transportation,						

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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. FY 2010 Plans: Continue to maintain and operate mission essential/core test support resources required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. FY 2011 Base Plans: Continue all efforts of FY2010.					
Threat/Target Systems This project funds the overhead/institutional costs required to sustain the MRTFB capabilities of the Threat/Target Systems facilities. These facilities provide the airborne and seaborne threats for test and evaluation. FY 2009 Accomplishments: Threat/Target Systems. Maintained and operated mission essential/core test support resources associated with airborne and seaborne targets required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. FY 2010 Plans: Threat/Target Systems. Continue to maintain and operate mission essential/core test support resources associated with airborne and seaborne targets required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment	1.472	1.954	1.961	0.000	1.961

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605864N: Test & Evaluation Support		PROJECT 0654: NAWC Acft Division		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. FY 2011 Base Plans: Continue all efforts of FY2010.						
Naval Test Wing Atlantic This project funds the overhead/institutional costs required to sustain the MRTFB capabilities of the Naval Test Wing Atlantic. These facilities provide support for Naval Aviation Systems Team aircraft, engaged in or supporting T&E of aircraft and aircraft systems. FY 2009 Accomplishments: Naval Test Wing Atlantic. Maintained and operated mission essential/core test support resources associated with aircraft and related systems and flight test safety required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. FY10-11 budget increased to support additional chase and tanker aircraft required to support F/A-18E/F/G and JSF. FY 2010 Plans: Naval Test Wing Atlantic. Continue to maintain and operate mission essential/core test support resources associated with aircraft and related systems and flight test safety required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Increase to support additional chase and tanker aircraft required to support F/A-18E/F/G and JSF.		33.637	34.221	44.693	0.000	44.693

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: Continue all efforts of FY2010. Increase to support additional chase and tanker aircraft required to support F/A-18E/F/G and JSF.						
Staff This project funds the overhead/institutional costs required to sustain the Naval Air Warfare Center Aircraft Division (NAWCAD) MRTFB Test and Evaluation capabilities. FY 2009 Accomplishments: Staff. Reimburses the Command for General and Administrative Support services. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. FY 2010 Plans: Staff. Continue to reimburse the Command for General and Administrative Support services. Continue to fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. FY 2011 Base Plans: Continue all efforts of FY2010 except for the funding of NMCI equipment which was realigned to different program element.		26.611	28.710	25.090	0.000	25.090
DAWDF Alignment Defense Acquisition Workforce Development Fund (DAWDF) funding. FY 2009 Accomplishments: DAWDF Realignment.		0.513	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
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B. Accomplishments/Planned Program (\$ in Millions)					
				FY 2009	FY 2010
				FY 2011 Base	FY 2011 OCO
				FY 2011 Total	
Accomplishments/Planned Programs Subtotals				112.333	116.049
				122.604	0.000
				122.604	
C. Other Program Funding Summary (\$ in Millions)					
N/A					
D. Acquisition Strategy					
N/A					
E. Performance Metrics					
Maintain MRTFB infrastructure in a ready state to provide between 8,700-9,200 range hours, 4,900-5,300 chamber hours, 9,500-10,000 E3 test hours, and over 10,000 flight hours in support of multiple Navy and DoD acquisition programs and fleet training.					

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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2921: <i>Pacific Missile Range Facility</i>	5.954	5.119	5.227	0.000	5.227	3.330	1.438	0.109	0.111	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This program provides continuing maintenance and operations support for Test & Evaluation (T&E) related capabilities at the Pacific Missile Range Facility (PMRF) located at Barking Sands on Kauai, HI. PMRF's T&E capabilities include precision radar and telemetry assets, the Mobile Aerial Target Support System (MATSS), and optical tracking systems. These assets support Navy, DOD, and Army Missile Defense Test & Evaluation. This project funds costs not chargeable to customers. Effective FY 12 and out, PMRF instrumentation will be phased out due to large funding reductions.

This Project includes \$.024M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Pacific Missile Range Facility	5.930	5.119	5.227	0.000	5.227
<p>This project funds the overhead/institutional costs required to sustain the recognized Major Range Test Facility Base (MRTFB) capabilities at PMRF in accordance with Department of Defense Directive 3200.11.</p> <p><i>FY 2009 Accomplishments:</i> PMRF Test and Evaluation Assets. Maintained and operated mission essential/core test support resources including the precision radar and telemetry assets, the Mobile Aerial Target Support System (MATSS), the Stabilized High-accuracy Optical Tracking System (SHOTS), and the Telemetry Systems required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual</p>					

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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>		PROJECT 2921: <i>Pacific Missile Range Facility</i>		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
utilities and any costs necessary to manage and sustain MRTFB operations. Reimburses the Command for General and Administrative support services. <i>FY 2010 Plans:</i> PMRF Test and Evaluation Assets. Continue to maintain and operate mission essential/core test support resources including the precision radar and telemetry assets, the Mobile Aerial Target Support System (MATSS), the Stabilized High-accuracy Optical Tracking System (SHOTS), and the Telemetry Systems required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Reimburses the Command for General and Administrative support services. <i>FY 2011 Base Plans:</i> Continue all efforts of FY2010.						
DAWDF Realignment Defense Acquisition Workforce Development Fund (DAWDF) funding. <i>FY 2009 Accomplishments:</i> DAWDF Realignment.		0.024	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals		5.954	5.119	5.227	0.000	5.227
C. Other Program Funding Summary (\$ in Millions) N/A						
D. Acquisition Strategy N/A						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 2921: <i>Pacific Missile Range Facility</i>
E. Performance Metrics Maintain MRTFB infrastructure in a ready state to provide between 600-1,000 range hours in support of multiple Navy and DoD acquisition programs and fleet training.		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>				PROJECT 2922: <i>MRTFB Maint & Repair</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2922: <i>MRTFB Maint & Repair</i>	15.520	25.368	21.300	0.000	21.300	22.236	23.043	23.756	24.498	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification <p>This project provides funding for the maintenance and repair of the Major Range Test Facility Base (MRTFB) Real Property Maintenance Activities (RPMA) at the Naval Air Warfare Center Weapons Division (W0653) and the Naval Air Warfare Center Aircraft Division (0654). Funds mission critical emergency services, recurring maintenance and repair, and major repair projects. In addition it addresses priority items on the Backlog of Maintenance and Repair (BMAR) list.</p> <p>This Project includes \$.077M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Facility Maintenance and Repair						15.443	25.368	21.300	0.000	21.300	
Maintenance and repair of the Major Range Test Facility Base (MRTFB) Real Property Maintenance Activities (RPMA) at the Naval Air Warfare Center Weapons Division (W0653) and the Naval Air Warfare Center Aircraft Division (0654). <i>FY 2009 Accomplishments:</i> Facility Maintenance and Repair. Supported mission critical emergency services, recurring maintenance and repair, and minor and major repair efforts at the Naval Air Warfare Center Weapons Division, the Naval Air Warfare Center Aircraft Division, and the Atlantic Undersea Test and Evaluation Center (AUTEC). FY09 budget funds MRTFB facility to 53% of DoD sustainment model.											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605864N: Test & Evaluation Support		PROJECT 2922: MRTFB Maint & Repair	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: Facility Maintenance and Repair. Continue to support mission critical emergency services, recurring maintenance and repair, and minor and major repair efforts at the Naval Air Warfare Center Weapons Division, the Naval Air Warfare Center Aircraft Division, and the Atlantic Undersea Test and Evaluation Center (AUTEC). FY10 budget funds MRTFB facility to 90% of DoD sustainment model and addresses restoration and modernization of Hangars and roads.					
FY 2011 Base Plans: Continue all efforts of FY2010. FY11 budget funds MRTFB facility to 90% of DoD sustainment model.					
DAWDF Realignment Defense Acquisition Workforce Development Fund (DAWDF) funding. FY 2009 Accomplishments: DAWDF Realignment.	0.077	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	15.520	25.368	21.300	0.000	21.300
C. Other Program Funding Summary (\$ in Millions)					
N/A					
D. Acquisition Strategy					
N/A					
E. Performance Metrics					
Maintain the 141, 357, and 784 building/structures at AUTEC, NAWCAD, and NAWCWD respectively. Execute 15-20 major repair projects per year to address mission critical services.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>				PROJECT 3029: <i>T&E Policy Support</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3029: <i>T&E Policy Support</i>	0.691	0.755	0.782	0.000	0.782	0.782	0.789	0.804	0.820	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification <p>This project provides funds to support Test and Evaluation (T&E) policy, transformation, programming, requirements validation, and T&E dispute arbitration and resolution in an evolutionary acquisition environment. This expertise is also used as required to support the completion of the Navy T&E mission including oversight of T&E plans for Navy and Joint acquisition programs, liaison with other agencies on T&E matters, development of T&E strategic plans, conduct of T&E studies and assessments, formulation and validation of T&E capability needs, assessment and support of future testing of formal acquisition programs, and identification of Science and Technologies required to support T&E of future acquisition programs.</p> <p>This Project includes \$.003M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
T&E Policy & Requirements Validation Support							0.688	0.755	0.782	0.000	0.782
Test and Evaluation (T&E) policy and requirements validation.											
<i>FY 2009 Accomplishments:</i>											
T&E Policy & Requirements Validation Support. Provided funding for labor, material, and travel in support of the Test and Evaluation (T&E) policy and requirements validation.											
<i>FY 2010 Plans:</i>											
T&E Policy & Requirements Validation Support. Continue to provide funding for labor, material, and travel in support of the Test and Evaluation (T&E) policy and requirements validation.											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>		PROJECT 3029: <i>T&E Policy Support</i>		
<u>B. Accomplishments/Planned Program (\$ in Millions)</u>						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2011 Base Plans:</i> Continue all efforts of FY2010.						
DAWDF Realignment Defense Acquisition Workforce Development Fund (DAWDF) funding. <i>FY 2009 Accomplishments:</i> DAWDF Realignment.		0.003	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals		0.691	0.755	0.782	0.000	0.782
<u>C. Other Program Funding Summary (\$ in Millions)</u> N/A						
<u>D. Acquisition Strategy</u> N/A						
<u>E. Performance Metrics</u> Assess and validate requirements for over 25 Navy and Joint test capability investments per year.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>				PROJECT 3154: <i>Nanoose and Dabob Bay Ranges</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3154: <i>Nanoose and Dabob Bay Ranges</i>	11.660	11.746	12.080	0.000	12.080	12.304	12.462	12.705	12.950	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification <p>This project provides maintenance and operations support for the Nanoose and Dabob Bay Ranges along with associated support systems to provide Test and Evaluation (T&E) and readiness assessment services for acquisition programs and the Fleet. Operates ocean-based environment, measurement and support systems. Maintains and repairs systems that measure warfare system performance. Oversees test, training, and measurement facilities, equipment, operations and maintenance processes. Satisfies customer exercise and measurement requirements through the operation of ocean based test and measurement systems. Assures the readiness of systems through the implementation of calibration, maintenance, repair and life cycle processes. Performs exercise planning, exercise interpretation and development of surrogate environments, measurement and support systems. Assists in the design, fabrication and testing of systems for Undersea Warfare (USW) warfare environment simulation and performance measurement. Oversees the manning and maintenance of Naval Undersea Warfare Center (NUWC) Division Keyport range craft and range craft systems.</p> <p>This Project includes \$.057M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Undersea Ranges						11.603	11.746	12.080	0.000	12.080	
<p>This project funds the overhead/Institutional costs required to sustain the Major Range Test Facility Base (MRTFB) capabilities at the Nanoose and Dabob Bay undersea tracking ranges.</p> <p><i>FY 2009 Accomplishments:</i> Undersea Ranges. Maintained and operated mission essential/core test support resources associated with the unique test environments for test and evaluation of undersea weapons, sensors, submarines</p>											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>		PROJECT 3154: <i>Nanoose and Dabob Bay Ranges</i>		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p>and other undersea systems required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Reimburses the Command for General and Administrative support services.</p> <p><i>FY 2010 Plans:</i> Undersea Ranges. Continue to maintain and operate mission essential/core test support resources associated with the unique test environments for test and evaluation of undersea weapons, sensors, submarines and other undersea systems required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Reimburses the Command for General and Administrative support services.</p> <p><i>FY 2011 Base Plans:</i> Undersea Ranges. Continue all efforts of FY2010.</p>						
<p>DAWDF Realignment</p> <p>Defense Acquisition Workforce Development Fund (DAWDF) funding.</p> <p><i>FY 2009 Accomplishments:</i> DAWDF Realignment.</p>		0.057	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals		11.660	11.746	12.080	0.000	12.080
C. Other Program Funding Summary (\$ in Millions) N/A						
D. Acquisition Strategy N/A						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 3154: <i>Nanoose and Dabob Bay Ranges</i>
E. Performance Metrics Maintain MRTFB infrastructure in a ready state to provide between 1,600-2,000 range hours in support of multiple Navy and DoD acquisition programs and fleet training.		

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605865N: Operational Test & Eval Capability							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	12.044	11.960	15.746	0.000	15.746	16.853	17.042	17.412	17.771	Continuing	Continuing
0831: OPTEVFOR Support	11.556	11.464	15.290	0.000	15.290	16.369	16.547	16.907	17.255	Continuing	Continuing
2923: Navy JT&E Support	0.488	0.496	0.456	0.000	0.456	0.484	0.495	0.505	0.516	Continuing	Continuing
A. Mission Description and Budget Item Justification											
<p>This program element (PE) provides Commander, Operational Test and Evaluation Force (COMOPTEVFOR) general support funding for headquarters annual operating costs and ensures COMOPTEVFOR compliance with Secretary of Defense (SECDEF) and Secretary of the Navy (SECNAV) directives to conduct independent operational testing and evaluation. Funding supports planning, conducting, and reporting on the operational effectiveness and suitability of new and improved systems and recommending fleet usage to the Chief of Naval Operations (CNO). Funding is also used to support ongoing development and implementation of new requirements relative to integrated testing. The CNO, as well as acquisition executives and managers at all levels, have a continuing need for expeditious and efficient conduct of Operational Test and Evaluation (OT&E) by COMOPTEVFOR in support of training and equipping fleet forces. To this end, CNO has increased funding program support for COMOPTEVFOR beginning FY 2011 and beyond as displayed herein. This increase will support COMOPTEVFOR pursuing a variety of senior management initiatives aimed at increasing efficiencies in T&E; new senior management initiatives will include IT database and decision making technology upgrades, implementation of Integrated Testing and Mission Based Test Design across all programs, and improved civilian staffing and expertise in the areas of DON acquisition processes, Modeling and Simulation, Statistical Studies, Cost Analysis, Information Assurance, and similar disciplines. All of these senior management initiatives are aimed at improving the quality of testing and evaluation thus ensuring delivery to fleet units of fully tested and capable combat systems. OT&E issues have direct long term Navy-wide implications on the Fleet's readiness and war fighting capability. Rapid advances in technology, changes in fleet tactics, and increased complexity of weapons systems and platforms, combined with reductions in manpower, force structure, and budgets have created an increased need for technical and operational analyses that are sophisticated and timely in order to ensure an optimal return on investment of Navy resources. Funding is also provided for Navy support of the Office of the Secretary of Defense (OSD) sponsored Joint Test and Evaluation (JT&E) program.</p>											

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
1319: Research, Development, Test & Evaluation, Navy		PE 0605865N: Operational Test & Eval Capability			
BA 6: RDT&E Management Support					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	12.162	12.010	0.000	0.000	0.000
Current President's Budget	12.044	11.960	15.746	0.000	15.746
Total Adjustments	-0.118	-0.050	15.746	0.000	15.746
• Congressional General Reductions		-0.050			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-0.118	0.000			
• Program Adjustments	0.000	0.000	15.746	0.000	15.746
Change Summary Explanation					
Technical: Not applicable.					
Schedule: Not applicable.					
FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605865N: <i>Operational Test & Eval Capability</i>				PROJECT 0831: <i>OPTEVFOR Support</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0831: <i>OPTEVFOR Support</i>	11.556	11.464	15.290	0.000	15.290	16.369	16.547	16.907	17.255	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This PE provides COMOPTEVFOR general support funding for headquarters annual operating costs and ensures COMOPTEVFOR compliance with SECDEF and SECNAV directives to conduct independent operational testing and evaluation as well as responding to emerging requirements associated with establishing and maintaining compliance with the Department of the Navy's Continuity of Operation (COOP) Program. Funding supports planning, conducting, and reporting on the operational effectiveness and suitability of new and improved systems and recommending fleet usage to the CNO. To this end, CNO has increased funding program support for COMOPTEVFOR beginning FY 2011 and beyond as displayed herein. This increase will support COMOPTEVFOR pursuing a variety of senior management initiatives aimed at increasing efficiencies in T&E; new senior management initiatives will include IT database and decision making technology upgrades, implementation of Integrated Testing and Mission Based Test Design across all programs, and improved civilian staffing and expertise in the areas of DON acquisition processes, Modeling and Simulation, Statistical Studies, Cost Analysis, Information Assurance, and similar disciplines. All of these senior management initiatives are aimed at improving the quality of testing and evaluation thus ensuring delivery to fleet units of fully tested and capable combat systems. The CNO has a continuing need for expeditious and efficient conduct of OT&E by COMOPTEVFOR in support of training and equipping fleet forces. OT&E issues have direct long term Navy-wide implications on the Fleet's readiness and war fighting capability. Rapid advances in technology, changes in fleet tactics, and increased complexity of weapons systems and platforms, combined with reductions in manpower, force structure, and budgets have created an increased need for technical and operational analyses that are sophisticated and timely to ensure an optimal return on investment of Navy resources.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
OPTEVFOR SUPPORT	11.556	11.464	15.290	0.000	15.290
The CNO has increased funding program support for COMOPTEVFOR beginning FY 2011 and beyond. This increase will support COMOPTEVFOR pursuing a variety of senior management initiatives aimed at increasing efficiencies in T&E; new senior management initiatives will include IT database and decision making technology upgrades, implementation of Integrated Testing and Mission Based Test					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605865N: Operational Test & Eval Capability		PROJECT 0831: OPTEVFOR Support	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Design across all programs, and improved civilian staffing and expertise in the areas of DON acquisition processes, Modeling and Simulation, Statistical Studies, Cost Analysis, Information Assurance, and similar disciplines. All of these senior management initiatives are aimed at improving the quality of testing and evaluation thus ensuring delivery to fleet units of fully tested and capable combat systems. FY 2009 Accomplishments: - Continued to operationally test and evaluate CNO projects commensurate with authorized funding level. - Continued to maintain level of effort associated with the DoD 5000-acquisition guidance, which requires increased COMOPTEVFOR involvement in early operational assessments, developmental testing, advanced concept technology demonstrations, and advanced technology demonstrations. Acquisition Workforce Fund: - Funded DoD Acquisition Workforce Fund. FY 2010 Plans: - Continue all efforts of FY09. FY 2011 Base Plans: - Continue all efforts of FY10. - Initiate a variety of senior management initiatives aimed at increasing efficiencies in T&E; to include IT database and decision making technology upgrades, implementation of Integrated Testing and Mission Based Test Design across all programs, and improved civilian staffing and expertise in the areas of DON acquisition processes, Modeling and Simulation, Statistical Studies, Cost Analysis, Information Assurance, and similar disciplines. All of these senior management initiatives are aimed at improving the quality of testing and evaluation thus ensuring delivery to fleet units of fully tested and capable combat systems.					
Accomplishments/Planned Programs Subtotals	11.556	11.464	15.290	0.000	15.290

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605865N: <i>Operational Test & Eval Capability</i>	PROJECT 0831: <i>OPTEVFOR Support</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy N/A		
E. Performance Metrics <p>As indicated in section A above, funding provides for core headquarters operations and support (O&S) costs related to required operational testing and evaluation (T&E) conducted in support of Navy acquisition programs. The preponderance of funding provides for the annual O&S costs for day to day operations of the staff/ headquarters of COMOPTEVFOR, located in Norfolk, Virginia. (Pursuant to DoD Financial Management Regulations and Navy financial policy guidance, as a T&E activity, COMOPTEVFOR's annual support costs are funded via RDTEN vice OMN; hence, and unlike most RDT&EN programs, these funds provide for O&S costs typical of military field commands/activities). Within this project, over half of the funding supports salaries of assigned civilian personnel. The remaining funds provide for other routine support costs such as travel, IT support, supplies, and other overhead/administrative support costs. The primary metric used within the project involves support for scheduled Navy acquisition program testing and subsequent analysis and reporting of results of testing to appropriate senior Navy acquisition officials and to the Navy chain of command directly to the CNO and various OPNAV/SECNAV staff offices. The performance goal is met when all assigned/scheduled testing and reporting is supported each year. Specific test program success is measured through analytic results of testing conducted throughout the year and constant interaction with program offices, acquisition decision makers, OPNAV staff resource sponsor offices, OSD and other service T&E offices/activities, and miscellaneous other customers/stakeholders. This project also supports testing and evaluation of various Joint/multi-service programs in which the Navy shares responsibilities in support of the acquisition community. The following metrics relate directly to the funding provided and are applicable to current operations.</p> <p>Number of Tests Conducted - FY09 = 119; FY10 = 120; FY11 = 120 Number of Programs Supported - FY09 = 512; FY10 = 512; FY11 = 512</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605865N: Operational Test & Eval Capability				PROJECT 2923: Navy JT&E Support			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2923: Navy JT&E Support	0.488	0.496	0.456	0.000	0.456	0.484	0.495	0.505	0.516	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project provides funding for Navy support of the OSD-sponsored JT&E program. This funding covers cost associated with facilities, personnel, and administrative support for T&E-focused Navy-led Joint Feasibility Studies and Joint Tests to ensure Navy compliance with requirements established by directive from the SECDEF to carry out the JT&E program. The funding is used for planning, conducting, and reporting the results of T&E-focused JT&E projects to assess the interoperability of recommendations on improvements in joint technical and operational concepts, to evaluate and validate testing methodologies having multi-service application, to assess technical or operational performance of interrelated and/or interacting systems under realistic joint operational conditions, and to provide data from joint field tests and exercises with which to validate models, simulations, and test beds. This funding is essential for Navy participation with the other services in these critical joint areas.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
JOINT TEST & EVALUATION	0.488	0.496	0.456	0.000	0.456
FY 2009 Accomplishments:					
- Continue to support JT&E projects as directed by the JT&E Senior Advisory Council.					
Acquisition Workforce Fund:					
- Funded DoD Acquisition Workforce Fund.					
FY 2010 Plans:					
- Continue all efforts of FY09.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605865N: <i>Operational Test & Eval Capability</i>		PROJECT 2923: <i>Navy JT&E Support</i>				
B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2011 Base Plans:</i> - Continue all efforts of FY10.								
Accomplishments/Planned Programs Subtotals				0.488	0.496	0.456	0.000	0.456
C. Other Program Funding Summary (\$ in Millions)								
N/A								
D. Acquisition Strategy								
N/A								
E. Performance Metrics								
This project supports testing and evaluation of various Joint/multi-service programs in which the Navy shares responsibilities in support of the acquisition community.								

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605866N: Navy Space & Electr Warfare Supt							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	2.686	2.659	4.013	5.200	9.213	4.789	5.306	5.396	5.485	Continuing	Continuing
0706: EMC & RF Mgmt	2.006	2.070	3.358	5.200	8.558	3.815	4.301	4.369	4.438	Continuing	Continuing
0739: Navy C2 Top Level	0.680	0.589	0.655	0.000	0.655	0.974	1.005	1.027	1.047	Continuing	Continuing
A. Mission Description and Budget Item Justification											
<p>Project 0706, Electromagnetic Interference (EMI) Reduction and Radio Frequency (RF) Management - Develops advanced technology to identify and reduce EMI sources from Navy systems research and development technology to develop top-level plans and space systems in the Space and Electronic Warfare (SEW) mission area. The Space and Electronic Warfare Shipboard Electromagnetic Compatibility Improvement Program (SEMCIIP) is an element of the Electromagnetic Compatibility (EMC) Systems Engineering Program.</p> <p>Project 0739, Navy Command, Control, Communications, Computers, and Intelligence (C4I) Top Level Requirements - This project provides analysis of both Fleet requirements and research and development technology to develop top-level plans and space systems in the Space and Electronic Warfare (SEW) mission area. The Space and Electronic Warfare Studies and Analysis Program (SEWSAP) supports analyses of Fleet requirements and research and development technology to develop top-level plans for operating Navy Command, Control, Communications, Intelligence, Surveillance and Reconnaissance (C4ISR) and space systems in the SEW mission area.</p> <p>Overseas Contingency Operations (OCO) Request: Combat Enabler in Theatre Operation Iraqi Freedom (OIF) - Joint Emitters during the continuing OIF operations was a source of debilitating electromagnetic interference to critical United States Navy (USN) Air Operations (OPS) & Ballistic Missile Defense (BMD) assets.</p> <p>In-Theater and Pre-Deployment OIF: Will address impact of upgrades to deploying ships and development of electromagnetic interference solutions for the deploying strike group.</p> <p>JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installations required for general research and development use.</p>											

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
1319: Research, Development, Test & Evaluation, Navy		PE 0605866N: Navy Space & Electr Warfare Supt			
BA 6: RDT&E Management Support					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	2.698	2.703	0.000	0.000	0.000
Current President's Budget	2.686	2.659	4.013	5.200	9.213
Total Adjustments	-0.012	-0.044	4.013	5.200	9.213
• Congressional General Reductions		-0.012			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	-0.032			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-0.012	0.000			
• Program Adjustments	0.000	0.000	4.013	0.000	4.013
• Rate/Misc Adjustments	0.000	0.000	0.000	5.200	5.200
Change Summary Explanation					
Technical: Not applicable.					
Schedule: Not applicable.					
FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605866N: <i>Navy Space & Electr Warfare Supt</i>				PROJECT 0706: <i>EMC & RF Mgmt</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0706: <i>EMC & RF Mgmt</i>	2.006	2.070	3.358	5.200	8.558	3.815	4.301	4.369	4.438	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification <p>Electromagnetic Interference (EMI) Reduction and Radio Frequency (RF) Management. This project develops tools, processes, and algorithms to identify and reduce EMI sources for Navy systems and platforms.</p> <p>(a) Automated spectrum capabilities will be enhanced to comply with Fleet operational requirements and streamline Strike Force frequency management processes. It will provide automated Spectrum Management (SM) Tools for development of Operational Task Communication and Radar/Weapon plans to support Fleet deployments, Exercises, Contingency Operations, and the Global War on Terrorism. It will provide identification and mitigation of EMI in Navy, North Atlantic Treaty Organization (NATO), Allied, Ashore and Joint Combat Operations.</p> <p>(b) It will support the Shipboard Electromagnetic Compatibility Improvement Program (SEMCIP), an element of the Electromagnetic Compatibility (EMC) Systems Engineering Program to identify, engineer, and evaluate effectiveness of potential EMI corrections.</p> <p>(c) Electromagnetic Pulse (EMP) Survivability Program provides for the Navy response to Secretary of Defense (SECDEF) tasking to assess the EMP survivability of all mission critical systems and to develop a hardness assurance and maintenance program. Develops improved modeling capability to reduce hardness validation costs at delivery and over the lifetime of the system/platform. Provides design criteria, test methodology, test limits, and survivability validation procedures for all Navy systems, ships, submarines and shore facilities.</p> <p>(d) Advanced Technology: Investigates below deck electromagnetic environmental effects and develops the capability to perform remote spectrum monitoring and electromagnetic noise monitoring. Also, develops the tools and technologies for innovative and efficient spectrum use, and continues the development of relationships between measured EMI and system performance for selected communications systems.</p> <p>(e) FY11 OCO Planned Program funds will be used for Combat Enabler in Theater OIF and Pre-Deployment OIF.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605866N: Navy Space & Electr Warfare Supt		PROJECT 0706: EMC & RF Mgmt	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
AESOP (Integrated CPM and EMCAP) FY 2009 Accomplishments: Delivered Afloat Electromagnetic Spectrum Operations Program (AESOP) version 2.1 & OP-3840, new AESOP newsletter, and ship card. Performed Electromagnetic Interference Investigation for major industrial & infrastructure customers. FY 2010 Plans: Continue development of interfaces for Afloat Electromagnetic Spectrum Operations Program (AESOP), and other automated tools to interface with evolving network protocols and to ensure currency for web based applications. Develop new algorithms for automated tools for new Navy C4ISR systems for both government and commercial communication systems being used by the Navy. Implement a set of web-based capabilities utilizing latest technologies Extensible Markup Language (XML) and other data standards to optimize information exchange/usability. FY 2011 Base Plans: FY 2011 - FY 2015 - Institutionalize frequency management process for operational fleet by developing procedures that can be utilized by all Navy Strike Groups. Make recommendations to update existing combatant commands, and numbered fleets directives regarding spectrum use in their areas of responsibility. Coordinate with ranges regarding impacts of spectrum relocation for systems used during tests, such as telemetry and data collection. Update the AESOP with the new radiation restrictions that reflect current legal requirements that result from spectrum relocation worldwide.	0.851	0.741	0.722	0.000	0.722
EMC Systems Engineering (SEMCIP) FY 2011 Base Plans: Identify and characterize EMI which can debilitate the Combat capability of strike force capability and operational readiness.	0.000	0.000	1.500	0.000	1.500

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605866N: Navy Space & Electr Warfare Supt		PROJECT 0706: EMC & RF Mgmt		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Evaluate effectiveness of proposed EMI solutions and coordinate with Program Managers/Resource Sponsors for procurement of final EMI fix.						
EMP Survivability FY 2009 Accomplishments: Completed initial EMP Survivability Assessment and EMP Hardness Maintenance development in accordance with current OPNAVINST/NAVSEAINST on EMP Survivability. FY 2010 Plans: Prepare EMP Survivability Assessment and EMP Hardness Maintenance Plan. Prepare updates to OPNAVINST/NAVSEAINST on EMP Survivability. Develop modeling capabilities and alternative techniques to reduce hardness validation costs at delivery. FY 2011 Base Plans: Develop and publish EMP Certification process in accordance with Military Standard (MIL-STD)188-125 High-Altitude Electromagnetic Pulse (HEMP) Protection for Ground-Based C41 Facilities. Support Navy and Defense Threat Reduction Agency (DTRA) in the development of a Maritime EMP Standard. This includes conducting a baseline EMP assessment of a Landing Craft Air Cushion (LCAC).		0.935	1.020	1.021	0.000	1.021
Advanced Technology FY 2009 Accomplishments: Completed ititial below decks characterization, investigated predictive application, and developed tools/technologies for spectrum usage. FY 2010 Plans: Continue below decks characterization, investigate predictive application, and develop tools/technologies for spectrum usage.		0.210	0.309	0.115	0.000	0.115

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605866N: Navy Space & Electr Warfare Supt		PROJECT 0706: EMC & RF Mgmt		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: Continue below decks characterization, and publish design guides for PEO/SYSCOM to ensure new systems can be installed with minimal interference.						
DAWDF FY 2009 Accomplishments: Completion of DAWDF requirements.		0.010	0.000	0.000	0.000	0.000
Combat Enabler in Theater OIF & Pre-Deployment OIF FY 2011 Base Plans: N/A FY 2011 OCO Plans: (\$1.900) Combat Enabler in Theater (OCO) OIF: Joint Emitters were a source of debilitating electromagnetic interference to critical USN Air OPS & BMD assets. In response to FY11 OIF requirements, funding will be used to expand USN Afloat/Ashore spectrum management tools to address the critical need for interoperability with the USMC's Spectrum management applications and put into place a Joint Capability for the USN/USMC Warfighter. This USN/USMC integration promotes interoperability with the multi-national deployed forces fighting the OCO and decreases the risk of friendly fire incidents. Increased situational awareness, reduction of interference, and restored mission capability are all expected benefits of the improved processes and procedures. The requested funds will deliver a Joint capability system that allows group planning and execution, information data discovery, data interoperability, and data fusion to USN and USMC forces directly supporting OIF and the OCO. Data tasking and deliverables are classified. (\$3.300) In-Theater and Pre-Deployment: Funding to address impact of upgrades to deploying ships and development of EMI solution for the deploying strike group. As the fleet continues to introduce		0.000	0.000	0.000	5.200	5.200

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605866N: <i>Navy Space & Electr Warfare Supt</i>		PROJECT 0706: <i>EMC & RF Mgmt</i>				
B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
additional variants of combat systems, electromagnetic interference (EMI)(must be addressed. Timely development of EMI solutions restores combat capability lost due to EMI. Funds will support procurement and installation of EMI Solutions within 12 months for strike groups and independent deployers.								
Accomplishments/Planned Programs Subtotals				2.006	2.070	3.358	5.200	8.558
C. Other Program Funding Summary (\$ in Millions) N/A								
D. Acquisition Strategy An acquisition strategy is not required.								
E. Performance Metrics Performance metrics will consist of quarterly program reviews.								

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605866N: <i>Navy Space & Electr Warfare Supt</i>				PROJECT 0739: <i>Navy C2 Top Level</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0739: <i>Navy C2 Top Level</i>	0.680	0.589	0.655	0.000	0.655	0.974	1.005	1.027	1.047	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification This project provides analysis of both Fleet requirements and research and development technology, to develop top-level plans and space systems in the Space and Electronic Warfare (SEW) mission area. The Space and Electronic Warfare Studies and Analysis Program (SEWSAP) supports analyses of Fleet requirements and research and development technology to develop top-level plans for operating Navy Command, Control, Communications, Intelligence, Surveillance and Reconnaissance (C4ISR) and space systems in the SEW mission area.											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Navy C2 Top Level <i>FY 2009 Accomplishments:</i> Initiated and completed studies supporting resource and requirement decisions in the Planning, Programming, and Budgeting Execution (PPBE) System; FORCEnet Fleet experiments; FORCEnet Architecture selection; evaluation of Tactics, Techniques and Procedures (TTP); alignment of Science and Technology (S&T) and Research, Development, Test, and Evaluation (RDT&E) efforts with FORCEnet requirements; evaluation and selection of Modeling and Simulation (M&S) tools and scenarios. SEWSAP (1) applied previously-developed models and analytical methods to identify areas of highest sensitivity in Command, Control, Communications (C3) performance, (2) extend previous architectural work on Naval operational functions and networks to detailed analyses of C3 and network requirements and, (3) extend previous system engineering results to newly emerging implementation issues						0.680	0.589	0.655	0.000	0.655	

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605866N: <i>Navy Space & Electr Warfare Supt</i>		PROJECT 0739: <i>Navy C2 Top Level</i>				
B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2010 Plans:</i> Initiate studies supporting resource and requirement decisions in the PPBE System. Conduct FORCEnet Fleet experiments; FORCEnet Architecture selection; evaluation of TTP and Research, Development, Test, and Evaluation (RDT&E) efforts with FORCEnet requirements. Begin evaluation of M&S tools and scenarios.</p> <p><i>FY 2011 Base Plans:</i> Continue to initiate and complete studies supporting resource and requirement decisions in the PPBE System. Conduct FORCEnet Fleet experiments, FORCEnet Architecture selection, and evaluate TTP and Research, Development, Test, and Evaluation (RDT&E) efforts with FORCEnet requirements. Complete evaluation of M&S tools and scenarios.</p>								
Accomplishments/Planned Programs Subtotals				0.680	0.589	0.655	0.000	0.655
C. Other Program Funding Summary (\$ in Millions)								
N/A								
D. Acquisition Strategy								
An acquisition strategy is not required.								
E. Performance Metrics								
Conduct studies and report plans and analysis of Fleet requirements for operating Navy C4ISR and space systems in the space and electronic warfare mission area.								

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605867N: Space & Elec War Surv/Recon							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	25.221	20.747	19.700	0.000	19.700	20.001	20.405	19.924	19.416	Continuing	Continuing
1034: TAC SAT Recon Office	25.221	20.747	19.700	0.000	19.700	20.001	20.405	19.924	19.416	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Link Crimson program was congressionally chartered in 1977 (updated in 1980) to oversee the tactical use of reconnaissance satellites. The program rapidly develops (1-2 years) prototype systems, sensors, and software that exploit space systems to support tactical Fleet problems. Additionally, Link Crimson focuses on elements of National ISR systems and National-Tactical Integration operations to rapidly fill tactical capability gaps via improved, fused, all-source products at multiple security levels. Link Crimson also supports and participates in fleet exercises, which provide the venue for testing and demonstrating new prototype capabilities and enhancements to existing programs into which R&D efforts transition.

This program supports the operations and installations required for general research and development use. Program baseline funds will address research and development into potential unmanned vehicles, irregular warfare, anti-piracy, strike, information operations, Battlespace and Maritime Domain Awareness (Anti-Submarine Warfare & Anti-Surface Warfare), fusion, visualization, ballistic missile defense (BMD) threats and cross-domain and cyber solutions. Additional information is held at a higher classification.

B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	25.270	20.921	0.000	0.000	0.000
Current President's Budget	25.221	20.747	19.700	0.000	19.700
Total Adjustments	-0.049	-0.174	19.700	0.000	19.700
• Congressional General Reductions		-0.087			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	-0.087			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	-0.049	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Program Adjustments	0.000	0.000	19.700	0.000	19.700

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605867N: Space & Elec War Surv/Recon	
<p><u>Change Summary Explanation</u></p> <p>Technical: Not applicable.</p> <p>Schedule: Not applicable.</p> <p>FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605867N: <i>Space & Elec War Surv/Recon</i>				PROJECT 1034: <i>TAC SAT Recon Office</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
1034: <i>TAC SAT Recon Office</i>	25.221	20.747	19.700	0.000	19.700	20.001	20.405	19.924	19.416	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification <p>The Link Crimson program was congressionally chartered in 1977 (updated in 1980) to oversee the tactical use of reconnaissance satellites. The program rapidly develops (1-2 years) prototype systems, sensors, and software that exploit space systems to support tactical Fleet problems. Additionally, Link Crimson focuses on elements of National ISR systems and National-Tactical Integration operations to rapidly fill tactical capability gaps via improved, fused, all source products at multiple security levels. Link Crimson also supports and participates in fleet exercises, which provide the venue for testing and demonstrating new prototype capabilities and enhancements to existing programs into which research and development efforts transition.</p> <p>This program supports the operations and installations required for general research and development use. Program baseline funds will also address research and development into potential unmanned vehicles, irregular warfare, anti-piracy, strike, information operations, Battlespace and Maritime Domain Awareness (Anti-Submarine Warfare & Anti-Surface Warfare), fusion, visualization, ballistic missile defense (BMD) threats and cross-domain and cyber solutions. Additional information is held at a higher classification.</p> <p>The program exploits all National and Service sensor systems to improve tactical support to fleet operational commanders. Project also supports equipment upgrades, training and Fleet exercises, which provide the venue for testing modifications to existing programs.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
TAC SAT Recon Office						25.221	20.747	19.700	0.000	19.700	
<i>FY 2009 Accomplishments:</i> Joint Exercise/Training Precision Strike/Mission Planning Anti-Submarine Warfare											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605867N: Space & Elec War Surv/Recon		PROJECT 1034: TAC SAT Recon Office		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Improved Info. Management (Dissemination/Exploitation/Fusion/Visualization) Battlespace and Maritime Domain Awareness Support to Mine/Littoral/Expeditionary/Irregular Warfare/Anti-Piracy Information Operations/GWOT and Cyber Ballistic Missile Defense (BMD) FY 2010 Plans: Joint Exercise/Training Precision Strike/Mission Planning Anti-Submarine Warfare Improved Info. Management (Dissemination/Exploitation/Fusion/Visualization) Battlespace and Maritime Domain Awareness Support to Mine/Littoral/Expeditionary/Irregular Warfare/Anti-Piracy Information Operations/GWOT and Cyber Ballistic Missile Defense (BMD) FY 2011 Base Plans: Joint Exercise/Training Precision Strike/Mission Planning Anti-Submarine Warfare Improved Info. Management (Dissemination/Exploitation/Fusion/Visualization) Battlespace and Maritime Domain Awareness Support to Mine/Littoral/Expeditionary/Irregular Warfare/Anti-Piracy Information Operations/GWOT and Cyber Ballistic Missile Defense (BMD)						
Accomplishments/Planned Programs Subtotals		25.221	20.747	19.700	0.000	19.700

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605867N: <i>Space & Elec War Surv/Recon</i>				PROJECT 1034: <i>TAC SAT Recon Office</i>			

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

<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u> <u>Base</u>	<u>FY 2011</u> <u>OCO</u>	<u>FY 2011</u> <u>Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• O&M,N/1C3C: <i>Space Systems & Surveillance</i>	0.230	0.231	0.229	0.000	0.229	0.233	0.237	0.240	0.247	Continuing	Continuing

D. Acquisition Strategy
An acquisition strategy is not required.

E. Performance Metrics
Performance will be evaluated quarterly.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY
1319: *Research, Development, Test & Evaluation, Navy*
BA 6: *RDT&E Management Support*

R-1 ITEM NOMENCLATURE
PE 0605873M: *Marine Corps Program Wide Supt*

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	27.123	19.650	17.721	0.000	17.721	21.836	22.192	22.757	24.647	Continuing	Continuing
0030: <i>Studies & Analysis/MC</i>	6.761	6.504	6.555	0.000	6.555	6.689	6.865	7.021	7.165	Continuing	Continuing
0033: <i>OT&E Support</i>	0.075	3.939	3.681	0.000	3.681	4.000	4.628	4.737	4.838	Continuing	Continuing
2330: <i>Chem Bio Consequence Mgmt</i>	4.007	4.232	3.139	0.000	3.139	6.708	6.068	6.262	7.809	Continuing	Continuing
2930: <i>Phase 0 Activities</i>	10.695	4.178	4.346	0.000	4.346	4.439	4.631	4.737	4.835	Continuing	Continuing
9999: <i>Congressional Adds</i>	5.585	0.797	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	27.295

A. Mission Description and Budget Item Justification

This program element (PE) provides the analytical foundation for the Marine Corps Studies System (MCSS), including mandated Mission Area Analyses and Cost and Operational Effectiveness Analyses. The MCSS is the front end of the Marine Corps' acquisition system.

This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installation required for general research and development use.

B. Program Change Summary (\$ in Millions)

	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>
Previous President's Budget	30.167	19.004	0.000	0.000	0.000
Current President's Budget	27.123	19.650	17.721	0.000	17.721
Total Adjustments	-3.044	0.646	17.721	0.000	17.721
• Congressional General Reductions		-0.082			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	-0.072			
• Congressional Adds		0.800			
• Congressional Directed Transfers		0.000			
• Reprogrammings	-2.511	0.000			
• SBIR/STTR Transfer	-0.533	0.000			
• Program Adjustments	0.000	0.000	17.721	0.000	17.721

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy		DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>	
<u>Congressional Add Details (\$ in Millions, and Includes General Reductions)</u>		FY 2009	FY 2010
Project: 9999: <i>Congressional Adds</i>			
Congressional Add: <i>USMC LOGISTICS ANALYSIS & OPTIMIZATION</i>		2.393	0.000
Congressional Add: <i>Logistics Technology Improvements</i>		1.596	0.000
Congressional Add: <i>Global Supply Chain Management</i>		1.596	0.797
Congressional Add Subtotals for Project: 9999		5.585	0.797
Congressional Add Totals for all Projects		5.585	0.797
<u>Change Summary Explanation</u>			
Technical: Not applicable.			
Schedule: Not applicable.			
FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.			

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>				PROJECT 0030: <i>Studies & Analysis/MC</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0030: <i>Studies & Analysis/MC</i>	6.761	6.504	6.555	0.000	6.555	6.689	6.865	7.021	7.165	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Project funds the general studies and analysis portion of the Marine Corps Studies System (MCSS). Supports studies and analyses approved for execution in the annual Marine Corps Studies System Master Plan (MCSSMP) including mandated Mission Area Analyses (MAAs), Milestone A, and Pre-Milestone A (Conceptual) Analysis of Alternatives (AoAs), technology assessments, force structure analysis, weapons systems analysis, concept development and analysis, logistics analysis, cost benefit analysis, training assessments, feasibility analysis, and scenario development. MCSS supports the Marine Corps Logistics, the Expeditionary Force Development System (EFDS), and the Combat Development Process (CDP). The Mission Area Analyses (MAA) process provides quantitative and qualitative information utilized by decision makers to initiate improvements in operational concepts, doctrine, force structure, education, training, and procurement. Provide analytical documentation and support to decision makers for resolution of current and future issues identified by operating forces. Utilize Marine Corps Research University to conduct studies and analysis projects in basic and applied research and advanced technology development. Provide funds to the Naval Sea Systems Command (NAVSEA) for direct support, technical analyses, and liaison services to assure a sound bridge between the Marine Corps' role in defining Expeditionary Warfare Specialist (EXW)/Seabasing requirements and the SEA 05 role for Future Concepts and Ships Designs for amphibious ships/aircraft, Maritime Prepositioning Force (Future), (MPF (F)), High Speed Connectors, and related systems. Space and Naval Warfare Systems Center (SPAWAR) funded to support Naval Assessment Program to modify and upgrade all DoN war fighting, crisis response and support capabilities and vulnerabilities and provide baseline of future capabilities. Baseline analysis supports Mission Capability Packages (MCPs), Investment Strategy, Joint Capability Areas (JCAs), and the Naval Strategic Plan providing the DoN assessments for future force development.											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Studies & Analysis/MC						6.761	6.504	6.555	0.000	6.555	

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605873M: Marine Corps Program Wide Supt		PROJECT 0030: Studies & Analysis/MC		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: Initiate following efforts: Maritime Prepositioned Forces Maritime Prepositioning Force Future (MPF(F)) Excursion Study: support the FY09 Quadrennial Defense Review (QDR) assess current and future requirements, identify programmatic and warfighting risks and benefits, recommend alternatives/ adjustments to current geographic prepositioning, legacy MPF, and MPF(F) programs of record. Marine Air Ground Task Force (MAGTF) Command and Control (C2) Systems and Emergency Situations Study: analyze training and education on C2 systems and Marine Corps capabilities to provide responding Joint Task Force (JTF) headquarters in emergency situations. Explosive Hazard Capability Study: determine effective way of supporting explosive hazard reduction requirements for mobility operations within the MAGTF identify the most appropriate placement of explosive ordnance disposal (EOD) assets within Marine Corps Forces. Force Mobility Analytical Support (FMAST) III - Follow-on study to FMASTII: capture Marine Corps Type 1 equipment in FMAST vice all vehicles and rolling stock and generate the Measures of Effectiveness (MOE) for various MAGTFs. Combine information gathered in Tasks 1 and 2 Strategic Mobility, aggregate footprint (weight, area, and volume) relative to available strategic lift and Tactical Mobility. Time Domain Analysis for Airspace Command and Control (C2): define Marine Aviation C2 Time Domain (TD) in quantifiable and measurable terms for the following: Real-Time (RT), Near-Real-Time (NRT), and Non-Real-Time (Non-RT), define Marine Aviation C2 Data Fusion (DF) requirements in quantifiable and measurable terms. Future Plans, Policy and Operations(PP&O), Maritime Preposition Shipping (MPS) Load out Study (II Marine Expeditionary Force (MEF) and MAGTF Core Competencies (II MEF) Naval Expeditionary Warfare (NEXW) Assessment: assess amphibious warfare capabilities and proficiency; enabling capabilities to support smaller scale MAGTF operations. Marine Corps Training and Advisory Group(MCTAG) Deployment Analysis Study: examine operational drivers affecting deployments and implications for MCTAG in coordinating, forming, training and equipping conventional advisor and training teams.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605873M: Marine Corps Program Wide Supt		PROJECT 0030: Studies & Analysis/MC		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Anti-Armor Study: identify the overall anti-armor requirements for a Marine Air-Ground Task Force (MAGTF), develop and evaluate weapons systems (force) mixes for the MAGTF, document the range of densities and distributions on current or alternative organizational locations. Marksmanship Instruction: study trends in marksmanship instruction since the Vietnam era comparing other marksmanship instruction in anticipation of the M16/M4 rifle use in the near future. Family of Optics: provide life cycle cost estimates for selected optical equipment (e.g. rifle scopes, night vision equipment) to determine effective requirements emerging from combat in Iraq and Afghanistan. Initiate the high priority studies and analyses projects approved in the FY2009 - FY2010 Marine Corps Studies System Master Plan (MCSSMP).						
FY 2010 Plans: Initiate following efforts: Maritime Prepositioned Forces Maritime Prepositioning Force Future (MPF(F)) Excursion Study: support the FY09 Quadrennial Defense Review (QDR) assess current and future requirements, identify programmatic and warfighting risks and benefits, recommend alternatives/ adjustments to current geographic prepositioning, legacy MPF, and MPF(F) programs of record. Marine Air Ground Task Force (MAGTF) Command and Control (C2) Systems and Emergency Situations Study: analyze training and education on C2 systems and Marine Corps capabilities to provide responding Joint Task Force (JTF) headquarters in emergency situations. Explosive Hazard Capability Study: determine effective way of supporting explosive hazard reduction requirements for mobility operations within the MAGTF identify the most appropriate placement of explosive ordnance disposal (EOD) assets within Marine Corps Forces. Force Mobility Analytical Support (FMAST) III - Follow-on study to FMASTII: capture Marine Corps Type 1 equipment in FMAST vice all vehicles and rolling stock and generate the Measures of Effectiveness (MOE) for various MAGTFs. Combine information gathered in Tasks 1 and 2 Strategic Mobility, aggregate footprint (weight, area, and volume) relative to available strategic lift and Tactical Mobility. Time Domain Analysis for Airspace Command and Control (C2): define Marine Aviation C2 Time Domain (TD) in quantifiable and measurable terms for the following: Real-Time (RT), Near-Real-						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605873M: Marine Corps Program Wide Supt		PROJECT 0030: Studies & Analysis/MC		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Time (NRT), and Non-Real-Time (Non-RT), define Marine Aviation C2 Data Fusion (DF) requirements in quantifiable and measurable terms. Future Plans, Policy and Operations (PP&O), Maritime Preposition Shipping (MPS) Load out Study (II Marine Expeditionary Force (MEF) and MAGTF Core Competencies (II MEF) Naval Expeditionary Warfare (NEXW) Assessment: assess amphibious warfare capabilities and proficiency; enabling capabilities to support smaller scale MAGTF operations. Marine Corps Training and Advisory Group(MCTAG) Deployment Analysis Study: examine operational drivers affecting deployments and implications for MCTAG in coordinating, forming, training and equipping conventional advisor and training teams. Anti-Armor Study: identify the overall anti-armor requirements for a Marine Air-Ground Task Force (MAGTF), develop and evaluate weapons systems (force) mixes for the MAGTF, document the range of densities and distributions on current or alternative organizational locations. Marksmanship Instruction: study trends in marksmanship instruction since the Vietnam era comparing other marksmanship instruction in anticipation of the M16/M4 rifle use in the near future. Family of Optics: provide life cycle cost estimates for selected optical equipment (e.g. rifle scopes, night vision equipment) to determine effective requirements emerging from combat in Iraq and Afghanistan. Initiate the high priority studies and analyses projects approved in the FY2009 - FY2010 Marine Corps Studies System Master Plan (MCSSMP).						
FY 2011 Base Plans: Initiate following efforts: Maritime Prepositioned Forces Maritime Prepositioning Force Future (MPF(F)) Excursion Study: support the FY09 Quadrennial Defense Review (QDR) assess current and future requirements, identify programmatic and warfighting risks and benefits, recommend alternatives/ adjustments to current geographic prepositioning, legacy MPF, and MPF(F) programs of record. Marine Air Ground Task Force (MAGTF) Command and Control (C2) Systems and Emergency Situations Study: analyze training and education on C2 systems and Marine Corps capabilities to provide responding Joint Task Force (JTF) headquarters in emergency situations. Explosive Hazard Capability Study: determine effective way of supporting explosive hazard reduction requirements for						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605873M: Marine Corps Program Wide Supt		PROJECT 0030: Studies & Analysis/MC	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
mobility operations within the MAGTF identify the most appropriate placement of explosive ordnance disposal (EOD) assets within Marine Corps Forces. Force Mobility Analytical Support (FMAST) III - Follow-on study to FMASTII: capture Marine Corps Type 1 equipment in FMAST vice all vehicles and rolling stock and generate the Measures of Effectiveness (MOE) for various MAGTFs. Combine information gathered in Tasks 1 and 2 Strategic Mobility, aggregate footprint (weight, area, and volume) relative to available strategic lift and Tactical Mobility. Time Domain Analysis for Airspace Command and Control (C2): define Marine Aviation C2 Time Domain (TD) in quantifiable and measurable terms for the following: Real-Time (RT), Near-Real-Time (NRT), and Non-Real-Time (Non-RT), define Marine Aviation C2 Data Fusion (DF) requirements in quantifiable and measurable terms. Future Plans, Policy and Operations(PP&O), Maritime Preposition Shipping (MPS) Load out Study (II Marine Expeditionary Force (MEF) and MAGTF Core Competencies (II MEF) Naval Expeditionary Warfare (NEXW) Assessment: assess amphibious warfare capabilities and proficiency; enabling capabilities to support smaller scale MAGTF operations. Marine Corps Training and Advisory Group(MCTAG) Deployment Analysis Study: examine operational drivers affecting deployments and implications for MCTAG in coordinating, forming, training and equipping conventional advisor and training teams. Anti-Armor Study: identify the overall anti-armor requirements for a Marine Air-Ground Task Force (MAGTF), develop and evaluate weapons systems (force) mixes for the MAGTF, document the range of densities and distributions on current or alternative organizational locations. Marksmanship Instruction: study trends in marksmanship instruction since the Vietnam era comparing other marksmanship instruction in anticipation of the M16/M4 rifle use in the near future. Family of Optics: provide life cycle cost estimates for selected optical equipment (e.g. rifle scopes, night vision equipment) to determine effective requirements emerging from combat in Iraq and Afghanistan. Initiate the high priority studies and analyses projects approved in the FY2009 - FY2010 Marine Corps Studies System Master Plan (MCSSMP).					
Accomplishments/Planned Programs Subtotals	6.761	6.504	6.555	0.000	6.555

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010																										
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>			PROJECT 0030: <i>Studies & Analysis/MC</i>																											
<p><u>C. Other Program Funding Summary (\$ in Millions)</u></p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Line Item</u></th> <th style="text-align: right;"><u>FY 2009</u></th> <th style="text-align: right;"><u>FY 2010</u></th> <th style="text-align: right;"><u>FY 2011</u> <u>Base</u></th> <th style="text-align: right;"><u>FY 2011</u> <u>OCO</u></th> <th style="text-align: right;"><u>FY 2011</u> <u>Total</u></th> <th style="text-align: right;"><u>FY 2012</u></th> <th style="text-align: right;"><u>FY 2013</u></th> <th style="text-align: right;"><u>FY 2014</u></th> <th style="text-align: right;"><u>FY 2015</u></th> <th style="text-align: right;"><u>Cost To</u> <u>Complete</u></th> <th style="text-align: right;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td style="padding-left: 20px;">• 0605154N/C0031: <i>Center for Naval Analysis (CNA)</i></td> <td style="text-align: right;">7.423</td> <td style="text-align: right;">7.458</td> <td style="text-align: right;">7.742</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">7.742</td> <td style="text-align: right;">7.903</td> <td style="text-align: right;">8.110</td> <td style="text-align: right;">8.293</td> <td style="text-align: right;">8.463</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">55.392</td> </tr> </tbody> </table> <p><u>D. Acquisition Strategy</u> N/A</p> <p><u>E. Performance Metrics</u> N/A</p>											<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u> <u>Base</u>	<u>FY 2011</u> <u>OCO</u>	<u>FY 2011</u> <u>Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>	• 0605154N/C0031: <i>Center for Naval Analysis (CNA)</i>	7.423	7.458	7.742	0.000	7.742	7.903	8.110	8.293	8.463	0.000	55.392
<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u> <u>Base</u>	<u>FY 2011</u> <u>OCO</u>	<u>FY 2011</u> <u>Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>																							
• 0605154N/C0031: <i>Center for Naval Analysis (CNA)</i>	7.423	7.458	7.742	0.000	7.742	7.903	8.110	8.293	8.463	0.000	55.392																							

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>				PROJECT 0033: <i>OT&E Support</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0033: <i>OT&E Support</i>	0.075	3.939	3.681	0.000	3.681	4.000	4.628	4.737	4.838	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification <p>The Marine Corps Operational Test and Evaluation Activity (MCOTEA) supports the material acquisition process by managing the Marine Corps Operational Test (OT) programs for Acquisition Categories (ACAT) I through ACAT IV (less OT of manned aircraft) and performs other functions that may be directed by the Commandant of the Marine Corps. The primary purpose of Operational Test and Evaluation (OT&E) is to provide information to the Milestone Decision Authority (MDA) regarding the Operational Effectiveness (OE) and Operational Suitability (OS) of the system addressed at a decision point. MCOTEA must ensure that the Marines in the Operating Forces receive the very best possible equipment and support. MCOTEA must also ensure each system proposed for acquisition is tested adequately, evaluated objectively and reported independently. This funding supported salaries of MCOTEA mission employees and physical overhead.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
MCOTEA <i>FY 2009 Accomplishments:</i> OT&E Support <i>FY 2010 Plans:</i> OT&E Support <i>FY 2011 Base Plans:</i> OT&E Support						0.075	3.939	3.681	0.000	3.681	
Accomplishments/Planned Programs Subtotals						0.075	3.939	3.681	0.000	3.681	

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>	PROJECT 0033: <i>OT&E Support</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy N/A		
E. Performance Metrics N/A		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>				PROJECT 2330: <i>Chem Bio Consequence Mgmt</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2330: <i>Chem Bio Consequence Mgmt</i>	4.007	4.232	3.139	0.000	3.139	6.708	6.068	6.262	7.809	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification The Family of Incident Response Systems (FIRS) consists of equipment, systems, and services designed to provide Weapons of Mass Destruction (WMD) incident response forces the capabilities needed to effectively respond to a terrorist attack using Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives (CBRNE). The Family of Incident Response Systems meets the mission requirements for the detection; mass casualty decontamination; force protection; responder inter-agency interoperability; C4I; urban search and rescue; medical and general support requirements needed by these forces to mitigate the effects of a CBRNE terrorist attack. The Family of Incident Response Systems relies primarily on Commercial Off-The-Shelf/Non-Developmental Items (COTS/NDI) equipment and systems that meet the particular mission requirements of Consequence Management (CM). Nuclear, Biological, and Chemical (NBC) systems are adopted if they meet the CM mission requirements. The Family of Incident Response Systems (FIRS) R&D effort allows the program to keep abreast of emerging technologies in the commercial sector and address operational capability gaps that cannot be met by commercial items.											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
*FIRS: Reconnaissance Mission Area.						2.095	1.984	1.435	0.000	1.435	
<i>FY 2009 Accomplishments:</i> 'FIRS: Reconnaissance Mission Area included: 1) began the assessment of Hand-Held Biological Detection Systems 2) continued the transition of a Field Chemical Analytical Tool (GC/MS) 3) continued the testing and evaluation of a portable bio-aerosol sampler 4) completed the evaluation and testing of an arsenic detector 5) continued the development and testing of the Chemical Biological Incident Response Force (CBIRF) Standoff Chemical Agent Detector.											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605873M: Marine Corps Program Wide Supt		PROJECT 2330: Chem Bio Consequence Mgmt		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: 'FIRS: Reconnaissance Mission Area includes: 1) begin the assessment of emerging technologies for Toxic Industrial Chemical detection and identification in conjunction with the Department of Homeland Security and the Technical Support Working Group (TSWG) 2) complete the assessment of Hand-Held Biological Detection Systems 3) continue the transition of a Field Chemical Analytical Tool (GC/MS) 4) complete the testing and evaluation of a portable bio-aerosol sampler 5) continue the development and testing of the Chemical Biological Incident Response Force (CBIRF) Standoff Chemical Agent Detector.						
FY 2011 Base Plans: 'FIRS: Reconnaissance Mission Area includes: 1) complete the assessment of emerging technologies for Toxic Industrial Chemical detection and identification in conjunction with the Department of Homeland Security and the Technical Support Working Group (TSWG) 2) continue the transition of a Field Chemical Analytical Tool (GC/MS) 3) continue the development and testing of the Chemical Biological Incident Response Force (CBIRF) Standoff Chemical Agent Detector.						
*FIRS: Search and Rescue (SAR) Mission Area. FY 2009 Accomplishments: FIRS: Search and Rescue (SAR) Mission Area included 1) began the evaluation of SAR HazMat boots that can be decontaminated 2) continued evaluation of Commercial Off the Shelf (COTS) and emerging SAR tools. FY 2010 Plans: FIRS: Search and Rescue (SAR) Mission Area includes 1) continue the evaluation of SAR HazMat boots that can be decontaminated 2) continue evaluation of Commercial Off the Shelf (COTS) and emerging SAR tools.		0.150	0.300	0.150	0.000	0.150

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605873M: Marine Corps Program Wide Supt		PROJECT 2330: Chem Bio Consequence Mgmt		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FIRS: Search and Rescue (SAR) Mission Area includes 1) begin the assessment of emerging technologies to locate viable casualties through debris of a collapsed building or through standing structures, such as walls and doors 2) complete the evaluation of SAR HazMat boots that can be decontaminated 3) continue evaluation of Commercial Off the Shelf (COTS) and emerging SAR tools.						
*FIRS: Decontamination Mission Area FY 2009 Accomplishments: FIRS: Decontamination Mission Area included 1) completed assessment of the effectiveness of packetized liquid decon solutions in civilian mass casualty events 2)began the development and evaluation of improved mass casualty decon equipment (flash heaters) and procedures. FY 2010 Plans: FIRS: Decontamination Mission Area includes 1) continue the development and evaluation of improved mass casualty decon equipment (flash heaters) and procedures. FY 2011 Base Plans: FIRS: Decontamination Mission Area includes 1) complete the development and evaluation of improved mass casualty decon equipment (flash heaters) and procedures.		0.350	0.300	0.200	0.000	0.200
*FIRS: C4I Mission Area. FY 2009 Accomplishments: FIRS: C4I Mission Area included 1) continued technology assessments 2) continued field user evaluations 3) continued development of prototypes. FY 2010 Plans: FIRS: C4I Mission Area includes 1) continue technology assessments 2) continue field user evaluations 3) continue development of prototypes.		0.150	0.150	0.150	0.000	0.150

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605873M: Marine Corps Program Wide Supt		PROJECT 2330: Chem Bio Consequence Mgmt		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FIRS: C4I Mission Area includes 1) continue technology assessments 2) continue field user evaluations 3) continue development of prototypes.						
*FIRS: Force Protection Mission Area FY 2009 Accomplishments: FIRS: Force Protection Mission Area includes 1) continued the transition of the Improved Level A Protective Ensemble developed in concert with Technical Support Working Group (TSWG) 2) continued the radiation hardness survey and assessment of COTS CM equipment 3) continued the development and validation of an electronic filter matrix from military and commercial filter testing data 4) continued the testing and evaluation of a hydration system in conjunction with the Army 5) began the testing and evaluation of the M-53 mask as a system with Commercial Self Contained Breathing Apparatus and Powered Air Purifying Respirators. FY 2010 Plans: FIRS: Force Protection Mission Area includes 1) continue the transition of the Improved Level A Protective Ensemble developed in concert with Technical Support Working Group (TSWG) 2) continue the radiation hardness survey and assessment of COTS CM equipment 3) continue the development and validation of an electronic filter matrix from military and commercial filter testing data 4) continue the testing and evaluation of a hydration system in conjunction with the Army 5) continue the testing and evaluation of the M-53 mask as a system with Commercial Self Contained Breathing Apparatus and Powered Air Purifying Respirators. FY 2011 Base Plans: FIRS: Force Protection Mission Area includes 1) complete the transition of the Improved Level A Protective Ensemble developed in concert with Technical Support Working Group (TSWG) 2) continue the radiation hardness survey and assessment of COTS CM equipment 3) continue the development and validation of an electronic filter matrix from military and commercial filter testing data 4) complete		0.762	0.698	0.604	0.000	0.604

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605873M: Marine Corps Program Wide Supt		PROJECT 2330: Chem Bio Consequence Mgmt		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
the testing and evaluation of a hydration system in conjunction with the Army 5) continue the testing and evaluation of the M-53 mask as a system with Commercial Self Contained Breathing Apparatus and Powered Air Purifying Respirators.						
*FIRS: Medical Mission Area FY 2009 Accomplishments: FIRS: Medical Mission Area included 1) completed evaluation of patient tracking systems 2) continued the development of a Standoff patient triage tool 3) continued the development and testing of gloves with increased dexterity. FY 2010 Plans: FIRS: Medical Mission Area includes 1) continue development of a Standoff patient triage tool 2) complete the development and testing of gloves with increased dexterity. FY 2011 Base Plans: FIRS: Medical Mission Area includes 1) begin development and decontamination testing of cumulative dose dosimeter 2) complete the development of a Standoff patient triage tool.		0.100	0.300	0.200	0.000	0.200
*FIRS: General Support Mission Area FY 2009 Accomplishments: FIRS: General Support Mission Area included 1) continued the prototyping and testing of modified COTS and Government Off-the-Shelf (GOTS) vehicles for the deployment of incident response equipment (Explosive Ordnance Disposal (EOD), SAR). FY 2010 Plans: FIRS: General Support Mission Area includes 1) continue the prototyping and testing of modified COTS and Government Off-the-Shelf (GOTS) vehicles for the deployment of incident response equipment (Explosive Ordnance Disposal (EOD), SAR).		0.400	0.500	0.400	0.000	0.400

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010							
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>		PROJECT 2330: <i>Chem Bio Consequence Mgmt</i>							
B. Accomplishments/Planned Program (\$ in Millions)											
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total			
<i>FY 2011 Base Plans:</i> FIRS: General Support Mission Area includes 1) continue the prototyping and testing of modified COTS and Government Off-the-Shelf (GOTS) vehicles for the deployment of incident response equipment (Explosive Ordnance Disposal (EOD), SAR).											
Accomplishments/Planned Programs Subtotals				4.007	4.232	3.139	0.000	3.139			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• 652200: <i>Field Medical Equipment</i>	21.980	3.384	3.432	0.000	3.432	3.501	3.586	3.684	3.784	0.000	177.051
D. Acquisition Strategy											
N/A											
E. Performance Metrics											
N/A											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>				PROJECT 2930: <i>Phase 0 Activities</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2930: <i>Phase 0 Activities</i>	10.695	4.178	4.346	0.000	4.346	4.439	4.631	4.737	4.835	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Pre-Phase A Activities include assessments, surveys, and planning activities in support of the requirements generation system to mature, limit, clarify and define requirements before competition for resources in the POM process and transition to acquisition management. This effort will complement the currently funded Marine Corps Systems Command (MCSC) Phase A Activities line to pursue a limited range of items on a priority basis, examining critical issues and alternatives. Examples of activities include but are not limited to (1) development of Operational Mode Summaries, Mission Profiles, Concepts of Employment and Acquisition Objectives, (2) mapping between legacy systems and replacements, (3) examining integration and family of systems architectural issues, (4) performing Doctrine, Organization, Training, Equipment, Support, Facilities (DOTESF) assessments and providing other key support for the Universal Needs Statement (UNS) process, (5) base-lining POM initiatives, (6) planning requirements support of evolutionary acquisition, (7) facilitating user/advocate interaction to better understand what is needed and how it will be used, and (8) supporting the Marine Requirements Oversight Council (MROC)-directed tailoring Authorized Acquisition Objective process. Marine Corps Combat Development Command (MCCDC) averages approximately 62 Urgent Needs Statements (UNS) requests per year addressing new requirements, of which approximately 20% require expedited processing. Quick reaction assessment and planning is likely to support requirements emerging from current real world operations. Clear Facilities, a Command Element (CE) Army Research Laboratory (ARL) item (supported by the Marine Corps Ground Combat Element (GCE)) requiring a continuum of materiel solutions (family of systems) to enable lethal clearing of a broad range of man-made structures in multiple environments/ tactical situations typifies a requirement needing pre-Phase A support. Supporting activities have centered around decomposition of the mission into 460 specific tasks accompanied by development of an operational concept, objectives and key performance parameters, and warfighter prioritization. The end product will be a requirements road map. The end state will be a process and product to guide both POM and acquisition activities. These activities do not overlap/conflict with Mission Area Analysis and Analysis of Alternatives funded within the MCCDC Studies and Analysis (S&A) program, MCSC Phase A Activities, Marine Corps Warfighting Lab (MCWL) warfighting experimentation or Science and Technology (S&T) activities. Pre-phase A Activities allow high priority requirements to move ahead in advance of funding decisions for specific programs, provide a better capability to react to emerging requirements and improve the quality of initiatives brought to the Program Objective Memorandum (POM) process. Through front-end assessment, relatively modest funding can be leveraged into significant cost and schedule savings, bringing needed capabilities to the operating forces sooner and cheaper. Each POM cycle provides examples of initiatives that are unfunded or delayed by an immature requirement or understanding of alternatives. In other cases the initiative is funded but the acquisition cycle stretches out until the requirement is better understood. Pre Phase A facilitates a timely and more efficient process. Phase A Activities consist of a series of interrelated activities in Phase A (previously known as Phase 0) of the acquisition process designed to investigate potential material solutions to validate needs, estimate program costs, support sound business decisions, correct inherent disconnects between the Programming, Planning, Budgeting and Execution (PPBE) cycle, the Combat Development and Acquisition Management

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605873M: Marine Corps Program Wide Supt		PROJECT 2930: Phase 0 Activities		
Systems, and prevent undue delays in pursuing priority requirements. The process supports Commanding General (CG), MCCDC and Commander, Marine Corps Systems Command (COMMARCORSYSCOM) by providing funding to priority programs, thus allowing for the examination of concepts and alternatives to support an orderly transition from requirements to initiatives and initiatives to funded programs. This will permit the POM process to focus on activities of evaluating, prioritizing and integrating rather than defining and resolving raw, immature requirements. Phase A activities literally "jump start" high priority programs of the acquisition process. Furthermore, since 70% of a program's life cycle cost is determined during Phase A, this initiative will put resources to work where the return on investment (payoff) is the greatest. Typical studies conducted Phase A activities include, but are not limited to Market Surveys, Business Case Analysis (BCA), Cost as an Independent Variable (CAIV) analysis, Life Cycle Cost Estimates, Cost Comparison Analysis, Acquisition Strategies, Trade-off Analysis in lieu of an Analysis of Alternatives. To satisfy the emerging requirements, the Deputy Commandant for Combat Development is leading the Marine Expeditionary Force Future Vehicle (MEFFV) effort to conduct Joint Capability Integration and Development System analysis to establish a capabilities framework specifically tailored to assess technologies for transition to the Marine Air Ground Task Force (MAGTF). MEFFV efforts are directed at capability refinement and integration, analysis of multiple concepts, determining technology objectives, and continued development of Initial Capabilities Documents (ICDs) and Capabilities Development Documents supporting 'spin-out' technology transitions. This budget item supports combat development activities supporting the three Marine Requirements Oversight Council (MROC) priorities in compliance with JROC and USD AT&L guidance to participate in a Joint Program with the Army's Future Combat Systems Program.						
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
*Phase A Activities		4.947	4.178	4.346	0.000	4.346
FY 2009 Accomplishments: Phase A Activities - Initiate, assist and complete Phase A activities of high priority programs during their concept refinement and in some cases their technology development phases in the areas of Business Case Analysis, Trade Studies, Economic Analysis, Life Cycle Cost Estimates and Market Research Studies in support of the following efforts: Electronic Records Management, Net Enabled Command Capability, Target Processing, Ground Based Air Defense, Ground Based Operational Surveillance, Optical Systems, Route Reconnaissance and Clearance, Mortar Fire Control and Indirect Fire, Ground Radio and Maintenance and the Squad Immersive Training Environment.						
FY 2010 Plans: Phase A Activities - Initiate, assist and complete Phase A activities of high priority programs during their concept refinement and in some cases their technology development phases in the areas of						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605873M: Marine Corps Program Wide Supt		PROJECT 2930: Phase 0 Activities		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Business Case Analysis, Trade Studies, Economic Analysis, Life Cycle Cost Estimates and Market Research Studies in support of the following efforts: Electronic Records Management, Net Enabled Command Capability, Target Processing, Ground Based Air Defense, Ground Based Operational Surveillance, Optical Systems, Route Reconnaissance and Clearance, Mortar Fire Control and Indirect Fire, Ground Radio and Maintenance and the Squad Immersive Training Environment.						
FY 2011 Base Plans: Phase A Activities - Initiate, assist and complete Phase A activities of high priority programs during their concept refinement and in some cases their technology development phases in the areas of Business Case Analysis, Trade Studies, Economic Analysis, Life Cycle Cost Estimates and Market Research Studies in support of the following efforts: Electronic Records Management, Net Enabled Command Capability, Target Processing, Ground Based Air Defense, Ground Based Operational Surveillance, Optical Systems, Route Reconnaissance and Clearance, Mortar Fire Control and Indirect Fire, Ground Radio and Maintenance and the Squad Immersive Training Environment.						
*Pre-Phase A Activities FY 2009 Accomplishments: Pre-Phase A Activities - Provides for the conduct of high priority Pre-Phase A Activities for Reconnaissance Surveillance Target Acquisition, Joint Tactical Radio System, Assault Breacher Vehicle, Follow-On Shoulder Launcher Weapon System (Analysis of Alternative/Op Mode Summary/ Mission Profile) War Reserve Materiel Requirement Development, Tier II Unmanned Aerial Vehicle (UAV) concept of employment & Initial Capabilities Document, Force Protection concepts and and requirements assessments, establish alternatives for the Joint Light Tactical Vehicle, traceability findings for seabasing capabilities of the future, provide for integration of concepts for the Joint command and control arena, and examine engineering initial capabilities concepts.		3.904	0.000	0.000	0.000	0.000
*Pre-Phase A - Future Combat Vehicle		1.844	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605873M: Marine Corps Program Wide Supt		PROJECT 2930: Phase 0 Activities		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: Pre-Phase A - Future Combat Vehicle - Force Design Trades: Employ the Joint Capability Integration and Development System to derive roles, capability needs and attributes of MAGTF armor units performing in future service and joint operational concepts. Complete Functional Solution Analysis (FSA) and Concept Decision for MAGTF needs potentially addressed by FCS systems, components or Spin Out products. Develop Expeditionary Armored Forces (EAF) mission profiles and operational mode summary. Develop an Operations and Organization documents for FCS Spin Out products potentially meeting MAGTF needs. Conduct an EAF Evaluation Strategy, providing metrics or the needed capabilities. Provide personnel and travel necessary to participate in FCS and Unit of Action IPTs and planning for FCS Spin Out products. Technology Assessments: To support MCCDC JCIDS assessments of Army FCS capabilities. Technology assessments will be conducted to define technology maturity/readiness and issues for potential USMC adoption. Technology assessments, technology development strategy and consideration of technology issues shall be used to evaluate FCS technologies, including Spin Outs, and platforms (combat vehicles, UAVs, Unmanned Ground Vehicles, unattended sensors, and unattended munitions) of interest, based on developing MCCDC Initial Capabilities Documents (ICD) and Capability Development Documents (CDD). This shall include market research to determine alternate sources of technology. In support of MROC directed C4I integration (now called Systems Engineering, Interoperability Architectures and Technology (SIAT)) with FCS, assess architecture commonality, and assess/resolve technology barriers to C4I interoperability/integration (SIAT). Such technology assessment activities shall be coordinated with the Office of Naval Research, including monitoring Functional Naval Capabilities (FNC) developments for component commonality opportunities and participating in joint ONR/FCS technology initiatives. In support of FCS assessment, explore survivability initiatives through service and joint wargames and experiments and initiate risk studies. Systems Integration Plan: Develop the architecture based Systems Engineering Plan to support development and integration in preparation for Systems Development and Demonstration tasks. Establish a database compatible with both the Expeditionary Force Development System for DOTMLPF Integration and the Army's FCS Systems Integration						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>		PROJECT 2930: <i>Phase 0 Activities</i>				
<u>B. Accomplishments/Planned Program (\$ in Millions)</u>								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
methodologies for current and future MAGTF systems design integration. Develop modeling and simulation approach and determine feasibility of FCS components on MAGTF systems. Populate EFDC system integration databases, based on capability options for meeting Expeditionary Maneuver Warfare (EMW) capability needs. Evaluate design excursions. Examine risk mitigation methodologies. Build business technology evaluation plan and strategy for measuring progress. Office and Acquisition Analysis: Fund capabilities, acquisition and technology team documentation development and coordinate successive integration of activities. Administrative support, (Systems Engineering and Technical Assistance (SETA))/contractor support. Project office travel, training and office materials.								
Accomplishments/Planned Programs Subtotals				10.695	4.178	4.346	0.000	4.346
<u>C. Other Program Funding Summary (\$ in Millions)</u> N/A								
<u>D. Acquisition Strategy</u> N/A								
<u>E. Performance Metrics</u> N/A								

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>				PROJECT 9999: <i>Congressional Adds</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	5.585	0.797	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	27.295
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification USMC Logistics Analysis & Optimization; Logistics Technology Improvements; Global Supply Chain Management B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010			
Congressional Add: USMC LOGISTICS ANALYSIS & OPTIMIZATION <i>FY 2009 Accomplishments:</i> C9C46A - USMC Logistics Analysis & Optimization - Design and Prototype of IT enablers, for capabilities enhancement and to test solutions prior to infusing technology or replacing USMC logistics tools.							2.393	0.000			
Congressional Add: Logistics Technology Improvements <i>FY 2009 Accomplishments:</i> C9E06A - Logistics Technology Improvements - funding will be used to update technology that allows for hands free update of inventory files via various automatic identification (AIT) Active Radio Frequency Identification (AFRIF), providing Logistics Command with similar warehousing efforts found commercially.							1.596	0.000			
Congressional Add: Global Supply Chain Management							1.596	0.797			

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>	PROJECT 9999: <i>Congressional Adds</i>
B. Accomplishments/Planned Program (\$ in Millions)		
	FY 2009	FY 2010
<p><i>FY 2009 Accomplishments:</i> C9E07A - Global Supply Chain Management - funding is intended to establish a Center for Advanced Logistics Management in Albany, Georgia to facilitate collaboration and assist in fulfilling the needs of military logistical organizations, providing real world knowledge of managing supply chains and logistics in a highly competitive, global environment.</p> <p><i>FY 2010 Plans:</i> C9E07A - Global Supply Chain Management - funding is intended to establish a Center for Advanced Logistics Management in Albany, Georgia to facilitate collaboration and assist in fulfilling the needs of military logistical organizations, providing real world knowledge of managing supply chains and logistics in a highly competitive, global environment.</p>		
Congressional Adds Subtotals	5.585	0.797
C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy N/A		
E. Performance Metrics N/A		

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0305885N: Tactical Cryptologic Activities							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	1.993	2.454	1.859	0.000	1.859	1.886	1.924	1.967	2.009	Continuing	Continuing
0037: TACT COMBAT OPER SYS	1.993	2.454	1.859	0.000	1.859	1.886	1.924	1.967	2.009	Continuing	Continuing

A. Mission Description and Budget Item Justification

This is a continuing program that will provide advanced technologies and capabilities to current Electronic Warfare / Electronic Intelligence System Programs of Record (POR). Develop concepts of data / information exchange within the Global Information Grid (GIG) as envisioned by Chief of Naval Operations (CNO) and outlined within the FORCEnet concept. To comply with the intent of the GIG, this program will address compression, transmission, decompression, re-compression and long term storage of targeted data / information without degradation. This program will become an enabler for future capabilities such as remote operation of surface, subsurface, and air EW/ELINT open architecture PORs. A holistic approach to data / information format, processing, transmission, and storage will require developments in antenna technology, communications capabilities, operational concepts, and software development.

B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	1.993	2.464	0.000	0.000	0.000
Current President's Budget	1.993	2.454	1.859	0.000	1.859
Total Adjustments	0.000	-0.010	1.859	0.000	1.859
• Congressional General Reductions		-0.010			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Program Adjustments	0.000	0.000	1.859	0.000	1.859

Change Summary Explanation

Technical: Not applicable.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0305885N: <i>Tactical Cryptologic Activities</i>	
Schedule: Not applicable.		
FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0305885N: <i>Tactical Cryptologic Activities</i>				PROJECT 0037: <i>TACT COMBAT OPER SYS</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0037: <i>TACT COMBAT OPER SYS</i>	1.993	2.454	1.859	0.000	1.859	1.886	1.924	1.967	2.009	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification This is a continuing program that will provide advanced technologies and capabilities to current Electronic Warfare/Electronic Intelligence system programs of record (POR). Develop concepts of data/information exchange within the Global Information Grid (GIG) as envisioned by Chief of Naval Operations (CNO) and outlined within the FORCEnet concept. To comply with the intent of the GIG, this program will address compression, transmission, de-compression, re-compression and long term storage of targeted data/information without degradation. This program will become an enabler for future capabilities such as remote operation of surface, subsurface, and air EW/ELINT open architecture PORs. A holistic approach to data/information format, processing, transmission, and storage will require developments in antenna technology, communications capabilities, operational concepts, and software development.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
TACT COMBAT OPER SYS							1.993	2.454	1.859	0.000	1.859
<i>FY 2009 Accomplishments:</i> Develop concepts of data/information exchange within the Global Information Grid (GIG) as envisioned by Chief of Naval Operations (CNO) and outlined within the FORCEnet concept.											
<i>FY 2010 Plans:</i> Develop concepts of data/information exchange within the Global Information Grid (GIG) as envisioned by Chief of Naval Operations (CNO) and outlined within the FORCEnet concept.											
<i>FY 2011 Base Plans:</i> Develop concepts of data/information exchange within the Global Information Grid (GIG) as envisioned by Chief of Naval Operations (CNO) and outlined within the FORCEnet concept.											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0305885N: <i>Tactical Cryptologic Activities</i>		PROJECT 0037: <i>TACT COMBAT OPER SYS</i>	
B. Accomplishments/Planned Program (\$ in Millions)					
				FY 2009	FY 2010
				FY 2011 Base	FY 2011 OCO
				FY 2011 Total	
Accomplishments/Planned Programs Subtotals				1.993	2.454
				1.859	0.000
				1.859	
C. Other Program Funding Summary (\$ in Millions)					
N/A					
D. Acquisition Strategy					
N/A					
E. Performance Metrics					
Provide advanced technologies and capabilities to current Electronic Warfare/Electronic Intelligence System Programs of Record (POR).					

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0804758N: Service Support To JFCOM, JNTC							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	4.983	4.180	4.260	0.000	4.260	4.355	4.453	4.573	4.687	Continuing	Continuing
3152: Service Support to JFCOM/ JNTC	4.983	4.180	4.260	0.000	4.260	4.355	4.453	4.573	4.687	Continuing	Continuing

A. Mission Description and Budget Item Justification

Per the FY 2005 National Defense Authorization Act, Navy JNTC RDT&E is managed by US Fleet Forces Command (USFF) Joint & Sustainment Branch (N71) from P/ E 0804758N. This management reflects the decentralized execution of JNTC RDT&E from JFCOM. Throughout the FYDP, these funds will continue to be managed and executed by USFF N71.

The Navy continues to develop joint training technologies that will play a crucial role in it's ability to address current and future joint operational training requirements. Navy program activities include conducting research, development, test and evaluation and cross-service architecture certification on Navy capable systems, developing architectures and roadmaps to ensure that service instrumentation follows a common standard, and researching and assessing Navy mission rehearsal, Joint Semi-Automated Forces (JSAF), JNTC JLVC FOM Interoperabilities, Remote Interface Control, Virtual Communications Multi-Modal Interface, and Coalition / Inter-Agency integration requirements.

The Navy will further develop capabilities that integrate live, virtual, and constructive elements into a seamless joint training environment. Using a scientific and phased approach, Navy will leverage and research new technologies and methods, based upon focused joint operational training requirements, that provide a crucial technology-based foundation supporting all current and "to be" Navy joint training capabilities. Available commercial-off-the-shelf (COTS) and government-off-the-shelf (GOTS) networked information technologies and collaborative planning tools will be leveraged to provide improved net-centric joint training capability. Navy will lead the collaboration process to identify, collect and validate the requirements in order to design and develop the modeling and simulation capabilities that address the shortfalls in current abilities to support Joint Task training to standards.

The Navy JNTC RDT&E Program efforts directly support the Unified Command Plan (UCP) series and is aligned with the DoD Information Operations (IO) Roadmap.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
1319: Research, Development, Test & Evaluation, Navy		PE 0804758N: Service Support To JFCOM, JNTC			
BA 6: RDT&E Management Support					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	5.134	4.197	0.000	0.000	0.000
Current President's Budget	4.983	4.180	4.260	0.000	4.260
Total Adjustments	-0.151	-0.017	4.260	0.000	4.260
• Congressional General Reductions		-0.017			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-0.151	0.000			
• Program Adjustments	0.000	0.000	4.260	0.000	4.260
Change Summary Explanation					
Technical: Not applicable.					
Schedule: Not applicable.					
FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0804758N: <i>Service Support To JFCOM, JNTC</i>				PROJECT 3152: <i>Service Support to JFCOM/JNTC</i>				
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost	
3152: <i>Service Support to JFCOM/JNTC</i>	4.983	4.180	4.260	0.000	4.260	4.355	4.453	4.573	4.687	Continuing	Continuing	
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0			
A. Mission Description and Budget Item Justification BASE REQUEST: Navy Warfare Development Command (NWDC) provides dedicated Joint Semi-Automated Forces (JSAF) software via development, configuration management, verification and validation and engineering management to ensure that Fleet and Joint requirements are incorporated. NWDC also supports the development of standards in networking, simulation federation, and tactical system interfaces for Fleet Synthetic Training (FST) interoperability to meet training objectives.												
B. Accomplishments/Planned Program (\$ in Millions)												
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total		
JSAF Improvement Program <i>FY 2009 Accomplishments:</i> In FY 2009, the programmed improved AGEIS representation supporting C2BMC in support of Integrated Air & Missile Defense for Terminal Fury '09. Reduced performance limitations in the generation of shipping and surface clutter in support of Fleet Synthetic Training -Joint. Improved the theater ballistic missile model for the short range missiles used authoritative data from the Missile and Space Intelligence Center (MSIC), in support of FST-J and COCOM events. The JNTC/JLVC Navy Training FOM supported JLVC 2.1 acceptance testing; provided integration support for Missile Defense Agency (MDA) and STRATCOM.						2.883	2.400	2.436	0.000	2.436		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0804758N: Service Support To JFCOM, JNTC		PROJECT 3152: Service Support to JFCOM/JNTC	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2010 Plans:</i> Fleet Synthetic Training (FST) utilizes interoperable shore-based and ship-embedded simulation and stimulation systems linked by distributed networks, using JSAF as the core constructive environment. FST capability shortfalls addressed in FY10: BMD integration with live system components, IO; Maritime Interceptions/MDA; IWO, /EW;Emergent Requirements. The JLVC NCTE FOM Development program is the primary means of providing a persistent and interoperable network among the Navy, Joint, and Coalition federation components.</p> <p><i>FY 2011 Base Plans:</i> Navy will further develop capabilities to address ASW improvements, information operations, BLUFOR capability representation including Littoral Combat Ship (LCS), P-8A, Surface Warfare Enterprise Advanced Capability Build (ACB) - 12/14 development and integration and emergent threats. Navy will further address additional Coalition Partner Integration, LCS Shore Based Training Facility (SBTF) integration, Combined Armed Forces (CAF) -Distributed Mission Operations (DMO) integrations and Korean Simulation Battle Center (KSBC) integration.</p>					
JNTC/JLVC Navy Training FOM Support	2.100	1.780	1.824	0.000	1.824
<p><i>FY 2009 Accomplishments:</i> In FY 2009, the programmed improved AGEIS representation supporting C2BMC in support of Integrated Air & Missile Defense for Terminal Fury '09. Reduced performance limitations in the generation of shipping and surface clutter in support of Fleet Synthetic Training -Joint. Improved the theater ballistic missile model for the short range missiles used authoritative data from the Missile and Space Intelligence Center (MSIC), in support of FST-J and COCOM events. The JNTC/JLVC Navy Training FOM supported JLVC 2.1 acceptance testing; provided integration support for Missile Defense Agency (MDA) and STRATCOM.</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0804758N: <i>Service Support To JFCOM, JNTC</i>		PROJECT 3152: <i>Service Support to JFCOM/JNTC</i>				
B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2010 Plans:</i> Fleet Synthetic Training (FST) utilizes interoperable shore-based and ship-embedded simulation and stimulation systems linked by distributed networks, using JSAF as the core constructive environment. FST capability shortfalls addressed in FY10: BMD integration with live system components, IO; Maritime Interceptions/MDA; IWO, /EW; Emergent Requirements. The JLVC NCTE FOM Development program is the primary means of providing a persistent and interoperable network among the Navy, Joint, and Coalition federation</p> <p><i>FY 2011 Base Plans:</i> Navy will further develop capabilities to address ASW improvements, information operations, BLUFOR capability representation including Littoral Combat Ship (LCS), P-8A, Surface Warfare Enterprise Advanced Capability Build (ACB) - 12/14 development and integration and emergent threats. Navy will further address additional Coalition Partner Integration, LCS Shore Based Training Facility (SBTF) integration, Combined Armed Forces (CAF) -Distributed Mission Operations (DMO) integrations and Korean Simulation Battle Center (KSBC) integration.</p>								
Accomplishments/Planned Programs Subtotals				4.983	4.180	4.260	0.000	4.260
C. Other Program Funding Summary (\$ in Millions)								
N/A								
D. Acquisition Strategy								
N/A								
E. Performance Metrics								
1) Navy Warfare Development Command (NWDC) will produce one JSAF software release to include documentation; will design and implement upgrades to JSAF consistent with approved requirements and CRs and document the effects of JSAF capabilities (robustness) and stability. Will design, implement, test, and integrate JSAF enhancements in accordance with requirements.								

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0804758N: <i>Service Support To JFCOM, JNTC</i>	PROJECT 3152: <i>Service Support to JFCOM/JNTC</i>
<p>2) NWDC will produce one Navy Training FOM (NTF) release to include applicable documentation updates for the Guidance, Rational, and Interoperability Manual (GRIM) and Federation Agreement document (FAD). Will implement JSAF capability enhancements to support evolving joint and Coalition training requirements.</p> <p>3) Facilitate integration by providing dedicated support to the effort, improving the quality of participation and documentation of Navy efforts in the JNTC. Refine and mature the Navy Training Federation Object Model (NTF), it is improving interoperability and integration with other services and the Joint community. Provides a standardized Federation Object Model (FOM) for integration across the Navy training simulations.</p> <p>4) The multi-tiered technology approach currently implemented in Joint distributed exercises presents challenges to asset control and monitoring. collective system control is sparse at best. Emerging research in the area of global control architectures and mechanisms is advancing the state of the art in communication network/system control. A current advanced research initiative, Remote Interface Control (RIC), has established an architecture capable of controlling the five layers of the communications network infrastructure that must be addressed as Joint and multi-national events continue to expand: (1) live and virtual radio control, (2) Internet Protocol network control, (3) security administration and control, (4) system health, and (5) support services.</p> <p>5) Current Joint Live-Virtual-Constructive (JLVC) and other federation simulation distribution is accomplished by tying simulation data to multicast groups. This is neither a scalable solution nor is it an effective one as federates are not able to publish and subscribe with fine enough precision. The Simulation Aware Software Router will address this shortcoming, and additionally provide a flexible solution for federating heterogeneous networks and on-the-wire protocols without forcing all federates onto a single, uniform, lowest common denominator solution for each training event. Ultimately, a simulation aware router will allow simulation users to optimize the network for both simulation scalable traffic and for voice and Command, Control, Communications, (Computers), Intelligence (C4I) traffic.</p> <p>6) Naval aviation training components will require the ability to transport multi-modal (e.g. secure, non-secure, coalition, etc.) voice communication simultaneously on the Navy Continuous Training Environment (NCTE) and other networks during Joint fleet exercises. As the Navy Aviation Simulation Master Plan (NASMP) integrates within the NCTE and other Joint training environments, multi-modal virtual communication technology is required for Naval aviation components to participate in multi-national, multi-service, and fleet coalition training events.</p>		

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