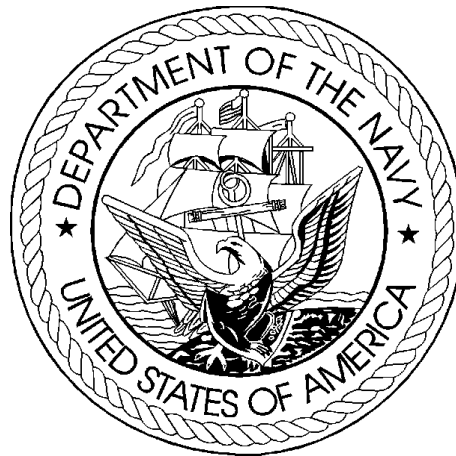


DEPARTMENT OF THE NAVY
FISCAL YEAR (FY) 2004/2005
BIENNIAL BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES
FEBRUARY 2003

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

UNCLASSIFIED

Department of the Navy

FY 2004/2005 R D T E Program

Exhibit R-1

APPROPRIATION: 1319n Research, Development, Test, and Evaluation, Navy

DATE: February 2003

LINE NO	PROGRAM ELEMENT NUMBER	ITEM NOMENCLATURE	Thousands of Dollars					S E C
			BA	FY 2002	FY 2003	FY 2004	FY 2005	
146	0604256N	Threat Simulator Development	06	29.811	29.891	28.004	29.185	U
147	0604258N	Target Systems Development	06	48.935	45.618	37.638	39.571	U
148	0604759N	Major T&E Investment	06	40.674	41.473	43.908	45.737	U
149	0605152N	Studies and Analysis Support - Navy	06	7.422	5.930	4.431	4.166	U
150	0605154N	Center for Naval Analyses	06	45.324	42.170	40.726	42.175	U
151	0605155N	Fleet Tactical Development	06	2.746	2.707	2.006	2.348	U
152	0605502N	Small Business Innovative Research	06	180.118	0.000	0.000	0.000	U
153	0605804N	Technical Information Services	06	10.127	18.320	0.726	0.799	U
154	0605853N	Management, Technical & International Suppor	06	28.467	50.698	30.236	29.712	U
155	0605856N	Strategic Technical Support	06	2.275	2.285	3.883	3.904	U
156	0605861N	RDT&E Science and Technology Management	06	57.486	55.737	64.885	58.533	U
157	0605862N	RDT&E Instrumentation Modernization	06	11.439	13.221	13.554	14.268	U
158	0605863N	RDT&E Ship and Aircraft Support	06	70.956	69.867	78.648	88.912	U
159	0605864N	Test and Evaluation Support	06	274.223	272.417	258.471	260.082	U
160	0605865N	Operational Test and Evaluation Capability	06	11.473	11.555	12.094	13.027	U
161	0605866N	Navy Space and Electronic Warfare (SEW) Suppo	06	7.200	3.154	3.187	3.279	U
162	0605867N	SEW Surveillance/Reconnaissance Support	06	16.254	11.836	12.091	12.569	U
163	0605873M	MARINE CORPS PROGRAM WIDE SUPPORT	06	20.023	27.476	16.635	19.766	U
164	0909999N	Financing for Cancelled Account Adjustments	06	12.855	0.000	0.000	0.000	U
TOTAL	RDTE Management Support			877.808	704.355	651.123	668.033	

**Fiscal Year 2004/2005 Budget Estimates
Budget Appendix Extract Language**

**RESEARCH, DEVELOPMENT, TEST & EVALUATION, NAVY
(RDTEN)**

For expenses necessary for basic and applied scientific research, development, test and evaluation, including maintenance, rehabilitation, lease, and operation of facilities and equipment, [\$13,946,085,000] \$14,106,653,000, to remain available for obligation until September 30, [2004] 2005: *Provided*, That funds appropriated in this paragraph which are available for the V-22 may be used to meet unique operational requirements of the Special Operations Forces: *Provided further*, That funds appropriated in this paragraph shall be available for the Cobra Judy program. (10 U.S.C. 174, 2352-54, 7522; Department of Defense Appropriations Act, 2003.)

EXHIBIT R-2, RDT&E Budget Item Justification	DATE: February 2003
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APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6					R-1 ITEM NOMENCLATURE 0604256N, Threat Simulator Development			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	29.811	29.891	28.004	29.185	29.678	30.153	30.682	31.215
E0602 Electronic Warfare Environment SIM (ECHO)	15.112	15.993	14.155	14.637	14.891	15.127	15.415	15.697
R0672 Effectiveness of Navy E.W. Systems (ENEWS)	13.203	13.898	13.849	14.548	14.787	15.026	15.267	15.518
C9132 Battle Effect Simulator	1.496							

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-Services EW systems and defensive tactics. These projects develop former Soviet and Free-World Anti-Air and Anti-Ship weapon systems simulators in accordance with the Services requirements.

The E0602 Project, EW Environment Simulation (ECHO) provides airborne system component level Test and Evaluation (T&E) at the Electronic Combat Simulation and Evaluation Laboratory (ECSEL), Naval Air Warfare Center Weapons Division (NAWCWD), Point Mugu, CA. ECHO also provides a secure anechoic closed loop T&E facility for fully integrated, aircraft-installed systems testing at the EW Integrated Systems Test Laboratory (EWISTL) at the Naval Air Warfare Center Aircraft Division (NAWCAD), Patuxent River, MD. Included in this Project is the T&E of airborne systems and tactics in flight, against the open air range at the Electronic Combat Range (ECR) complex located at the NAWCWD, China Lake, CA.

The R0672 Project (formally E0672), Effectiveness of Navy EW Systems (ENEWS), is a Department of the Navy (DON) unique project that supports Test and Evaluation of Ships EW efforts. ENEWS provides T&E for surface and subsurface shipboard systems and tactics in digitally modeled battle scenarios at the component, fully integrated single ship, multi-ship and full-up multi-platform battle group levels. ENEWS also provides a secure anechoic closed loop T&E facility specifically designed to test shipboard systems at the stand alone subsystem or fully integrated systems level. The last and largest portion of this project addresses the flyable Infrared and Radio Frequency simulators flown on specially configured NP-3D aircraft to provide at-sea open air T&E for systems and tactics. All ENEWS assets are developed, operated and maintained by the Naval Research Laboratory (NRL), Washington, DC.

C9132 Project, Battle Effects Simulator, this project supports the Omega 36 Battle Effects Simulator Device. This is potentially a direct replacement for the M-21 pyrotechnic device along with the Hoffman Firing Device and Armored Target Kills Simulator Device.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0604256N, Threat Simulator Development			PROJECT NUMBER AND NAME E0602, ECHO				
COST (\$ in Millions)		FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		15.112	15.993	14.155	14.637	14.891	15.127	15.415	15.697
RDT&E Articles Qty		Not Applicable							

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: 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.

The EW Environment Simulation (ECHO) project is unique in that 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.

This project directly supports the Test and Evaluation resource requirements for all Naval Air Electronic Warfare (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 Suite (IDECM) ALQ-214, AAR-47 (v) 2 and the AAR-47 (v) 3, AVR -2, Advanced 6" Expendable, Advanced Strategic Tactical Expendable (ASTE), ALQ-144A, Directed Infrared Countermeasures (DIRCM), EA-6B Improved Capability Program (ICAP III), LR700 and the Low Band Transmitter (LBT). This program also supports Joint Service EW systems with initial operational capability in the mid to late 2000's.

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.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME PE0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME E0602, ECHO

B. Accomplishments/Planned Program

InfraRed/Ultra Violet (IR/UV) Mobile Stimulator	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	1.015	0.900		
RDT&E Articles Quantity				

FY2002 - Initiated Infrared/Ultraviolet (IR/UV) Mobile Stimulator. Conducted market survey and perform field tests to down select source. Initiated procurement action for commercial off the shelf equipment.
 FY2003 - Complete Infrared/Ultraviolet (IR/UV) Mobile Stimulator. Procure additional hardware, install and test.

Ground Based IR Stimulator	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	1.150	0.800	1.975	
RDT&E Articles Quantity				

FY2002 - Initiated Ground Based IR Stimulator. Conducted preliminary analysis and design trade-off studies. Developed specifications and designs. Developed and test prototype system.
 FY2003 - Continue Ground Based IR Stimulator. Finalize design and begin fabrication of field units.
 FY2004 - Complete Ground Based IR Stimulator. Complete fabrication. Integrate into the Range and perform initial operational capabilities (IOC) testing.

IR Target Array	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	2.379	3.081		
RDT&E Articles Quantity				

FY2002 - Continued IR Target Array. Completed prototype development and testing. Performed fabrication of field units.
 FY2003 - Complete IR Target Array. Complete fabrication. Integrate into the Range and perform IOC testing.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2003
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME PE0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME E0602, ECHO
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B. Accomplishments/Planned Program

Advanced Man Portable Air Defense Systems	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.380	0.597	0.750	0.750
RDT&E Articles Quantity				

FY2002 - Initiated Advanced Man Portable Air Defense Systems. Procured additional manpad seekers, install and test at the Navy open air range.
 FY2003 - FY2005 - Continue Advanced Man Portable Air Defense Systems. Procure additional manpad seekers, install and test at the Navy open air range.

Advanced Multiple-Emitter Simulator Direction Finding	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.722			
RDT&E Articles Quantity				

FY2002 - Completed Advanced Multiple-Emitter Simulator Direction Finding Modification. Completed fabrication, installation and test of hardware.

Radar Signal Density Environment (RSDE) Mobile	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.250			
RDT&E Articles Quantity				

FY2002 - Completed Radar Signal Density Environment (RSDE) Mobile. Completed hardware fabrication and final integration. Performed initial operational capabilities testing at Navy open air range.

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME PE0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME E0602, ECHO

B. Accomplishments/Planned Program

Hybrid Laboratory Simulator (HLS) MOBCAP	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	1.000			
RDT&E Articles Quantity				

FY2002 - Completed Hybrid Laboratory Simulator (HLS) MOBCAP Upgrades. Conducted final factory acceptance testing. Installed and test at Navy laboratories.

1V1 IR Alert/Response System	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	2.809	0.263		
RDT&E Articles Quantity				

FY2002 - Initiated 1V1 IR Alert/Response System. Conducted trade-off analysis and design studies. Developed hardware and software subsystems, and system architecture.
 FY2003 - Completed 1V1 IR Alert/Response System. Complete development efforts, integrate and test at Navy open air range.

1V2 IR Alert/Response System	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.410	2.655	0.450	
RDT&E Articles Quantity				

FY2002 - Initiated 1V2 IR Alert/Response System. Developed interface specifications for connection to 1V1 System.
 FY2003 - Continue 1V2 IR Alert/Response System. Develop hardware and software subsystems. Install and interface to 1V1 subsystems.
 FY2004 - Complete 1V2 IR Alert/Response System. Complete installation of hardware and software. Conduct initial operational capabilities testing at the Navy open air range.

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME PE0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME E0602, ECHO

B. Accomplishments/Planned Program

SIMVAL	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.100	0.121	0.100	0.100
RDT&E Articles Quantity				

Continue SIMEVAL (Simulator Evaluation). Conduct and evaluate measurements and document results to provide customers with confidence in simulator performance.

Radar and Weapon Simulator	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.457	0.542	0.525	0.525
RDT&E Articles Quantity				

Continue Radar and Weapon Simulator Updates. Perform intelligence based updates to threat radar and weapon system simulators.

Missile/Gun	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.552	0.872	0.450	0.450
RDT&E Articles Quantity				

Continue Missile and Gun System Simulator Updates. Perform intelligence based updates to threat missile and gun system software flyout models.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME PE0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME E0602, ECHO

B. Accomplishments/Planned Program

Reprogrammable Early Warning Acquisition Radar	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.325	0.525	
RDT&E Articles Quantity				

FY2003 - Initiate Reprogrammable Early Warning (EW) Acquisition (ACQ) Radar. Design and begin fabrication of new capability for laboratory EW/ACQ Threat Radar System.
 FY2004 - Complete Reprogrammable Early Warning (EW) Acquisition (ACQ) Radar. Complete fabrication and perform IOC testing of laboratory EW/ACQ Threat Radar System.

Real/Time Electronic Combat Range	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.223		
RDT&E Articles Quantity				

FY2003 - Initiate and complete Real/Time Electronic Combat Range - Electronic Combat Simulation and Evaluation Laboratory (R/T ECR-ECSEL) Link. Design, install and test realtime link between Navy hardware-in-the-loop (HITL) and open-air-range (OAR).

1VM RF Alert/Response	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		1.687	2.692	2.800
RDT&E Articles Quantity				

FY2003 - Initiate 1 vs M RF Alert Response. Develop design and interface specifications. Begin prototype hardware and software development.
 FY2004 - Continue 1 vs M RF Alert Response. Continue hardware and software development.
 FY2005 - Continue 1 vs M RF Alert Response. Continue hardware and software development. Begin installation and interface with 1V1 and 1V2 systems.

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME PE0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME E0602, ECHO

B. Accomplishments/Planned Program

Validation	FY 02	FY 03	FY 04	FY 05
Accomplishments/Efforts/Subtotal Cost	0.400	0.400	0.400	0.400
RDT&E Articles Quantity				

Continue Validation. Generate Validation Reports using Simulator Evaluation (SIMEVAL) results and forward for Director Test and Evaluation (DOT&E) approval.

ECHO Technical & Engineering support	FY 02	FY 03	FY 04	FY 05
Accomplishments/Efforts/Subtotal Cost	3.488	3.527	2.765	2.674
RDT&E Articles Quantity				

Continue ECHO Technical & Engineering support. Provide Program Management, Systems Engineering and Requirements support at all three Navy Electronic Warfare Test and Evaluation (EWT&E) facilities.

Advanced Multiple-Emitter Simulator Advanced Modu	FY 02	FY 03	FY 04	FY 05
Accomplishments/Efforts/Subtotal Cost			0.750	0.925
RDT&E Articles Quantity				

FY2004 - Initiate Advanced Multiple-Emitter Simulator Advanced Modulation. Develop design and interface specifications and begin hardware and software development.
 FY2005 - Complete Advanced Multiple-Emitter Simulator Advanced Modulation. Complete development, install and perform initial operational capabilities testing at the Navy laboratory facilities.

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME PE0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME E0602, ECHO

B. Accomplishments/Planned Program

MVM RF Alert/Response	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost			2.773	2.073
RDT&E Articles Quantity				

FY2004 - Initiate M vs M Radio Frequency (RF) Alert/Response. Develop design and interface specifications. Begin prototype hardware and software development.
 FY2005 - Continue M vs M RF Alert/Response. Continue hardware and software development.

RF/IR Air Intercept Environment Evaluation System	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				3.340
RDT&E Articles Quantity				

FY2005 - Initiate RF/Infrared (IR) Air Intercept Environment Evaluation System. Perform design trade-off analysis, develop specifications and begin hardware and software development.

Advanced Threat Simulator	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				0.600
RDT&E Articles Quantity				

FY2005 - Initiate Advanced Threat Simulator. Conduct design trade-off analysis and begin hardware and software development.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME PE 06042256N, Threat Simulator Development	PROJECT NUMBER AND NAME E0602, ECHO

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget:	16.276	16.372	14.733	15.215
Current BES/President's Budget	15.112	15.993	14.155	14.637
Total Adjustments	-1.164	-0.379	-0.578	-0.578

Summary of Adjustments

Congressional program reductions				
Congressional undistributed reductions		-0.096		
Congressional rescissions	-0.039			
SBIR/STTR Transfer	-0.488			
Economic Assumptions	-0.042	-0.283	-0.368	-0.393
Reprogrammings	-0.595			
Other program adjustments			-0.210	-0.185
Congressional increases				
Subtotal	-1.164	-0.379	-0.578	-0.578

Schedule:

Schedule changes from President's budget are a direct result of the funding changes identified above.

The FY2002 decrease resulted in a 3 month slip in the prototype development effort for the IR Target Array project (from 4th QTR FY02 to 1st QTR FY03) and a delay of 1 year in the procurement of additional seeker assets for Advanced ManPads (from FY02 to FY03) .

The FY2003 decrease resulted in a delay of 1 year in the procurement of additional seeker assets for Advanced ManPads (from FY03 to FY04)

The FY2004 decrease resulted in a 1 year delay in fielding the Reprogrammable SAMs/AIs (from 4th QTR FY07 to 4th QTR FY08)

The FY2005 decrease resulted in a 1 year delay in fielding the Reprogrammable SAMs/AIs (from 4th QTR FY07 to 4th QTR FY08)

Technical: Not Applicable.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME PE 0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME E0602, ECHO
<p>D. OTHER PROGRAM FUNDING SUMMARY: Not Applicable</p> <p>E. ACQUISITION STRATEGY: Not Applicable</p>		

R-1 SHOPPING LIST - Item No. 146

UNCLASSIFIED

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CLASSIFICATION:									
EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2003			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME			
RDT&E, N / BA-6		0604256N, Threat Simulator Development				R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)			
COST (\$ in Millions)		FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		13.203	13.898	13.849	14.548	14.787	15.026	15.267	15.518
RDT&E Articles Qty									
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <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 (NAVSEA), Operational Test and Evaluation Force (OPTEVFOR), Special Operations and other EW Research Development Test and Evaluation (RDT&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. Builder, an ENEWS digital modeling tool that was developed and is maintained to support surface EW Test and Evaluation (T&E) has migrated outside the T&E arena and is being used by special forces and carrier battle groups as a mission planning tool. Simulation Display (SIMDIS) is another ENEWS modeling tool that was developed to support T&E and 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 (ASCM) systems. The ENEWS Project is unique in that it is the only project within the Department of Defense (DOD) dedicated to developing and providing realistic ASCM 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 (OSD) 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), Operations Test and Evaluation (OT&E) and Follow-on Operations 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 (RAIDS), all MK245 Giant tests, advanced Infrared (IR) decoys, decoy placement (Littoral), ship IR signature and Radar Cross Section (RCS) measurement of DDG-51, LPD-17, DD-21 and PC class ships, High Power Microwave (HPM) program, and other ship self-defense initiatives, including test and evaluation of Future Naval Capability (FNC) process. In addition, ENEWS assets are regularly employed to test the effectiveness of North Atlantic Treaty Organization (NATO) ships' EW systems in joint allied exercises.</p>									

R-1 SHOPPING LIST - Item No. 146

UNCLASSIFIED

Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 12 of 21)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)

(U) B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Simulator Hardware Upgrades	1.040	0.947	0.896	0.995
RDT&E Articles Quantity				

Provides simulator upgrades to the both ENEWS flyable and shore based Infrared (IR) and Radio Frequency (RF) simulators. This task includes upgrades to the ALQ-170 Multi-Threat simulator.

	FY 02	FY 03	FY 04	FY 05
Simulator Software Upgrades	0.975	0.700	0.705	0.786
RDT&E Articles Quantity				

Provides software upgrades to existing ENEWS flyable and shore based simulations required due to either hardware upgrade of the computer or new intelligence information. This task includes upgrades to the ALQ-170 Multi-Threat and VICTOR simulators.

	FY 02	FY 03	FY 04	FY 05
Simulator Characterization	0.100	0.200	0.145	0.147
RDT&E Articles Quantity				

Provides characterization of IR and RF simulators as part of the periodic checks on simulator performance and to collect performance data to be used in validation reports. This includes the characterization of six simulators annually.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)

(U) B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Simulator Maintenance	1.078	1.070	1.009	1.073
RDT&E Articles Quantity				

Provides required simulator maintenance to ensure that the hardware simulators are available for customer testing. Preventative maintenance, troubleshooting and repairs are performed as required. This includes annual maintenance on 21 simulators.

	FY 02	FY 03	FY 04	FY 05
Intelligence Upgrades	0.000	0.000	0.000	0.100
RDT&E Articles Quantity				

Provides for the analysis of new anti-ship capable missile (ASCM) characteristics, impacts and identification of countermeasure solutions.

	FY 02	FY 03	FY 04	FY 05
Simulator Control Panels	0.300	0.300	0.295	0.302
RDT&E Articles Quantity				

Supports the development and maintenance of all simulator control panels, including IR FOXTROT, IR VICTOR, NOVEMBER II, and MEIR simulator control panels.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)

(U) B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Laboratory Facilities	1.070	1.110	1.000	1.190
RDT&E Articles Quantity				

Provides maintenance and upgrades to the indoor (laboratory) and outdoor land-based facilities required to perform testing of surface electronic warfare systems.

	FY 02	FY 03	FY 04	FY 05
Simulation Threat Repository	0.045	0.029	0.010	0.010
RDT&E Articles Quantity				

Provides management and access control of the classified document collection and simulations.

	FY 02	FY 03	FY 04	FY 05
Simulation Instrumentation	0.678	0.426	0.455	0.495
RDT&E Articles Quantity				

Provides for the development, procurement, repair and maintenance of digital data collection and analysis systems.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)

(U) B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Simulation Validation	0.543	0.575	0.530	0.565
RDT&E Articles Quantity				

Provides for the validation of hardware and software simulators and digital models. Product is reports that contain detailed descriptions of the threat simulators or digital models and the threat missile seekers. Simulator parameters are compared to actual threat parameters and differences are documented in the Validation Reports. Develop an average of four reports a year.

	FY 02	FY 03	FY 04	FY 05
Electronic Attack/Electronic Support Simulations	0.754	0.594	0.523	0.550
RDT&E Articles Quantity				

Provides improvements and intelligence upgrades to ASCM Digital Models to include fly-out models, NULKA and other off-board decoys including chaff models. Also, supports maintenance of the Threat Database to provide threat intelligence for the development of Test and Evaluation digital scenarios.

	FY 02	FY 03	FY 04	FY 05
Program Management	0.520	0.547	0.581	0.635
RDT&E Articles Quantity				

Provides technical management functions in support of the ENEWS project; engineering and technical support required for the overall efforts of ASCM Simulator and Digital Models development to meet DT/OT testing requirements, development of detailed test resource requirements and providing an interface between N-912, ONR and other ENEWS oversight activities. Also provides technical leadership to the Navy Surface Anti-Ship Cruise Missile Threat Simulator Validation Working Group (SVWG).

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)		
(U) B. Accomplishments/Planned Program				
	FY 02	FY 03	FY 04	FY 05
Classified Program	6.100	7.400	7.700	7.700
RDT&E Articles Quantity				
Classified Program				

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2003
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)
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(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget:	13.568	14.227	14.362	14.973
Current BES/President's Budget	13.203	13.898	13.849	14.548
Total Adjustments	-0.365	-0.329	-0.513	-0.425

Summary of Adjustments

Congressional reductions	-0.032			
SBIR/STTR Transfer	-0.055			
Miscellaneous adjustments		-0.083	-0.053	-0.063
Reprogrammings	-0.241			
Inflation Savings		-0.166	-0.140	-0.047
Nonpay Purchase Inflation			-0.245	
Nonpay Inflation			-0.075	
FY05/09 Inflation				-0.315
Economic Assumptions	-0.037	-0.080		
Subtotal	-0.365	-0.329	-0.513	-0.425

(U) Schedule:

Not Applicable

(U) Technical:

Not Applicable

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0604256N, Threat Simulator Development			PROJECT NUMBER AND NAME R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)					
(U) D. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Complete</u>	<u>Total Cost</u>
NONE										
(U) E. ACQUISITION STRATEGY: *										
N/A										

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0604256N, Threat Simulator Development			R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
HDW/SW Dev, Sys Eng/Integ	WX	NRL, Washington, DC	184.664	13.898	10/02	13.849	10/03	14.548	10/04	Continuing	Continuing	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Product Development			184.664	13.898		13.849		14.548		Continuing	Continuing	
Remarks:												
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												

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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6					R-1 ITEM NOMENCLATURE 0604256N, Threat Simulator Development			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	1.496							
C9132 Battle Effect Simulator	1.496							
<p>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Titan Dynamic Systems, Inc of Marshall, TX manufactures the Omega 36 Battle Effects Simulator Device. This is potentially a direct replacement for the M-21 .</p>								

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 21 of 21)

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6					R-1 ITEM NOMENCLATURE 0604258N TARGET SYSTEMS DEVELOPMENT (TSD)			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	48.935	45.618	37.638	39.571	44.372	45.828	46.681	47.533
20612 Surface Targets Development	1.103	1.112	0.864	0.968	0.992	1.193	1.216	1.239
K3045 Terrier/SSST	0.000	2.914	2.908	0.000	0.000	0.000	0.000	0.000
A0609 Aerial Target Systems Development	36.774	29.772	22.189	23.417	14.177	14.458	14.730	15.001
A0610 Wpn Sys T&E Development/Procurement	11.058	11.820	11.677	15.186	29.203	30.177	30.735	31.293

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This program element funds the development and procurement of aerial and surface targets, and associated Target Augmentation and Auxiliary Systems (TA/AS) necessary to duplicate or simulate threat characteristics. This requirement is necessary to support weapons systems test and evaluation and fleet training. This program element includes the development of: Subsonic Subscale Aerial Target (SSAT), various TA/AS, Target Threat Characterization (TTC), Supersonic Sea Skimming Target (SSST), Navy Full Scale Aerial Target (FSAT) for conversions, the FSAT Follow-On (FO), surface targets for test and evaluation, surface towed targets, improved target control system, and an anti-radiation missile target. This program element also includes Vandal Extended Range testing and procurement of TA/AS Vector Scoring.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0604258N/Target Systems Development			PROJECT NUMBER AND NAME 20612/Surface Targets Development			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	1.103	1.112	0.864	0.968	0.992	1.193	1.216	1.239
RDT&E Articles Qty	1	1	1	1	1	1	1	1

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project develops seaborne targets systems and their related target augmentation systems in support of air-to-surface and surface-to-surface weapons test and evaluation and fleet training.

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N/Target Systems Development	PROJECT NUMBER AND NAME 20612/Surface Targets Development		
B. Accomplishments/Planned Program				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.866	0.645	0.192	0.202
RDT&E Articles Quantity				
<ul style="list-style-type: none"> -Continued requirements Study/Analysis of target requirements in response to weapons systems development and upgrades. -Continued development of real-time surface target scoring systems, including move to vector scorer. -Continued command and control upgrade development. -Continued Weapons System/Emitter, Target Augmentation System (TAS) upgrade. -Continued Target/Threat Characterization and Validation. 				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.237	0.467	0.672	0.766
RDT&E Articles Quantity				
<ul style="list-style-type: none"> -Procured prototype off-the-shelf boat for testing and evaluation of enhanced High Speed Maneuverable Seaborne Target (HSMST). -Initiated requirements study, prepare source selection criteria, prepare integration plan, performance test plan, evaluation plan and select prototype hull(s). Procure prototype small (50-60'), high speed, missile-capable, patrol craft threat; integrate target systems, test and evaluate for QST-35 replacement. -Revise/update design package for medium (40M) Coastal Patrol Craft threat. -Procure prototype Medium (130') missile-capable, patrol craft threat to address known threat (Got) design. Integration of on-board control system to be completed in FY06 upon receipt of vessel. -Conduct testing of small, high-speed, missile capable patrol craft threat, finalize reports and prepare procurement recommendations to sponsors. -Develop high-speed (>45 knots) tow platform to be utilized in conjunction with small high-speed patrol craft threat to enhance platform survivability. 				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N/Target Systems Development	PROJECT NUMBER AND NAME 20612/Surface Targets Development			
C. PROGRAM CHANGE SUMMARY:					
Funding:		FY 2002	FY 2003	FY 2004	FY2005
Previous President's Budget: (FY 03 Pres Controls)		1.139	1.138	1.137	1.190
Current BES/President's Budget: (FY04/05 Pres Controls)		1.103	1.112	0.864	0.968
Total Adjustments		-0.036	-0.026	-0.273	-0.222
Summary of Adjustments					
Congressional Program reductions					
Congressional undistributed reductions			-0.007		
Congressional rescissions		-0.004			
SBIR/STTR transfer		-0.023			
Economic assumptions		-0.003	-0.019	-0.031	-0.030
Reprogrammings		-0.006			
Other Navy/OSD adjustments				-0.242	-0.192
Congressional increases					
Subtotal		-0.036	-0.026	-0.273	-0.222
Schedule: Not applicable					
Technical: Not applicable					

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2003
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N/Target Systems Development	PROJECT NUMBER AND NAME 20612/Surface Targets Development
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D. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Complete</u>	<u>Total Cost</u>
OPN Line 545500 ASW Range Spt Equipmen	5.883	7.196	7.275	7.191	7.422	7.529	7.743	7.896		58.135

E. ACQUISITION STRATEGY:

Not applicable

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0604258N TARGET SYSTEMS DEVELOPMENT (TSD)			PROJECT NUMBER AND NAME K3045 Terrier/SSST			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		2.914	2.908					
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project funds the Terrier Supersonic Sea Skimming Target (SSST) development to provide both a low-fidelity and a moderate-fidelity Terrier Missile Target (TMT) for Fleet training against a supersonic sea skimming threat. Major efforts involve integrating a Flight Termination System (FTS), running 6-DOF simulations, recertifying rocket motors, modifying the launch control system, modifying the initialization code, and the build up and firing of rounds.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N TARGET SYSTEMS DEVELOPMENT (TSD)	PROJECT NUMBER AND NAME K3045 Terrier/SSST

B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		1.100	0.700	
RDT&E Articles Quantity				

Efforts include: Integration of a Flight Termination System (FTS), 6-DOF simulations, rocket motors recertification, and modification of the launch control system and the initializer for the low-fidelity Terrier SSST configuration.

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		1.814	2.208	
RDT&E Articles Quantity				

Efforts include: Low-drag nosecone, altimeter, and destruct charge, development of a delayed rocket motor ignition switch, building an IOM, and coding software for the moderate-fidelity Terrier SSST configuration.

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N TARGET SYSTEMS DEVELOPMENT (TSD)	PROJECT NUMBER AND NAME K3045 Terrier/SSST			
C. PROGRAM CHANGE SUMMARY:					
Funding:		FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget:			2.983	2.985	
Current BES/President's Budget:			2.914	2.908	
Total Adjustments		0.000	-0.069	-0.077	0.000
Summary of Adjustments					
Congressional program reductions					
Congressional undistributed reductions			-0.017		
Congressional rescissions					
SBIR/STTR Transfer					
Economic Assumptions			-0.052	-0.069	
Reprogrammings					
Other Navy/OSD Adjustments				-0.008	
Congressional increases					
Subtotal:		0.000	-0.069	-0.077	0.000
Schedule:					
Not Applicable					
Technical:					
Not Applicable.					

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0604258N/Target Systems Development			PROJECT NUMBER AND NAME A0609/Aerial Target Systems Development			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	36.774	29.772	22.189	23.417	14.177	14.458	14.730	15.001
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Aerial Target Systems and associated target augmentation and auxiliary systems are developed to test and provide training for Joint Strike and Littoral Warfare Systems required to defend fleet surface and air units in a hostile environment. The threat envelope covered extends from the surface to 100K feet for speeds in the low subsonic range to MACH 4. This project includes:

- Subsonic Subscale Aerial Target (SSAT) development (including pre-planned product improvements to the existing recoverable, remote-controlled subsonic target - upgraded engine, fuselage, swept wing configuration). The SSAT simulates the anti-ship Cruise Missile threat.
- Supersonic Sea Skimming Target (SSST) development. The current developmental SSST replicates anti-ship cruise missile Threat-C performance.
- Target Augmentation and Auxiliary Systems (TAAS) development. TAAS items allow each target to be uniquely configured for specific mission profiles. TAAS 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, readiness and effectiveness.
- Support for core modeling & simulation lab capability, including development and integration of analytical and hardware-in-the-loop simulations, and engineering/technical support to verify and validate target simulations.
- Target Threat Characterization (TTC).

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N/Target Systems Development	PROJECT NUMBER AND NAME A0609/Aerial Target Systems Development		
(U) B. Accomplishments/Planned Program				
	FY 02	FY 03	FY 04	FY 05
Continued Subsonic Subscale Aerial Target Dev.	12.078	19.763	16.047	11.328
RDT&E Articles Quantity				
Continued Subsonic Subscale Aerial Target (SSAT) Development, including product improvements to the existing SSAT (upgraded engine, swept wing configuration and fuselage upgrades).				
	FY 02	FY 03	FY 04	FY 05
Continued Target Threat Characterization (TTC)	0.520			
RDT&E Articles Quantity				
Support for core modeling & simulation lab capability. Includes development and integration of analytical and hardware-in-the-loop simulations. Engineering and technical support for the verification and validation of target simulations. Continued Target Threat Characterization (TTC).				
	FY 02	FY 03	FY 04	FY 05
Continued Target Augmentation and Auxillary Systems	3.596	3.256	5.254	5.520
RDT&E Articles Quantity				
Continued Target Augmentation and Auxillary Systems (TA/AS) development.				

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Exhibit R-2a, RDTEEN Project Justification
(Exhibit R-2a, page 10 of 16)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N/Target Systems Development	PROJECT NUMBER AND NAME A0609/Aerial Target Systems Development

(U) B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Supersonic Sea Skimming Target (SSST)	20.580	6.753	0.888	6.569
RDT&E Articles Quantity				

Complete GQM-163A SSST Engineering and Manufacturing Development and initiate Block Upgrades/evolutionary development to keep pace with evolving threat and associated ORD requirements. Efforts include:

- Initiate development of salvo firing and multiple target control capabilities.
- Conduct alternative booster system study and initiate alternative booster system development.
- Continue improvement of system deficiencies identified during EMD.
- Conduct Aerial Target Launch Ship (ATLS) integration.
- Develop improved telemetry transmission capabilities.

	FY 02	FY 03	FY 04	FY 05
RDT&E Articles Quantity				

	FY 02	FY 03	FY 04	FY 05
RDT&E Articles Quantity				

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE:
		February 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604258N/Target Systems Development	A0609/Aerial Target Systems Development

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget:	36.426	29.342	23.906	24.069
Current BES/President's Budget	36.774	29.772	22.189	23.417
Total Adjustments	0.348	0.430	-1.717	-0.652

Summary of Adjustments

Congressional program reductions				
Congressional undistributed reductions		-0.180		
Congressional rescissions	-0.087			
SBIR/STTR Transfer	-0.748			
Economic Assumptions	-0.105	-0.519	-0.565	-0.606
Reprogrammings	-1.104			
Other Navy/OSD Adjustments	2.392	1.129	-1.152	-0.046
Congressional increases				

Subtotal	0.348	0.430	-1.717	-0.652
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(U) Schedule:
Not applicable.

(U) Technical:
Not applicable.

(U) D. OTHER PROGRAM FUNDING SUMMARY:

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Complete</u>	<u>Total Cost</u>
228000 Aerial Target System	57.763	68.985	70.676	103.684	127.698	88.597	90.233	91.875	Continuing	

Related RDT& E: Not applicable.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0604258N/Target Systems Development			PROJECT NUMBER AND NAME A-0610/Weapons Systems T&E Development Procurement			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	11.058	11.820	11.677	15.186	29.203	30.177	30.735	31.293
RDT&E Articles Qty	2	3	5	4	3	3	3	3

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project provides for the development and procurement of Aerial Targets used exclusively for test and evaluation of Naval Weapons Systems which closely replicate current and projected threats to fleet units in the Joint Strike and the Littoral Warfare environments. This replication must include characteristics related to size, performance envelope, and electromagnetic and infrared signatures. As threats change, changes must be made to keep the targets as threat representative as possible. This is done in response to changes in the requirements of the developers of Naval weapons.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N/Target Systems Development	PROJECT NUMBER AND NAME A0610/Weapons Systems T&E Development/Procurement		
(U) B. Accomplishments/Planned Program				
	FY 02	FY 03	FY 04	FY 05
Continued Full Scale Aerial Target support	8.570	8.791	9.456	8.518
RDT&E Articles Quantity	2	3	5	4
<div style="border: 1px solid black; padding: 5px;"> <p>The Full Scale Aerial Target 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 Full Scale Aerial Target (FSAT), including Aviation Depot Level Repairables (AVDLR), procurement of kit material and conversion of three F-4 aircraft into FSAT targets. The Navy will begin joint procurement of QF-4 T&E assets with USAF in FY03 and beyond.</p> </div>				
	FY 02	FY 03	FY 04	FY 05
Continued T&E TAAS Vector Scorer	2.096	2.768	2.221	2.689
RDT&E Articles Quantity				
<div style="border: 1px solid black; padding: 5px;"> <p>Target Augmentation and Auxillary Systems items allows each target to be uniquely configured for specific mission profiles. TAAS 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, readiness and effectiveness. Continued T&E Target Augmentation and Auxillary Systems (TA/AS) Vector Scorer development/procurement/support.</p> </div>				
	FY 02	FY 03	FY 04	FY 05
Continued VANDAL support	0.392	0.261		
RDT&E Articles Quantity				
<div style="border: 1px solid black; padding: 5px;"> <p>The vandal target is a surface launched, expendable, ramjet powered missile converted to a Aerial Target which simulates anti-ship threat missiles. The target provides sea skimming and anti-radiation missile profiles. Continued VANDAL support.</p> </div>				

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 14 of 16)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N/Target Systems Development	PROJECT NUMBER AND NAME A0610/Weapons Systems T&E Development/Procurement

(U) B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Support of follow-on FSAT development				3.979
RDT&E Articles Quantity				

The Air Superiority Target (AST) is being developed as the follow-on to the current FSAT. AST will be a supersonic, high altitude, remote-controlled aerial target. This target will have full command and control capability through normal flight maneuvers. Continue support of the follow-on FSAT development.

	FY 02	FY 03	FY 04	FY 05
RDT&E Articles Quantity				

	FY 02	FY 03	FY 04	FY 05
RDT&E Articles Quantity				

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EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2003															
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME															
RDT&E, N / BA-6		0604258N/Target Systems Development				A0610/Weapons Systems T&E Development/Procurement															
(U) C. PROGRAM CHANGE SUMMARY:																					
(U) Funding:		FY 2002	FY 2003	FY 2004	FY 2005																
Previous President's Budget:		11.508	12.099	12.100	15.595																
Current BES/President's Budget		11.058	11.820	11.677	15.186																
Total Adjustments		-0.450	-0.279	-0.423	-0.409																
Summary of Adjustments																					
Congressional program reductions																					
Congressional undistributed reductions																					
Congressional rescissions																					
SBIR/STTR Transfer																					
Economic Assumptions																					
Reprogrammings																					
Other Navy/OSD Adjustments																					
Congressional increases																					
Subtotal																					
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"></td> <td style="width: 15%; text-align: right;">-0.450</td> <td style="width: 15%; text-align: right;">-0.279</td> <td style="width: 15%; text-align: right;">-0.423</td> <td style="width: 15%; text-align: right;">-0.409</td> <td colspan="6"></td> </tr> </table>												-0.450	-0.279	-0.423	-0.409						
	-0.450	-0.279	-0.423	-0.409																	
(U) Schedule:																					
Not applicable.																					
(U) Technical:																					
Not applicable.																					
(U) D. OTHER PROGRAM FUNDING SUMMARY:																					
	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	To <u>Complete</u>	Total <u>Cost</u>											
228000 Aerial Target System	57.763	68.985	70.676	103.684	127.698	88.597	90.233	91.875	Continuing												

R-1 SHOPPING LIST - Item No. 147

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EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6					R-1 ITEM NOMENCLATURE 0604759N Major T&E Investment			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	40.674	41.473	43.908	45.737	45.839	45.794	46.613	47.465
W2195 Test and Evaluation Investment	39.686	41.473	43.908	45.737	45.839	45.794	46.613	47.465
W9092 Flight Operations Safety at Pax River	0.988							

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project improves visibility of Test and Evaluation (T&E) resources across the Services 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 support for the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center (NAVUNSEAWARCEN DET AUTECE), Andros Island, Bahamas; the Naval Air Warfare Center Weapons Division (NAVAIRWARCENWPNDIV), Point Mugu, CA and China Lake, CA; and Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Patuxent River, MD.

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0604759N Major T&E Investment			PROJECT NUMBER AND NAME W2195 T&E Investment			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	39.686	41.473	43.908	45.737	45.839	45.794	46.613	47.465
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project improves visibility 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 support for the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center (NAVUNSEAWARCEN DET AUTEC), Andros Island, Bahamas; the Naval Air Warfare Center Weapons Division (NAVAIRWARCENWPNDIV), Point MUGU, CA and China Lake, CA; and the Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Patuxent River, MD.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2003
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604759N Major T&E Investment	PROJECT NUMBER AND NAME W2195 T&E Investment
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(U) B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	8.794	7.697	3.740	5.907
RDT&E Articles Quantity				

-NAVUNSEAWARCEN DET AUTEK. Continue Instrumentation Component Replacement (ICR) efforts. Continue Radar Systems Improvement efforts. Continue the Off-Board Advanced Systems Stimulator Project. Continue the Underwater Range Data Communications Project. Initiated Range Ware Improvement Project.

-NAVUNSEAWARCEN DET AUTEK. Continue Instrumentation Component Replacement (ICR) efforts. Complete Radar Systems Improvement efforts. Complete the Off-Board Advanced Systems Stimulator Project. Continue the Underwater Range Data Communications Project. Continue Range Ware Improvement Project.

-NAVUNSEAWARCEN DET AUTEK. Continue Instrumentation Component Replacement (ICR) efforts. Complete the Underwater Range Data Communications Project. Continue Range Ware Improvement Project. Initiate AUTEK Lightning Protection project. Initiate AUTEK Local Area Network modernization project.

-NAVUNSEAWARCEN DET AUTEK. Continue Instrumentation Component Replacement (ICR) efforts. Continue Range Ware Improvement Project. Continue AUTEK Lightning Protection project. Complete the AUTEK Local Area Network modernization project. Initiate the AUTEK minefield improvement project.

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604759N Major T&E Investment	PROJECT NUMBER AND NAME W2195 T&E Investment

(U) B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	16.723	19.863	25.515	25.492
RDT&E Articles Quantity				

- NAVAIRWARCENWPNSDIV. Continue to modernize core instrumentation capability. Complete the upgrade of two metric radar (3 and 4 of 7) electronic systems and control consoles and added moving target indicators, automatic calibration and computer controls of chart recorders at San Nicolas Island. Complete the Integrated Target Control System Keep Alive project. Continue modernization of air traffic control radar processing systems, controller consoles and voice switches to systems that will be compatible with the Federal Aviation Administration (FAA) and Department of Defense (DoD) air control network. Complete modernizing deteriorated copper cables proving data, video and communications within the Sea Range complexes. Continue a project to assemble and field remote, fixed and mobile telemetry receiving stations to provide full land range coverage required by customers. Complete Kineto tracking mounts with video tracker, Infrared (IR) cameras and telescopes, and microwave transmission capability. Complete replacement of obsolete GPS receivers and operating software. Initiated and completed upgrade of the site Command Transmitter System equipment. Develop a capability to test and evaluate effects and performance of hypersonic penetrators. Initiate replacement of aging cinesextant mount laser trackers with laser tracker kits. Initiated replacement of remote van equipment, vintage tracking antennas and allowed multiple participant operations coverage at San Nicolas Island. Modernized frequency monitoring capabilities at Electronic Combat Range, Land Range, and Sea Range. Initiate replacement of obsolete data acquisition and electronic equipment at Skytop facility. Initiated moving target launch capability/instrumentation from C130A to C130F.

- NAVAIRWARCENWPNSDIV. Continue to modernize core instrumentation capability. Continue modernization of air traffic control radar processing systems and voice switches to systems that will be compatible with the Federal Aviation Administration (FAA) and Department of Defense (DoD) air control network. Complete a project to assemble and field remote, fixed and mobile telemetry receiving stations to provide full land range coverage required by customers. Continue development of capability to test and evaluate effects and performance of hypersonic penetrators. Continue replacement of remote van equipment, vintage tracking antennas and allow multiple participant operations coverage at San Nicolas Island. Continue to modernize frequency monitoring capabilities at Electronic Combat Range, Land Range, and Sea Range. Continue replacement of obsolete data acquisition and electronic equipment at Skytop facility. Continue moving target launch capability/instrumentation from C130A to C130F. Initiate upgrade of fifth metric radar electronic systems and control consoles and add moving target indicators, automatic calibration and computer controls of chart recorders at San Nicolas Island. Initiate P-3/C-130 Instrumentation Replacement Project. Initiate procurement of Advanced Range Telemetry Program (ARTM) equipment. Initiate upgrade Range's need to gather, distribute, record/store and perform post test data analysis with Digital Video.

- NAVAIRWARCENWPNSDIV. Continue to modernize core instrumentation capability. Complete modernization of air traffic control radar with integration of new R-2508 surveillance radar. Complete development of capability to test and evaluate effects and performance of hypersonic penetrators. Complete replacement of remote van equipment, vintage tracking antennas and allow multiple participant operations coverage at San Nicolas Island. Continue to modernize frequency monitoring capabilities at Electronic Combat Range, Land Range, and Sea Range. Complete replacement of obsolete data acquisition and electronic equipment at Skytop facility. Complete moving target launch capability/instrumentation from C130A to C130F. Complete upgrade of fifth metric radar electronic systems and control consoles and add moving target indicators, automatic calibration and computer controls of chart recorders at San Nicolas Island. Continue P-3/C-130 Instrumentation Replacement Project. Complete procurement and integration of Advanced Range Telemetry Program (ARTM) equipment. Continue upgrade Land, Sea, and ECR Range's video capabilities. Initiate procurement and integration of new voice system for the Sea Range. Initiate upgrade of target control pedestals. Initiate modernization of Land range communication infrastructure.

-NAVAIRWARCENWPNSDIV. Continue to modernize core instrumentation capability. Complete modernization of frequency monitoring capabilities at Electronic Combat Range, Land Range, and Sea Range. Initiate upgrade of sixth metric radar electronic systems and control consoles and add moving target indicators, automatic calibration and computer controls of chart recorders. Continue with P-3/C-130 Instrumentation Replacement Project. Complete upgrade of Land, Sea, and ECR Range's video capabilities. Continue procurement and integration of new voice system for the Sea Range. Continue upgrade of target control pedestals. Continue modernization of Land range communication infrastructure. Initiate replacement of VHF/UHF/HF and mobile radios. Initiate modernization of warhead/explosives instrumentation. Initiate modernization of ECR radars and threat system interfaces. Initiate non destructive weapon evaluation (x-ray capabilities).

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604759N Major T&E Investment	PROJECT NUMBER AND NAME W2195 T&E Investment

(U) B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	12.093	12.513	14.653	14.338
RDT&E Articles Quantity				

- NAVAIRWARCENACDIV. Continue to modernize core instrumentation capability. Complete modernization of RIR-778 Range Instrumentation radars and the Multiple Target Instrumentation Radar. Continue to replace aging Telemetry acquisition and processing equipment. Continue to replace and upgrade obsolescent image generators and video display systems at the Manned Flight Simulator facility. Continue to develop full-spectrum dynamic avionics and aircraft signature measurement system. Complete procurement of Common Airborne Instrumentation System (CAIS) hardware suites. Initiate replacement of obsolete data collection system with new collection and distribution system. Initiate and completed increased fuel filtration testing capabilities. Modernize the Range Control Center display systems. Initiate procurement of hardware to monitor radio frequency (RF) environment and responses in real-time for installed test facility. Integrate and supported replacement of high-speed film cameras with Airborne Separation Video System. Initiate replacement of analog National Television Systems Committee (NTSC) video with digital systems based on industry and Advanced Television Systems Committee formats.

- NAVAIRWARCENACDIV. Continue to modernize core instrumentation capability. Continue replacement of aging Telemetry acquisition and processing equipment. Complete replacement and upgrade of obsolescent image generators and video display systems at the Manned Flight Simulator facility. Complete development of full-spectrum dynamic avionics and aircraft signature measurement system. Complete replacement of obsolete data collection system with new collection and distribution system. Complete modernization of the Range Control Center display systems. Complete procurement of hardware to monitor radio frequency (RF) environment and responses in real-time for installed test facility. Complete integration and support replacement of high-speed film cameras with Airborne Separation Video System. Continue integration of analog National Television Systems Committee (NTSC) video with digital systems based on industry and Advanced Television Systems Committee formats. Initiate upgrade universal radar moving target transponder to support all Navy radar systems. Initiate upgrade of mechanical/machining capabilities. Initiate a development of a High Cycle Fatigue (HCF) Test Capability. Initiate upgrade for semi-automatic and video reader capabilities under the Next Generation Video Project.

- NAVAIRWARCENACDIV. Continue to modernize core instrumentation capability. Complete replacement of aging Telemetry acquisition and processing equipment. Continue integration of analog National Television Systems Committee (NTSC) video with digital systems based on industry and Advanced Television Systems Committee formats. Complete upgrade of universal radar moving target transponder to support all Navy radar systems. Continue upgrade of mechanical/machining capabilities. Continue a development of a High Cycle Fatigue (HCF) Test Capability. Continue upgrade for semi-automatic and video reader capabilities under the Next Generation Video Project. Initiate procurement and integration of communication and security equipment required to support operations within the Advanced Systems Integration Laboratory (ASIL) MILCON. Initiate modernization and upgrades to the existing radar cross section pedestals.

-NAVAIRWARCENACDIV. Continue to modernize core instrumentation capability. Complete integration of analog National Television Systems Committee (NTSC) video with digital systems based on industry and Advanced Television Systems Committee formats. Complete upgrade of mechanical/machining capabilities. Complete development of a High Cycle Fatigue (HCF) Test Capability. Complete upgrade for semi-automatic and video reader capabilities under the Next Generation Video Project. Complete procurement and integration of communication and security equipment required to support operations within the ASIL MILCON. Continue modernization and upgrades to the existing radar cross section pedestals. Initiate procurement and integration of a reconfigurable cockpit simulator. Initiate replacement of range's voice communication system. Initiate upgrades to test instrumentation calibration equipment. Initiate rotor spin facility instrumentation improvements. Initiate procurement to improve measurements of aircraft coupling of electromagnetic radiation. Initiate modernization of Air Combat Environment Test & Evaluation Facility (ACETEF's) visual display systems.

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EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2003
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604759N Major T&E Investment	PROJECT NUMBER AND NAME W2195 T&E Investment
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(U) B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	2.100	1.400		
RDT&E Articles Quantity				

-Joint Modeling and Simulation System (JMASS). Efforts to develop a tri-service simulation infrastructure that will assist model developers, engineers, and analysts in the development of digital models, configuration and execution of simulations and analysis of simulation capabilities.

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EXHIBIT R-2a, RDT&E Project Justification		DATE:
		February 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604759N Major T&E Investment	W2195 T&E Investment

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget:	41.435	42.453	45.777	47.969
Current BES/President's Budget	39.686	41.473	43.908	45.737
Total Adjustments	<u>-1.749</u>	<u>-0.980</u>	<u>-1.869</u>	<u>-2.232</u>
Summary of Adjustments				
Congressional program reductions				
Congressional undistributed reductions		-0.248		
Congressional rescissions	-0.098			
SBIR/STTR Transfer	-0.042			
Economic Assumptions	-0.136	-0.732	-1.385	-1.317
Misc. Adjustments				
Reprogrammings	-1.473			
SPONSOR/FMB/NAVAIR Adjustments				
Other Navy/OSD Adjustments			-0.484	-0.915
Congressional increases				
Subtotal	<u>-1.749</u>	<u>-0.980</u>	<u>-1.869</u>	<u>-2.232</u>

(U) Schedule:
Not Applicable.

(U) Technical:
Not Applicable.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2003
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604759N Major T&E Investment	PROJECT NUMBER AND NAME W2195 T&E Investment
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D. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Complete</u>	<u>Total Cost</u>
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Related RDT&E: List PE numbers and names. It is not necessary to include related RDT&E funding profile unless there is a funding dependency between the RDT&E programs.
 (U) PE 0605759F: Test and Evaluation (Air Force)
 (U) PE 0605864N: Test and Evaluation (Navy)

E. ACQUISITION STRATEGY:

Not Applicable.

F. MAJOR PERFORMERS:

Not Applicable.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2

DATE: FEBRUARY 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N
PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
L2097 Manpower, Personnel, and Training	185	292	298	303	309	315	321	327
R0133 National Academy of Science/Naval Studies Board	1,798	1,567	2,069	2,138	2,187	2,233	2,275	2,318
S2233 Naval Surface Warfare Studies	3,173	0	0	0	0	0	0	0
S2354 Expeditionary Warfare Studies	541	0	0	0	0	0	0	0
S9260 Technology Obsolescence Reduction	0	1,954	0	0	0	0	0	0
W2092 Naval Aviation Studies	1,725	2,117	2,064	1,725	1,756	1,783	1,819	1,853
Total	7,422	5,930	4,431	4,166	4,252	4,331	4,415	4,498

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.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2

DATE: FEBRUARY 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N
PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

B. PROGRAM CHANGE SUMMARY:

	FY 2002	FY 2003	FY 2004	FY 2005
2003 President's Budget Submission:	5,926	4,071	4,588	4,315
Adjustments from FY 2003 President's Budget:				
Congressional Plus Ups		2,000		
Commonality Board Initiatives	150			
FY02 SBIR Assessment	-55			
NWCF Rate Adjustments			-14	-8
NMCI - Increase Funding for NAVAIR			-2	-2
Cong. Rescissions/Adjustments/Undist. Reductions	-26	-71		
Execution Adjustments	1,427			
Efficiencies at NWCF Activities			-35	-35
Pay Raise/Inflation Adjustments		-70	-106	-104
2004/2005 President's Budget Submission:	7,422	5,930	4,431	4,166

PROGRAM CHANGE SUMMARY EXPLANATION:

Schedule: Not applicable.
Technical: Not applicable.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: FEBRUARY 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N Project Number: L2097
PROGRAM ELEMENT TITLE: STUDIES AND ANALYSIS SUPPORT, NAVY Project Title: MANPOWER PERSONNEL & TRAINING

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
L2097 Manpower Personnel & Training	185	292	298	303	309	315	321	327

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Chief of Naval Personnel has a continuing need for studies and analyses 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.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 02	FY 03	FY 04	FY 05
Manpower Personnel & Training	185	292	298	303

FY 2002 ACCOMPLISHMENTS:

- Completed the second phase of a two-year General Educational Development (GED) Screening Pilot Study begun in FY 2001. Collected and analyzed information and data obtained from state GED files and from completed questionnaires at the Military Entrance Processing Stations (MEPS). Identified, evaluated, and recommended procedures to Commander, Navy Recruiting Command to broaden recruiting base to reduce 1st Term Attrition.
- Conducted a Business Process Reengineering (BPR) Conceptual Modeling study to develop a Web-based prototype tool to support rapid generation and analysis of alternative redesign process models, to include necessary life cycle management documentation requirements.
- Completed first of two phases of Retention Goaling by Rating and Paygrade study. Analyzed methods of developing a system that generates a sustainable force structure for each enlisted skill/community in the Navy. This system would provide the length of service targets for a future system to determine specific accession and retention goals for personnel in each Navy skill. The study will be completed in FY-03.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: FEBRUARY 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

Project Number: L2097

PROGRAM ELEMENT TITLE: STUDIES AND ANALYSIS SUPPORT, NAVY

Project Title: MANPOWER PERSONNEL
& TRAINING

FY 2003 PLAN:

- Complete the second of two phases of the Retention Goaling by Rating and Pay-grade study, which began in FY-02. The final products will be a written report detailing a standard methodology for developing a force modeling system, including detailed designs for an automated system, and a prototype of the Objective Force Model (OFM) for selected enlisted communities.
- Conduct Officer Retention/Continuation Metrics study to provide an adequate means/metrics for assessing the health of the Navy's Officer corps and specific communities. Initial focus will be on the Staff Corps Communities and then the Un-Restricted Line (URL) Communities after Minimum Service Requirements are met. Conduct interviews, conduct surveys and analysis of variables affecting/impacting community health and retention behavior. A report of findings and recommendations to the sponsor, Center for Career Development (CCD), Commander of Navy Personnel Command (CNPC) (PERS-00R), will complete the study.
- Conduct Objective Force Modeling Concept study to determine what methodology should be used for developing a Force Transition Modeling (FTM) System. The FTM would be an integrated system that would determine how many personnel, at each Length of Service, in each enlisted skill, will need to be retained in order to reach the desired distribution of skills at some future point in time (projection capability). A report will detail a standard methodology for developing the FTM, including designs for an automated system.
- Conduct the Effective Visualization for Navy Career Information Summary & Evaluation study to upgrade the technology and to provide recommendations for the redesign of displays of Selection Board Screens used by the various Officer and Enlisted Selection Boards conducted by the Chief of Naval Personnel. A prototype visual display and a report of findings and recommendations will complete the study.
- Conduct Ship Officer Staffing Guide (SOSG) study to develop a standardized methodology for determining officer manpower requirements displayed in Ship and Fleet Manpower Documents (SMDs/FMDs).

FY 2004 PLAN:

- Conduct a cost-benefit analysis of Recruiter Refresher Training to justify training expenditures.
- Conduct a study to determine Shipboard habitability factors that adversely impact retention.
- Assess manpower/personnel growth of Acquisition Category (ACAT) III and ACAT IV Programs.
- Conduct a study to determine the opportunities of combining Navy Enlisted Classification (NEC) Codes across warfare platforms.
- Conduct a study to assess effectiveness of Navy Drug Testing Program.

R-1 Line Item 149

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: FEBRUARY 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

Project Number: L2097

PROGRAM ELEMENT TITLE: STUDIES AND ANALYSIS SUPPORT, NAVY

Project Title: MANPOWER PERSONNEL
& TRAINING

FY 2005 PLAN:

- Conduct a study to update Fleet Manpower Requirements Pay-grade Distribution Table.
- Conduct a study to determine where Knowledge Management technology can be applied in Manpower and Personnel organizations and staff elements to improve operational performance and effectiveness.
- Assess the potential use and determine appropriate areas to employ Smart Card Technology.

C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. ACQUISITION STRATEGY: Not applicable.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: FEBRUARY 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N Project Number: R0133
PROGRAM ELEMENT TITLE: STUDIES AND ANALYSIS SUPPORT, NAVY Project Title: National Academy of Science/Naval Studies Board

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
R0133 National Academy of Science/Naval Studies Board	1,798	1,567	2,069	2,138	2,187	2,233	2,275	2,318

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 requirement, 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:

	FY 02	FY 03	FY 04	FY 05
National Academy of Science/Naval Studies Board	1,798	1,567	2,069	2,138

FY 2002 ACCOMPLISHMENTS:

- Continued research efforts and investigations in areas of interest to the Navy. Continued to support annual Navy authorized activities of importance, such as the National Space Forum and the Weinblum Memorial Lecture Series.
- Produced investigations of significant importance to the Navy concerning technology of the future, selected from proposals received from CNO and ASN (RD&A). Two new studies were authorized by CNO. The two studies commenced in winter/spring of CY02. The new study titles are: The Role of Experimentation in Building Naval Forces, and Uninhabited Vehicles in support of Naval Forces.

FY 2003 PLAN:

- Continue research efforts and investigations in areas of interest to the Navy. Continue to support annual Navy authorized activities of importance, such as the National Space Forum and the Weinblum Memorial Lecture Series.
- Continue performance on the two studies that were initiated in FY02. Begin an additional 2 studies per the direction of the CNO at the beginning of FY03. The approved studies for FY03 at this time are entitled: The Navy's Role in Space and Forcenet's Major Role in the Transformation of Naval Capabilities.

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Exhibit R-2a

DATE: FEBRUARY 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

Project Number: R0133

PROGRAM ELEMENT TITLE: STUDIES AND ANALYSIS SUPPORT, NAVY

Project Title: National Academy of
Science/Naval
Studies Board

FY 2004 PLAN:

- Continue research efforts and investigations in areas of interest to the Navy. Continue to support annual Navy authorized activities of importance, such as the National Space Forum and the Weinblum Memorial Lecture Series.
- New studies (1-3) to be selected by the CNO at the beginning of FY04.

FY 2005 PLAN:

- Continue research efforts and investigations in areas of interest to the Navy. Continue to support annual Navy authorized activities of importance, such as the National Space Forum and the Weinblum Memorial Lecture Series.
- New studies (1-3) to be selected by the CNO at the beginning of FY05.

C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. ACQUISITION STRATEGY: Not applicable.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: FEBRUARY 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N Project Number: W2092
PROGRAM ELEMENT TITLE: STUDIES AND ANALYSIS SUPPORT, NAVY Project Title: National Aviation Studies

COST: (Dollars in Thousands)

PROJECT NUMBER/TITLE	FY 2002 ACTUAL	FY2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
W2092 Naval Aviation Studies	1,725	2,117	2,064	1,725	1,756	1,783	1,819	1,853

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports studies over a wide range of Naval aviation issues that support the ongoing Joint Strike Assessment (JSA) guidelines. Results provide a basis for recommendations to the Chief of Naval Operations concerning major policy, planning, and acquisition program decisions. This effort is a management initiative, which will allow allocation of study resources in a timely manner according to priorities. This ongoing program will continue to leverage more detailed program specific analysis in order to gain insight in acquisition of various weapon systems and their impact on force structure, manning levels, operational readiness and Carrier Air Wing (CVW) effectiveness. This program will also support various Analysis of Alternatives (AOA) Studies.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 02	FY 03	FY 04	FY 05
Naval Aviation Studies	1,725	2,117	2,064	1,725

FY 2002 ACCOMPLISHMENTS:

- Continued a low level, multi-year effort to develop a consistent methodology to quantify and estimate future network centric warfare effectiveness.
- Continued studies to support JSA issues for POM-04.
- Resumed limited Carrier Air Wing (CVW) capability analysis effort.
- Continued studies to evaluate concepts of operations for strike missions.
- Continued studies to explore alternatives for Advanced Weapons Initiatives.
- Provided technical support for general aviation related AOAs and studies within NAVAIR and OPNAV.

FY 2003 PLAN:

- Continue a low level, multi-year effort to develop a consistent methodology to quantify and estimate future network centric warfare effectiveness.
- Continue studies to support JSA issues for current and follow on cycle.
- Continue to evaluate the integration of advanced technology into the Carrier Battle Group (CVBG).
- Continue studies to evaluate concepts of operations for strike missions.
- Continue studies to explore alternatives for advanced weapons initiatives.

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DATE: FEBRUARY 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

Project Number: W2092

PROGRAM ELEMENT TITLE: STUDIES AND ANALYSIS SUPPORT, NAVY

Project Title: National Aviation
Studies

- Provide technical support for general aviation related AOAs and studies within NAVAIR and OPNAV.

FY 2004 PLAN:

- Continue a low level, multi-year effort to develop a consistent methodology to quantify and estimate future network centric warfare (capability) effectiveness.
- Continue to evaluate the integration of advanced technology into the Carrier Battle Group (CVBG).
- Continue studies to evaluate naval aviation concepts of operations for assured access missions.
- Continue studies to explore concept of operations and integration of Unmanned Air Vehicle/Uninhabited Combat Air Vehicle (Navy) (UAV/UCAV(N)) initiatives in the CVBG.
- Continue studies for advanced weapons initiatives.
- Continue providing technical support for general aviation, network centric capabilities, system of systems related AOAs and studies within NAVAIR and OPNAV.

FY 2005 PLAN:

- Continue a low level, multi-year effort to develop a consistent methodology to quantify and estimate future network centric warfare (capability) effectiveness.
- Continue to evaluate the integration of advanced technology into the Carrier Battle Group (CVBG).
- Continue studies to evaluate naval aviation concepts of operations for assured access missions.
- Continue studies to explore concept of operations and integration of (UAV/UCAV(N)) initiatives in the Carrier Battle Group.
- Continue studies for advanced weapons initiatives.
- Continue providing technical support for general aviation, network centric capabilities, system of systems related AOAs and studies within NAVAIR and OPNAV.

C. OTHER PROGRAM FUNDING SUMMARY: Not applicable

D. ACQUISITION STRATEGY: Not Applicable

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
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DATE: FEBRUARY 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

Project Number: S9260

PROGRAM ELEMENT TITLE: STUDIES AND ANALYSIS SUPPORT, NAVY

Project Title: Technology
Obsolescence
Reduction

Congressional Plus-Up:

S9260	FY 02	FY 03
Technology Obsolescence Reduction	0	1,954

Designed to reduce obsolescence impacts on weapons systems and cost associated with "lifetime buys" needed to keep parts on the shelf by analyzing and re-engineering systems that are critical to the functionality of weapons systems that are employed by the United States Navy.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605154N
PROGRAM ELEMENT TITLE: CENTER FOR NAVAL ANALYSES

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
C0031 Marine Corps Operations and Analysis Group (MCOAG)	4,093	4,242	4,207	4,306	2,498	3,437	3,548	3,617
R0148 Center for Naval Analyses	41,231	37,928	36,519	37,869	38,708	39,456	40,203	40,954
Total	45,324	42,170	40,726	42,175	41,206	42,893	43,751	44,571

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Center for Naval Analyses (CNA) is the Department of the Navy's only Federally Funded Research and Development Center. 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 1 Marine Corps category and 12 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, and budgets, the Navy and Marine Corps have a greater need for analyses that are both sophisticated and timely. CNA is highly qualified to meet that need.

B. PROGRAM CHANGE SUMMARY:

	FY 2002	FY 2003	FY 2004	FY 2005
2003 President's Budget Submission:	42,691	45,435	46,351	48,014
Adjustments from FY 2003 President's Budget:				
Programmatic Adjustments			-4,154	-4,312
OMNIBUS Contractor Support			-495	-479
Cong Recissions/Adj/Undist.Reductions	-218	-2763		
Execution Adjustments	2,851			
Pay Raise/Inflation Adjustments		-502	-976	-1048
2004/2005 President's Budget Submission:	45,324	42,170	40,726	42,175

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605154N
PROGRAM ELEMENT TITLE: CENTER FOR NAVAL ANALYSES

PROGRAM CHANGE SUMMARY EXPLANATION:

Schedule: Not applicable.
Technical: Not applicable.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
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DATE: February 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605154N

Project Number: C0031

PROGRAM ELEMENT TITLE: CENTER FOR NAVAL ANALYSES

Project Title: MCOAG

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
C0031 Marine Corps Operations and Analysis Group (MCOAG)	4,093	4,242	4,207	4,306	2,498	3,437	3,548	3,617

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports the Marine Corps portion of the Department of the Navy's (DoNs) Center for Naval Analyses (CNA) Research Program. It 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 Federally Funded Research and Development Center (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 effort maintains a number of field representatives for the Operational Forces commanders and established five specific areas of expertise for CNA to maintain. The areas of expertise linked to the Marine Corps Advocacy (proponency) are: (1) Command Element, (2) Operations, (3) Aviation, (4) Integration and Logistics, and (5) Manpower. Scientific analysis support provides five scientific analysts, one for each of the five focus areas. The program continues analytical support for field exercise, ad hoc, and quick response requirements.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 02	FY 03	FY 04	FY 05
MCOAG	4,093	4,242	4,207	4,306

FY 2002 ACCOMPLISHMENTS:

- Provided formal study and analysis support to the operating forces and headquarters elements included in the annual Marine Corps Studies Master Plan. Continued and completed FY 2001 studies: Integrated Amphibious Operations Update, Manpower Critical Performance Indicators, and Roles and Responsibilities of Marine Logistics Command in Operations Plan (OPLAN) 5027. Commenced Impact of Encroachment on Training and Operational Readiness, Analytic Support to the Approved Acquisition Objective (AAO) Process, Norway Air Landed Marine Expeditionary Brigade (NALMEB)/Pre-Positioning, 5th Element of the Marine Air Ground Task Force (MAGTF) (Marine Corps Infrastructure) studies approved in the FY 2002 Marine Corps Studies Master Plan.
- Provided scientific analyst support, within the focus areas, to Marine Corps staff elements.
- Provided for six Field Representatives at Commander Marine Forces, Pacific (COMMARFORPAC), Commander Marine Forces, Atlantic (COMMARFORLANT), Commanding General I, Marine Expeditionary Forces (CG I MEF), Commanding General II, Marine Expeditionary Forces (CG II MEF), Commanding General III, Marine Expeditionary Forces (CG III MEF), and Marine Corps MAGTF Training Center (MCMAGTFTC).

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605154N

Project Number: C0031

PROGRAM ELEMENT TITLE: CENTER FOR NAVAL ANALYSES

Project Title: MCOAG

- Provided analysis support to operating forces exercises, AD HOC support for immediate analytical requirements, and other support functions including: General Concept Development, Quick Response, CNA Self-Initiated Analysis Efforts, administrative, and Award fee funding.

FY 2003 PLANS:

- Provides formal study analysis and study support to operating forces and headquarters elements included in the annual Marine Corps Studies Master Plan.
- Continues scientific analyst support to Marine Corps staff elements.
- Provides for Field Representatives at COMMARFORPAC, COMMARFORLANT, CG I MEF, CG II MEF, and CG III MEF.
- Supports analysis efforts with operating forces exercises, AD HOC support for the immediate analytical support requirements, and other support functions including: General Concept Development, Quick Response, CNA Self-Initiated Analysis Efforts, administrative, and Award fee funding.

FY 2004 PLANS:

- Continues to provide formal study analysis and study support to operating forces and headquarters elements included in the annual Marine Corps Studies Master Plan.
- Continues to provide scientific analyst support, within the five focus areas, to Marine Corps staff elements.
- Continues to provide for Field Representatives at COMMARFORPAC, COMMARFORLANT, CG I MEF, CG II MEF, and CG III MEF.
- Continues to support analysis efforts with operating forces exercises, AD HOC support for the immediate analytical support requirements, and other support functions including: General Concept Development, Quick Response, CNA Self-Initiated Analysis Efforts, administrative, and Award Fee funding.

FY 2005 PLANS:

- Continues to provide formal study analysis and study support to operating forces and headquarters elements included in the annual Marine Corps Studies Master Plan.
- Continues to provide scientific analyst support, within the five focus areas, to Marine Corps staff elements.
- Continues to provide for Field Representatives at COMMARFORPAC, COMMARFORLANT, CG I MEF, CG II MEF, and CG III MEF.
- Continues to support analysis efforts with operating forces exercises, AD HOC support for the immediate analytical support requirements, and other support functions including: General Concept Development, Quick Response, CNA Self-Initiated Analysis Efforts, administrative, and Award Fee funding.

C. OTHER PROGRAM FUNDING SUMMARY: Not Applicable.

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DATE: February 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605154N

Project Number: C0031

PROGRAM ELEMENT TITLE: CENTER FOR NAVAL ANALYSES

Project Title: MCOAG

NAVY RELATED RDT&E:

PE 0605873M (Marine Corps Program Wide Support)

D. ACQUISITION STRATEGY: Not Applicable.

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DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605154N Project Number: R0148
PROGRAM ELEMENT TITLE: CENTER FOR NAVAL ANALYSES Project Title: Center for Naval
Analyses, Navy

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
R0148 Center for Naval Analyses, Navy	41,231	37,928	36,519	37,869	38,708	39,456	40,203	40,954

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports the Navy's portion of the Center for Naval Analyses (CNA) Research Program, which is primarily concentrated along 12 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) Navy Field Program; 10) Navy Scientific Analyst Program; 11) Navy Quick Response Projects; and (12) CNA Initiated Projects. CNA's analyses have resulted in substantial improvements in force structure, fleet effectiveness, and significant cost avoidance.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 02	FY 03	FY 04	FY 05
Center for Naval Analyses, Navy	41,231	37,928	36,519	37,869

FY 2002 ACCOMPLISHMENTS:

- Addressed 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 34 locations around the world and at sea, continued to comprise approximately 20% of the funding.

FY 2003 PLANS:

- Address issues of major importance to Navy leadership in the above research areas. CNA's Research Program will be continually updated to support the Navy efficiently and effectively. Support for the CNA field program, which assigns analysts to 34 locations around the world and at sea, will continue to comprise approximately 20% of the funding.

FY 2004 PLANS:

- Continues to address issues of major importance to Navy leadership in the above research areas. CNA's Research Program will be continually updated to support the Navy efficiently and effectively. Support for the CNA field program, which assigns analysts to 34 locations around the world and at sea, will continue to comprise approximately 20% of the funding.

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DATE: February 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605154N

Project Number: R0148

PROGRAM ELEMENT TITLE: CENTER FOR NAVAL ANALYSES

Project Title: Center for Naval
Analyses, Navy

FY 2005 PLANS:

- Continues to address issues of major importance to Navy leadership in the above research areas. CNA's Research Program will be continually updated to support the Navy efficiently and effectively. Support for the CNA field program, which assigns analysts to 34 locations around the world and at sea, will continue to comprise approximately 20% of the funding.

C. OTHER PROGRAM FUNDING SUMMARY: Not Applicable.

NAVY RELATED RDT&E:

PE 0605152N (Studies and Analysis Support)

D. ACQUISITION STRATEGY: Not Applicable.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605155N
PROGRAM ELEMENT Title: Fleet Tactical Development and Evaluation

COST: (Dollars in Thousands)

PROJECT NUMBER/TITLE	FY 2002 ACTUAL	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
R0151 Intertype Tactical Development and Evaluation	2,746	2,707	2,006	2,348	2,409	2,907	2,956	3,009
Total	2,746	2,707	2,006	2,348	2,409	2,907	2,956	3,009

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports all naval warfare task areas and provides technical and analytical support to the fleet operating forces to develop and evaluate tactics for newly evolving force structures, new and existing weapon system employment, and changing threat scenarios to improve and measure force readiness.

B. PROGRAM CHANGE SUMMARY:

	FY 2002	FY 2003	FY 2004	FY 2005
2003 President's Budget Submission:	2,886	2,771	2,646	2,905
Adjustments from FY 2003 President's Budget:				
Non-S&T R&D Offset			-217	
ACTD offsets			-35	-49
Cong. Recissions/Adjustments/Undist. Reductions	-14	-32		
Post-Production R&D Continuation			-311	-420
SBIR	-70			
NWCF Rate Adjustments			-1	1
Efficiencies at NWCF Activities			-28	-30
Pay Raise/Inflation Adjustments		-32	-48	-59
Execution Adjustment	-56			
2004/2005 President's Budget Submission:	2,746	2,707	2,006	2,348

PROGRAM CHANGE SUMMARY EXPLANATION:

Schedule: Not applicable.
Technical: Not applicable.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605155N Project Number: R0151
PROGRAM ELEMENT TITLE: Fleet Tactical Development Project Title: Intertype Tactical
and Evaluation Development and
Evaluation

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
R0151 Intertype Tactical Development and Evaluation	2,746	2,707	2,006	2,348	2,409	2,907	2,956	3,009

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports all naval warfare task areas and provides technical and analytical support to the fleet operating forces to develop and evaluate tactics for newly evolving force structures, new and existing weapon system employment, and changing threat scenarios to improve and measure force readiness.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 02	FY 03	FY 04	FY 05
Newly Evolving Force Structures	740	299	765	1,201

The tactics, techniques and procedures being developed around evolving force structures provide the operational construct and architectural framework for Naval Warfare in the Information Age. They integrate Warriors, sensors, networks, command and control, platforms and weapons into a distributed combat system, scalable across the spectrum of conflict from seabed to space and sea to land.

FY 2002 ACCOMPLISHMENTS:

- Developed Tactics, Techniques and Procedures(TTP) to employ the Secret Internet Protocol Router Network(SIPRNET) and associated Information Technology for the 21st Century (IT21) equipment as a method for managing the Force Over-the-Horizon Target Coordinator(FOTC) Database.
- Established and publish the Damage Curves for Mine Hunting Class (MHC) 51 and Mine Countermeasures Ship (MCM-1).
- Developed TTP for protection of a High Value Unit (Carrier/Amphibious ship) with the NULKA (Chaff Decoy used to protect High Value Units) self defense system.
- Developed TTP for doing Anti-Submarine Warfare (ASW) using the Acoustic Communications (A-Comms) system.
- Developed TTP to delineate Air Defense Command Relationship for Carrier Battle Group (CVBG) Support Amphibious Ready Group (ARG).

FY 2003 PLANS:

- Develop TTP to retrograde Marine Forces in a Chemical/Biological (CHEM/BIO) Environment.
- Develop TTP for S-3B(Viking) SLAM-ER missile(AGM-84F) launch tactics.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
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DATE: February 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605155N

PROGRAM ELEMENT TITLE: Fleet Tactical Development
and Evaluation

Project Number: R0151

Project Title: Intertype Tactical
Development and
Evaluation

- Develop TTP for Multi CVN Battlegroup Operations.

FY 2004 PLANS:

- Develop TTP for Mine Counter Measures (MCM) Reconnaissance Tactics.
- Develop TTP for use of Night Vision Devices in Amphibious Operations.
- Develop TTP for Tactical Naval Information Operations (IO) Support to Humanitarian Assistance.
- Develop TTP for Naval IO Targeting to support SEA STRIKE.
- Develop TTP for Remote Buoy Active Search and Track.
- Develop TTP for MHC/MCM Survivability Data.
- Develop TTP for Tactical Exploitation of Real Time AAS-44 Forward Looking Infrared Sensor (FLIR) Radar Terrain Following (RTF).

FY 2005 PLANS:

- Develop TTP for Threat Very Shallow (VS) Ship Mine Counter Measures (SMCM) Systems Matrix.
- Develop TTP for a Common Data Link Management System (CDLMS).
- Develop TTP for Underway Replenishment Ship Susceptibility.
- Develop TTP for Battle Force/Battle Group (BF/BG) Interface Control.
- Develop TTP for Fixed Wing Patrol/Anti-Submarine Warfare (ASW) aircraft (P-3C)/ Aircraft Carrier (Nuclear) (VP/CVN) Tactical Imagery Dissemination.
- Develop TTP for E-2C Hawkeye as the Carrier Battle Group/Carrier Air Wing (CVBG/CVW) Have Quick Auto Time of Day (ATOD) Source.
- Develop TTP for Submarine Mine Vulnerability.
- Develop TTP for E-2C Hawkeye aircraft Group 2 Overland Surface Detection and Tracking.
- Develop TTP for E-2C Hawkeye Weapons System Recording Capability for Playback of Theater-Wide Events.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
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DATE: February 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605155N

PROGRAM ELEMENT TITLE: Fleet Tactical Development
and Evaluation

Project Number: R0151

Project Title: Intertype Tactical
Development and
Evaluation

	FY 02	FY 03	FY 04	FY 05
New and Existing Weapon Systems Employment	1,157	1,308	674	808

The emerging development and updating of advanced sensors and weapons systems requires continuous revision and promulgation of advanced tactics and procedures to assure that the Navy can project decisive and persistent offensive power anywhere in the world. Tactical Memorandum (TACMEMO's), i.e. TTP, that are developed maximize the Navy's Sea Strike capability through Network Centric Warfare and Navy Fires Networks.

FY 2002 ACCOMPLISHMENTS:

- Developed a targeting process for attacking Time Critical Targets using emergent target mensuration systems.
- Developed TTP defining the effectiveness of EA-6B Jamming on Anti-Ship Missiles and proper employment of such systems.
- Established TTP for Torpedo Employment in a Korean geographic area in support of the current Operations (Op) plan.
- Established TTP for Mine Counter Measure Reconnaissance Tactics.
- Developed TTP for employment of the Minehunter Coastal (MHC) Dyad Influence Sweeping system.
- Established and published the TTP for Preemptive Launch of Infrared (IR) Decoys in a hostile landing zone.
- Developed TTP for employment of the P-3 in a Naval Surface Fires Supporting role.
- Developed TTP for employment of E-2C II as an Overland Surface Detection and Tracking asset.

FY 2003 PLANS:

- Develop TTP for Effectiveness of Heliborne machine guns against small craft.
- Develop TTP for Laser Guided Bombing through the weather tactics.
- Develop TTP for S-3B(Viking) SLAM-ER missile(AGM-84F) launch tactics.
- Develop TTP to more effectively utilize submarine launched torpedoes in specific geographic areas.
- Develop TTP for the utilization of High Frequency (HF) Passive Engagement.
- Develop TTP to employ all multi-static (or bi-static) active acoustic sonar systems within the fleet.
- Develop a matrix of Ship Mine Counter Measures (SMCM) systems capabilities versus exploited foreign mines.
- Develop TTP for the employment the F-14B's ALR-67 radar warning receiver (RWR) with ASPJ antennas and improved sensors.

FY 2004 PLANS:

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605155N

PROGRAM ELEMENT TITLE: Fleet Tactical Development
and Evaluation

Project Number: R0151

Project Title: Intertype Tactical
Development and
Evaluation

- Develop TTP to govern the Tactical and Operational Utility of the Royal Australian Navy's High-Speed Lighterage/Theater Support Vessel.
- Develop TTP for utilization of Joint Strike Fighter (JSF) and MV-22 with ARG Operations.
- Develop TTP for Torpedo Selection and Employment.
- Develop TTP for Advanced Seal Delivery System Tactics using a Nuclear Submarine (ASDS-SSN) Employment Tactics.
- Develop TTP for Surface Warfare Tactical Decision Aid.

FY 2005 PLANS:

- Develop TTP to enhance ASDS-SSN Employment Tactics.
- Develop TTP for employment of New Inventory CV(N) Force Protection Weapons.
- Develop TTP for Tactical Employment of Underwater Sonar (Active/Passive) AN/BQQ-10 Sonar System.
- Develop TTP for Preemptive Launch of IR Expendable Decoys by Helicopters to Defeat IR Manpad Threat.
- Develop TTP for Deadeye Wheel Attack Gameplan for Paveway II Weapons.
- Develop TTP for Long-Range Advanced Capability MK-48 Torpedo (ADCAP) upgrade.

	FY 02	FY 03	FY 04	FY 05
Changing Threat Scenarios to Improve and Measure Force Readiness	849	1,100	567	339

The current asymmetric mode of warfare, as evidenced by the attacks on USS Cole and other US interests, requires a detailed look and development of tactics and procedures to provide naval forces protection, afloat and ashore. These projects provide that tactical advantage to Naval forces for operating continuously from an expanded and secure maneuver area on both land and sea. Additionally, these tactics, techniques and procedures provide the means to do that and thus assure freedom of access throughout the battle space.

FY 2002 ACCOMPLISHMENTS:

- Developed TTP for defending against Small Boat Attacks using Swarm tactics with an Armed Helo.
- Established TTP for Amphibious Assault Ships (LHA/LHD) Air Control Tactics in a Marine Expeditionary Force (MEF) environment.
- Established TTP for Helicopter Intercept of Low Slow Flyer.
- Developed TTP to defend naval shore establishments against terrorist attacks.
- Developed TTP to defend naval port facilities against terrorist attacks.
- Developed TTP to defend submarines in foreign ports against terrorist attacks.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605155N

PROGRAM ELEMENT TITLE: Fleet Tactical Development
and Evaluation

Project Number: R0151

Project Title: Intertype Tactical
Development and
Evaluation

FY 2003 PLANS:

- Develop TTP to formalize procedures for AEGIS surface combatants performing High Value Airborne Asset Protection (HVAAP).
- Develop TTP for the use of Thermal Imaging Sensor Systems (TISS) in counter drug operations.
- Develop TTP for Submarine Mine Vulnerability.
- Develop TTP for Mine Counter Measures (MCM) in homeland defense.
- Develop TTP for Amphibious Ready Groups (ARG) to conduct long range raids for inserting Marines ahead of the main landing force.
- Develop TTP for evaluating the validity of the assault lane width for Amphibious assault craft working in a mined environment.
- Develop TTP for Explosive Ordnance Disposal (EOD) and Very Shallow Water (VSW) diver's susceptibility to exploited foreign mines.

FY 2004 PLANS:

- Develop TTP to Optimize Amphibious Assault Craft Lane Width in a Mined Environment.
- Develop TTP for Organic Mine Counter-Measures (OMCM) Helicopters Assigned to Amphibious Ready Groups.
- Develop TTP for Amphibious Operations in a Chemical/Biological Threat Environment.
- Develop TTP for utilization of Mine Warfare and Environmental Decision Aid Library (Medal) to the Advance Force Commander.
- Develop TTP for MCM Operations in Homeland Defense.

FY 2005 PLANS:

- Develop TTP for Amphibious Assault through a Mined Very Shallow Water (VSW) Environment.
- Develop TTP for Explosive Ordnance Disposal (EOD) and Very Shallow Water (VSW) Diver Susceptibility.

C. OTHER PROGRAM FUNDING SUMMARY: Not Applicable.

D. ACQUISITION STRATEGY: Not Applicable.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605804N
PROGRAM ELEMENT TITLE: Technical Information Services

COST: (Dollars in Thousands)

PROJECT NUMBER/TITLE	FY 2002 ACTUAL	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
R0835 Technical Information Services	878	907	726	799	820	988	1,007	1,024
R2296 Federal Laboratory Consortium	288							
R2969 Supply Chain Management	1,921							
R2970 Commercialization of Adv Tech Prog	4,922	6,839						
R9093 Lean Pathways Proj Expansion & Distance Learning	2,118	3,737						
R9261 Navy Advanced Education Demonstration	0	976						
R9262 Joint Information Technology Center	0	5,861						
Total	10,127	18,320	726	799	820	988	1,007	1,024

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Technical Information Services program provides support to achieve affordability in the development of Navy systems and reduce life-cycle costs through the facilitation of advanced technology associations between U.S. industry and the Navy. The goals for project R0835 are met through the Navy leverage of the industry independent research and development (R&D) science and technology base, information exchange on Navy research and development requirements and advanced acquisition information through the Navy Acquisition Research and Development Information Center (NARDIC) and the Navy Potential Contractor Program (NPCP), and the transfer of 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).

This program 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.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605804N
PROGRAM ELEMENT TITLE: Technical Information Services

B. PROGRAM CHANGE SUMMARY:

	FY 2002	FY 2003	FY 2004	FY 2005
FY 2003 President's Submission:	10,161	929	959	986
Congressional Plus-ups		17,825		
Cong. Rescissions/Adjustments/Undist. Reductions	239	-215		
SBIR Reduction	-255			
Post-Production R&D Continuation			-113	-143
Execution Adjustment	-18			
R&D Offset			-92	-17
Inflation Adjustments		-219	-18	-20
Efficiencies at NWCF Activities			-6	-6
NWCF Rate Adjustment			-4	-1
FY 2004/2005 President's Budget Submission	10,127	18,320	726	799

PROGRAM CHANGE SUMMARY EXPLANATION:

Schedule: Not applicable
Technical: Not applicable

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

Project Number: R0835

PROGRAM ELEMENT TITLE: Technical Information Services

Project Title: Tech Info Serv

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
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R0835 Technical Information Services

	878	907	726	799	820	988	1,007	1,024
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A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Technical Information Services program provides support to achieve affordability in the development of Navy systems and reduce life-cycle costs through the facilitation of advanced technology associations between U.S. industry and the Navy. The goals for project R0835 are met through the Navy leverage of the industry independent research and development (R&D) science and technology base, information exchange on Navy research and development requirements and advanced acquisition information through the Navy Acquisition Research and Development Information Center (NARDIC) and the Navy Potential Contractor Program (NPCP), and the transfer of 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).

This program 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.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 02	FY 03	FY 04	FY 05
Commercialization of Navy-Developed Technologies	344	278	93	109

Commercialization of Navy-developed technologies supports the transfer of appropriate Navy-developed innovative concepts and inventions to the private sector for purposes of military and dual-use commercialization (Public Law 96-480, Federal Technology Transfer Act of 1986).

FY 2002 ACCOMPLISHMENTS:

- Conducted tests, developed models, and performed market evaluations supporting commercialization of three Navy-developed technologies: Oral medications for hearing loss, novel electrical power cooling techniques, and a high-performance, conversion coating for aluminum.
- Planned the 2002 DoD Technology Transfer Integrated Planning Team Workshop.

FY 2003 PLANS:

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

Project Number: R0835

PROGRAM ELEMENT TITLE: Technical Information Services

Project Title: Tech Info Serv

- Conduct tests, develop models, and perform market evaluations supporting commercialization of Navy-developed technologies for military and dual-use applications.

FY 2004 PLANS:

- Conduct tests, develop models, and perform market evaluations supporting commercialization of Navy-developed technologies for military and dual-use applications.

FY 2005 PLANS:

- Conduct tests, develop models, and perform market evaluations supporting commercialization of Navy-developed technologies for military and dual-use applications.

	FY 02	FY 03	FY 04	FY 05
Leverage of Industry R&D	320	409	521	588

Leverage of Industry R&D supports studies, workshops, conferences, and other activities that facilitate advanced technology associations between U.S. industry and the Navy.

FY 2002 ACCOMPLISHMENTS:

- Initiated a study to define the overlapping technical areas between DON and industry in wide band gap materials.
- Conducted a workshop on disruptive technologies to address effective management of different types of technology.
- Conducted a workshop on improving the technology insertion models to increase understanding of the transition processes in a DON acquisition activity.
- Planned and conducted the 2002 Naval-Industry R&D Partnership Conference to heighten industry awareness of Navy and Marine Corps Systems Commands technology and development needs. Focus topics included technology needs of naval programs, transformational technologies, evolutionary acquisition and more. Business to Business and Government to Business Marketplaces at the conference provided a forum for informal one-to-one discussions. A Technology Showcase facilitated the technology exchanges.
- Supported the Industrial Research and Development (IR&D) program by increasing awareness of Naval opportunities and of IR&D benefits.
- Conducted study of successful implementation by DON of technologies developed under IR&D.
- Maintained coordination efforts with Systems Commands, Program Executive Offices, Direct Reporting Program Managers, and Navy laboratories and warfare centers to leverage industry research and development efforts to meet Navy performance/affordability needs.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

Project Number: R0835

PROGRAM ELEMENT TITLE: Technical Information Services

Project Title: Tech Info Serv

FY 2003 PLANS:

- Conduct studies, workshops, conferences, and other activities that facilitate advanced technology associations between U.S. industry and the Navy.

FY 2004 PLANS:

- Conduct studies, workshops, conferences, and other activities that facilitate advanced technology associations between U.S. industry and the Navy.

FY 2005 PLANS:

- Conduct studies, workshops, conferences, and other activities that facilitate advanced technology associations between U.S. industry and the Navy.

	FY 02	FY 03	FY 04	FY 05
Technical Information Services	214	220	112	102

Technical Information Services supports information exchange on Navy research and development requirements and advanced acquisition information and information technology tools necessary to provide management and oversight of the DON technology transfer program.

FY 2002 ACCOMPLISHMENTS:

- Supported Navy Acquisition Research and Development Information Center (NARDIC) as the primary outreach resource to the private sector, including development and maintenance of electronic bulletin boards residing on the World Wide Web.
- Assisted approximately 40 small companies to participate in the Naval Potential Contractor Program.
- Initiated development of an on-line job performance support tool for DON technology transfer professionals.
- Supported and maintained the networked tracking of technology transfer efforts required for Congressional reporting.

FY 2003 PLANS:

- Support NARDIC as the primary outreach resource to the private sector, including development and maintenance of electronic bulletin boards residing on the World Wide Web.
- Assist small companies to participate in the Naval Potential Contractor Program.
- Complete development of an on-line job performance support tool for DON technology transfer professionals.
- Initiate an on-line training program for DON technology transfer professionals.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

Project Number: R0835

PROGRAM ELEMENT TITLE: Technical Information Services

Project Title: Tech Info Serv

- Support and maintain the networked tracking of technology transfer efforts required for Congressional reporting.

FY 2004 PLANS:

- Support NARDIC as the primary outreach resource to the private sector, including development and maintenance of electronic bulletin boards residing on the World Wide Web.
- Assist small companies to participate in the Naval Potential Contractor Program.
- Support and maintain on-line job performance support tool for DON technology transfer professionals.
- Support and maintain on-line training program for DON technology transfer professionals.
- Support and maintain the networked tracking of technology transfer efforts required for Congressional reporting.

FY 2005 PLANS:

- Support NARDIC as the primary outreach resource to the private sector, including development and maintenance of electronic bulletin boards residing on the World Wide Web.
- Assist small companies to participate in the Naval Potential Contractor Program.
- Support and maintain on-line job performance support tool for DON technology transfer professionals.
- Support and maintain on-line training program for DON technology transfer professionals.
- Support and maintain the networked tracking of technology transfer efforts required for Congressional reporting.

C. OTHER PROGRAM FUNDING SUMMARY: Not applicable

D. ACQUISITION STRATEGY: Not applicable

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

PROGRAM ELEMENT TITLE: Technical Information Services

Project Number: Various

Project Title: Congressional
Plus-ups

Congressional Plus-Ups:

R2969	FY 02	FY 03
Supply Chain Management	1,921	N/A

Improve the affordability of Navy Acquisition programs by increasing the efficiency of the supply chain networks through the Navy's Supply Chain Practices for Affordable Navy Systems (SPANS) project.

R2970	FY 02	FY 03
Commercialization of Adv Tech Prog	4,922	6,839

Develop and implement an innovative, cost-effective, capability to identify, develop and commercialize cutting edge technologies from any source - academia, private industry and government facilities - which address Naval requirements.

R9093	FY 02	FY 03
Lean Pathways Proj Expansion & Distance Learning	2,118	3,737

Improve the capability of the Navy's sub-tier suppliers by introducing them to Lean Manufacturing practices.

R9261	FY 02	FY 03
Navy Advanced Education Demonstration	0	976

This effort proposes a joint service demonstration project to develop curriculum materials, test specific course offerings and evaluate distributed education in the delivery of relevant postgraduate degrees for the Department of Defense and the U.S. Navy.

R9262	FY 02	FY 03
Joint Information Technology Center	0	5,861

Enables DoD, through the Joint Information Technology Center (JITC) in Hawaii, to continue integrating and implementing logistics and personnel initiatives underway, including medical surveillance, logistics systems, business objects and decision support systems.

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EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6					R-1 ITEM NOMENCLATURE 0605853N/Management, Technical and International Support			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	28.467	50.698	30.236	29.712	32.864	33.759	34.884	34.628
S3039 CHENG	12.396	32.270	12.432	11.549	14.295	14.804	15.573	14.963
R0149 International Cooperative RDT&E	1.654	1.859	1.889	1.975	2.021	2.063	2.101	2.140
R9263 Combating Terrorism Wargaming Research	0.000	1.172	0.000	0.000	0.000	0.000	0.000	0.000
R1767 Naval War College/Center for Naval Warfare Studies	3.025	2.951	3.014	3.062	3.125	3.179	3.239	3.299
X2221 Assessment Program	11.392	12.446	12.901	13.126	13.423	13.713	13.971	14.226
Quantity of RDT&E Articles	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Defense Emergency Response Funds (DERF) Funds: N/A								
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:								
<p>Project S3039 funds the Assistant Secretary of the Navy for Research, Development and Acquisition, ASN (RDA), Chief Engineer (CHENG) to develop and implement architecture-based systems engineering processes, methods and tools that assure integrated and interoperable systems are delivered to the fleet. These products and services also directly support Chief of Naval Operations (N7/N70) Navy Capability Plans as part of the Navy Planning, Programming, and Budgeting System (PPBS) process. This project provides the mission-oriented technical basis to address acquisition issues for Department of Navy combat systems, weapon systems, and command, control, communication, computer, intelligence, surveillance and reconnaissance (C4ISR) programs that must operate as a family-of-systems (FoS) or system-of-systems (SoS) to deliver mission capability. The focus is on identifying the functions, relationships, and connections between systems at the unit/force level and across warfare mission areas and components. System and technical architectures are developed to provide the framework for making engineering decisions by mission capability at the FoS/SoS levels. Large-scale systems engineering processes support consistent engineering and investment decision-making across Navy requirements generation, PPBS, and acquisition processes between the Chief of Naval Operations and ASN (RDA). Standards, policies and guidelines provides DoN leadership in the implementation of Anti-Tamper, Joint Technical Architecture and Software Engineering/Technical Data standards. This project includes the development and implementation of the management, engineering and networking tools for the Naval Collaborative Engineering Environment where all RDA CHENG integration and interoperability information will be managed electronically to enable collaboration and decision support among Fleet organizations, Systems Commands, Program Executive Offices and Program Managers, prime contractors, Warfare Sponsors and Comptroller organizations. This effort was transferred from the Operations and Maintenance appropriation February 2002. NAVY SINGLE INTEGRATED AIR PICTURE FUNDING IS TRANSFERRED TO PE 0603879N STARTING IN FY 2004.</p> <p>Project R0149 provides program management, execution, and support to implement a broad range of cooperative naval research and development (R&D) initiatives with allied and friendly nations. Potential cooperative programs are pursued to fulfill established operational requirements, enhance U.S./allied interoperability and standardization, obtain unique foreign technologies, and reduce U.S. developmental and production costs.</p> <p>Project R1767 provides Naval War College (NWC) research activities that serve as a focal point, stimulus and major source of strategic and campaign thought within the Navy. These efforts generate strategy and campaign alternatives, provide for evaluation through wargaming methodologies and provide recommendations to the Chief of Naval Operations (CNO) and fleet commanders regarding the formulation and execution of strategy.</p>								

R-1 SHOPPING LIST - Item No.154

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6	R-1 ITEM NOMENCLATURE Program Element (PE) No. and Name	
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION (Cont.): Project R9263, Combatting Terrorism Wargaming Research: The Naval War College, Newport, RI will conduct a series of wargames and research projects to identify potential terrorist threats and develop scenarios to counter those threats. Project X2221, Assessment Program, provides analytical and management support to the Planning segment of the Navy Planning, Programming and Budgeting System (PPBS) , analytically-based decision recommendations to Chief of Naval Operations (CNO) and assists in structuring follow-on OPNAV analyses. This project supports the independent analysis of annual Mission Capability Packages (MCP), Concept of Operations (CONOPS) analysis, and Chief of Naval Operations Program Analysis Memoranda (CPAM) assessments, which provide analytical underpinnings/basis for programmatic decisions of the Navy's top leadership regarding the integration of all Navy warfare and support requirements. This program provides the Navy input to the Vice Chairman Joint Chiefs of Staff (VCJCS) led Joint Warfighting Capability Assessment (JWCA) process, Joint Requirements Oversight Council (JROC), Joint Requirements Board (JRB), and Joint Review Panel (JRP). 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.		

R-1 SHOPPING LIST - Item No.154

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Support			PROJECT NUMBER AND NAME S3039 CHENG			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	12.396	32.270	12.432	11.549	14.295	14.804	15.573	14.963
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Project S3039 funds the Assistant Secretary of the Navy for Research, Development and Acquisition, ASN (RDA), Chief Engineer (CHENG) to develop and implement architecture-based systems engineering processes, methods and tools that assure integrated and interoperable systems are delivered to the fleet. These products and services also directly support Chief of Naval Operations (N7/N70) Navy Capability Plans as part of the Navy Planning, Programming, and Budgeting System (PPBS) process. This project provides the mission-oriented technical basis to address acquisition issues for Department of Navy combat systems, weapon systems, and command, control, communication, computer, intelligence, surveillance and reconnaissance (C4ISR) programs that must operate as a family-of-systems (FoS) or system-of-systems (SoS) to deliver mission capability. The focus is on identifying the functions, relationships, and connections between systems at the unit/force level and across warfare mission areas and components. System and technical architectures are developed to provide the framework for making engineering decisions by mission capability at the FoS/SoS levels. Large-scale systems engineering processes support consistent engineering and investment decision-making across Navy requirements generation, PPBS, and acquisition processes between the Chief of Naval Operations and ASN (RDA). Standards, policies and guidelines provides DoN leadership in the implementation of Anti-Tamper, Joint Technical Architecture and Software Engineering/Technical Data standards. This project includes the development and implementation of the management, engineering and networking tools for the Naval Collaborative Engineering Environment where all RDA CHENG integration and interoperability information will be managed electronically to enable collaboration and decision support among Fleet organizations, Systems Commands, Program Executive Offices and Program Managers, prime contractors, Warfare Sponsors and Comptroller organizations. This effort was transferred from the Operations and Maintenance appropriation February 2002.

R-1 SHOPPING LIST - Item No.154

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME S3039 CHENG

B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Architecture Development	3.482	7.224	4.400	4.100

FY 2002 ACCOMPLISHMENTS:

Developed initial architectures for six Mission Capability Packages (MCP) in the FY 2004/2009 Program Objectives Memoranda (POM 04) and FY 2005 Program Review (PR 05) for Strike (STK); Theater Air and Missile Defense (TAMD), Undersea Warfare (USW), Battle Management Command and Control (BFC2); Information, Surveillance and Reconnaissance (ISR); and Expeditionary Warfare (EXW). Developed system and technical architectures that described the physical, functional and organizational relationships among systems/programs within each MCP. Assessed and benchmarked each MCP architecture to support POM 04 and PR 05 decisions.

FY 2003 PLAN:

Continue and expand architecture development to new mission areas with emphasis on establishing family of systems/system of systems (FoS/SoS) acquisition portfolios. Initiate development of architecture simulation models to conduct performance and behavior assessments of FY02 architecture products and build resultant acquisition strategies. Update system interface mapping, data and connectivity assessments for these mission areas.

FY 2004 PLAN:

Update system and technical architectures. Complete the architecture simulation models and begin the interoperability assessment.

FY 2005 PLAN:

Update system and technical architectures. Continue the interoperability assessment.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME S3039 CHENG

B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Naval Collaborative Engineering Environment	2.011	3.170	1.700	1.500

FY 2002 ACCOMPLISHMENTS:

Developed the decision support capability to support development of Mission Capability Packages for FY 2004/2005 Program Objective Memoranda (POM 04) and FY 2005 Program Review (PR 05). Prototyped and demonstrated the engineering environment and related integrated databases for Strike (STK), Theater Air Missile Defense(TAMD), Undersea Warfare (USW) systems and Battle Force Command and Control (BFC2) systems.

FY 2003 PLAN:

Provide interactive engineering design, interactive analysis of design alternatives, data management and configuration control for STK, TAMD, USW, BFC2, Expeditionary Warfare (EXW) and Intelligence, Reconnaissance and Surveillance (ISR) warfare area architectures, System Performance Documents (SPD) for Surface Combant Land Attack and Anti- Ship Cruise Missile Defense acquisition portfolios and risk assessments.

FY 2004 PLAN:

Provide configuration management and control for technical architectures, and SPDs. Expand collaborative engineering capability to support Naval Fires Network and Air Interdiction acquisition portfolios. Maintain decision support capability and integrated databases.

FY 2005 PLAN:

Provide configuration management and control system and technical architectures, and SPDs. Maintain decision support capability and integrated databases.

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 5 of 29)

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME S3039 CHENG

B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Large Scale Systems Engineering Environment	3.074	6.107	3.332	3.149

FY 2002 ACCOMPLISHMENTS:

Conducted systems analyses and performance assessments on Strike (STK), Theater Air Missile Defense(TAMD), and Undersea Warfare (USW) mission areas for FY 2004/2009 Program Objective Memoranda (POM 04) and FY 2005 Program Review (PR 05) decision recommendations. Developed the knowledge base required to support integration and interoperability risk assessments of STK, TAMD, and USW systems including a working definition of interoperability metrics and operational analysis processes to relate these metrics to warfighting costs and operational performance.

FY 2003 PLAN:

Establish a Naval Systems Engineering Team (NSET) to initiate two system-of-system and family-of-system (SoS/FoS) acquisition portfolios: Surface Combatant Land Attack, and Anti-Ship Cruise Missile Defense. Establish the methods and tools to allow these teams to develop and review System Performance Documents (SPD); risk assessments; command, control, communication, computer and intelligence support plans (C4ISP) and test and evaluation master plans (TEMP).

FY 2004 PLAN:

Continue work with FY 03 NSET and initiate one to two additional SoS/FoS acquisition portfolios: Naval Fires Network and Air Interdiction. Update the integration and interoperability knowledge base and conduct risk assessments.

FY 2005 PLAN:

Continue work with FY 04 NSET and initiate one to two additional SoS/FoS acquisition portfolios. Update the integration and interoperability knowledge base and conduct risk assessments.

R-1 SHOPPING LIST - Item No.154

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME S3039 CHENG

B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Core	3.829	4.769	3.000	2.800

FY 2002 ACCOMPLISHMENTS:

Provide engineering and technical staff to direct integration and interoperability priorities across Navy and Marine Corps Systems Commands, laboratories, and field activities. Coordinate integration and interoperability priorities and issue resolution with OPNAV and Fleet Representatives. Develop and implement integration and interoperability policy and standards.

FY 2003 PLAN:

Provide engineering and technical staff to direct integration and interoperability priorities across Navy and Marine Corps Systems Commands, laboratories, and field activities. Coordinate integration and interoperability priorities and issue resolution with OPNAV and Fleet Representatives. Develop and implement integration and interoperability policy and standards.

FY 2004 PLAN:

Provide engineering and technical staff to direct integration and interoperability priorities across Navy and Marine Corps Systems Commands, laboratories, and field activities. Coordinate integration and interoperability priorities and issue resolution with OPNAV and Fleet Representatives. Develop and implement integration and interoperability policy and standards.

FY 2005 PLAN:

Provide engineering and technical staff to direct integration and interoperability priorities across Navy and Marine Corps Systems Commands, laboratories, and field activities. Coordinate integration and interoperability priorities and issue resolution with OPNAV and Fleet Representatives. Develop and implement integration and interoperability policy and standards.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME S3039 CHENG

B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Single Integrated Air Picture - Tier 2	0	11.000	0	0

FY 2003 PLAN:

Design reference algorithms for priority command and control systems to develop engineering solutions to implement recommended Block 1 and Block 2 changes in Navy software and processing equipment. Initiate tests, verify and validate Navy models and simulations for joint use, and conduct analysis to implement standards and assess battle group performance. Initiate performance-based engineering analysis of the functional and performance allocated baselines on approved and proposed changes. Provide design, cost, and benefit trades, metrics and lessons learned.

FY 2004 PLAN

Funds transferred.

FY 2005 PLAN

Funds transferred.

R-1 SHOPPING LIST - Item No.154

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UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME S3039 CHENG			
C. PROGRAM CHANGE SUMMARY:					
Funding:		FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget: (FY 03 Pres Controls)		11.561	33.063	15.367	15.746
Current BES/President's Budget (FY04/05 OSD/OMB Controls)		12.396	32.270	12.432	11.549
Total Adjustments		0.835	-0.793	-2.935	-4.197
Summary of Adjustments					
Program adjustments				8.865	7.872
Miscellaneous adjustments		0.867	-0.762	-0.494	-0.482
SBIR		-0.032			
Rates				-0.006	0.013
SIAP transfer			-0.031	-11.300	-11.600
Subtotal		0.835	-0.793	-2.935	-4.197
Schedule: "Not Applicable."					
Technical: "Not Applicable."					

R-1 SHOPPING LIST - Item No.154

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME S3039 CHENG
D. OTHER PROGRAM FUNDING SUMMARY: <u>Line Item No. & Name</u> PE0603582N Combat Systems Integration PE0603879N Single Integration Air Picture Systems Engineering PE0604231N Tactical Command System		

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Support			PROJECT NUMBER AND NAME R0149 International Cooperative RDT&E			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	1.654	1.859	1.889	1.975	2.021	2.063	2.101	2.140
RDT&E Articles Qty								

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 (R&D) initiatives with allied and friendly nations. Potential cooperative programs are pursued to fulfill established operational requirements, enhance U.S./allied interoperability and standardization, obtain unique foreign technologies, and reduce U.S. developmental and production costs. Such efforts result in:

1. Development and negotiation of approximately 25 International RDT&E Agreements annually with allied and friendly nations.
2. Execution of over 300 information exchange annexes.
3. Participation in armaments cooperation for a including the Conference of NATO Armaments Directors groups (e.g., the NATO Naval Armaments Group), Senior National Representative (SNR) meetings, the Technical Cooperative Program (TTCP) and Scientific Committee National Representatives meetings.
4. Participation in the Engineering and Scientist Exchange Program (ESEP).

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Exhibit R-2a, RDTE Project Justification
(Exhibit R-2a, page 11 of 29)

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EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2003
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME R0149 International Cooperative RDT&E
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B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
DoN Participation	1.654	1.859	1.889	1.975

Brief Description of DoN Participation.

FY 2002 ACCOMPLISHMENTS:

Continued to support Department of Defense (DoN) participation at Senior National Representative (SNR) Conferences with allies for harmonization of requirements and identification of potential collaboration R&D projects.

Continued to support DoN participation in U.S./allied data exchange conferences to identify foreign technologies and Research and Development (R&D) projects in which the Navy may desire to collaborate, as well as on-going efforts to initiate/revise/terminate Data Exchange Agreements (DEAs) to target new technologies and expand, where appropriate, to include exchanges with Former Soviet Union (FSU) countries.

Continued to update and maintain the DoN data bases for drafting, negotiating, managing and tracking of proposed International Agreements (IAs) for "high leverage/high payoff" R&D technology base cooperative projects with key allies and friendly nations. Provided support to Acquisition Integrated Product Team (IPTs) in evaluating international cooperative alternatives in development of DON programs as well as support to the Office of Secretary of Defense (OSD) International Cooperative Opportunities Group (ICOGs) regarding DON requirements and initiatives.

Navy participation in the Engineering and Scientist Exchange Program (ESEP) is approximately two scientists/engineers. Continued to conduct post-assignment analysis of scientists/engineers to better target assignments with emerging technologies and programs at foreign research establishments.

FY 2003 PLANS:

Continue to support DoN participation at SNR Conferences with allies for harmonization of requirements and identification of potential collaborative R&D projects.

Continue to support DoN participation in U.S./allied data exchange conferences to identify foreign technologies and R&D projects in which the Navy may desire to collaborate as well as on-going efforts to initiate/revise/terminate DEAs to target new technologies and expand, where appropriate, to include exchanges with FSU countries.

Continue to update and maintain the DoN data bases for drafting, negotiating, managing and tracking of proposed IAs for "high leverage/high payoff" R&D technology base cooperative projects with key allies and friendly nations. Provide support to Acquisition IPTs in evaluating international cooperative alternatives in development of DON programs as well as support to OSD ICOGs regarding DON requirements and initiatives.

Increase the level of Navy participation in the ESEP to approximately four scientists/engineers. Continue to conduct post-assignment analysis of scientists/engineers to better target assignments with emerging technologies and programs at foreign research establishments.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME R0149 International Cooperative RDT&E

B. Accomplishments/Planned Program (Cont.)

FY 2004 PLANS:

Continue to support DoN participation at SNR Conferences with allies for harmonization of requirements and identification of potential collaborative R&D projects.
Continue to support DoN participation in U.S./allied data exchange conferences to identify foreign technologies and R&D projects in which the Navy may desire to collaborate as well as on-going efforts to initiate/revise/terminate Data Exchange Agreement (DEAs) to target new technologies and expand, where appropriate, to include exchanges with FSU countries.
Continue to update and maintain the DoN databases for drafting, negotiating, managing, and tracking of proposed IAs for "high leverage/high payoff" R&D technology base cooperative projects with key allies and friendly nations. Provide support to Acquisition IPTs in evaluating international cooperative alternatives in development of DoN programs as well as support to OSD ICOGs regarding DoN requirements and initiatives.
Maintain a level of Navy participation in the ESEP at approximately four scientists/engineers. Continue to conduct post-assignment analysis of scientists/engineers to better target assignments with emerging technologies and programs at foreign research establishments.

FY 2005 PLANS:

Continue to support DoN participation at SNR conferences with allies for harmonization of requirements and identification of potential collaborative R&D projects.
Continue to support DoN participation in U.S./allied data exchange conferences to identify foreign technologies and R&D projects in which the navy may desire to collaborate as well as on-going efforts to initiate/revise/terminate DEAs to target new technologies and expand, where appropriate, to include exchanges with FSU countries.
Continue to update and maintain the DoN databases for drafting, negotiating, managing, and tracking of proposed IAs for "high leverage/high payoff" R&D technology base cooperative projects with key allies and friendly nations. Provide support to Acquisition IPTs in evaluating international cooperative alternatives in development of DoN programs as well as support to OSD ICOGs regarding DoN requirements and initiatives.
Maintain a level of Navy participation in the ESEP at approximately four scientists/engineers. Continue to conduct post-assignment analysis of scientists/engineers to better target assignments with emerging technologies and programs at foreign research establishments.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME R0149 International Cooperative RDT&E			
C. PROGRAM CHANGE SUMMARY:					
Funding:		FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget: (FY 03 Pres Controls)		1.723	1.903	1.937	2.027
Current BES/President's Budget (FY04/05 OSD/OMB Controls)		1.654	1.859	1.889	1.975
Total Adjustments		-0.069	-0.044	-0.048	-0.052
Summary of Adjustments					
Execution Adjustments		-0.034	0.000	0.000	0.000
Cong. Rescissions/Adjustments/Undist. Reductions		-0.035	-0.022	0.000	0.000
Pay Raise/Inflation Adjustments		0.000	-0.022	-0.045	-0.049
Efficiencies at NWCF Activities		0.000	0.000	-0.003	-0.003
Subtotal		-0.069	-0.044	-0.048	-0.052
Schedule:					
Not Applicable.					
Technical:					
Not Applicable.					

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME R0149 International Cooperative RDT&E
<p>D. OTHER PROGRAM FUNDING SUMMARY:</p> <p><u>Line Item No. & Name</u> Navy Related RDT&E: PE 0603790N (NATO Cooperative Research and Development)</p> <p>NON-Navy Related RDT&E PE 0605130D (Foreign Comparative Testing)</p>		

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Support			PROJECT NUMBER AND NAME R1767 Naval War College/Strategic Studies Support			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	3.025	2.951	3.014	3.062	3.125	3.179	3.239	3.299
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Naval War College (NWC) research activities serve as a focal point, stimulus, and major source of strategic and campaign thought within the Navy. These efforts generate strategy and campaign alternatives, provide for evaluation through wargaming methodologies, and provide recommendations to the Chief of Naval Operations (CNO) and fleet commanders regarding the formulation and execution of strategy.

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Exhibit R-2a, RDTEN Project Justification
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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME R1767 Naval War College/Strategic Studies Support

B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Strategic Studies	1.787	1.704	1.734	1.750

Brief Description of Strategic Studies. NWC conducts research in strategic studies in response to taskings from the Secretary of the Navy (SECNAV), CNO and combatant commanders, and hosts the activities of the CNO's Strategic Studies Group (SSG) which is a select group of Senior Naval officers appointed annually by the CNO to conduct an in-depth study in a subject selected by the CNO.

FY 2002 ACCOMPLISHMENTS:

Conducted strategic studies in response to SECNAV, CNO and combatant commander tasking in such areas as maritime strategy, decision support, and direct fleet support.

FY 2003 PLANS:

Continue to conduct strategic studies in response to SECNAV, CNO and combatant commander tasking in such areas as maritime strategy, decision support, and direct fleet support.

FY 2004 PLANS:

Continue to conduct strategic studies in response to SECNAV, CNO and combatant commander tasking in such areas as maritime strategy, decision support, and direct fleet support.

FY 2005 PLANS:

Continue to conduct strategic studies in response to SECNAV, CNO and combatant commander tasking in such areas as maritime strategy, decision support, and direct fleet support.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME R1767 Naval War College/Strategic Studies Support

B. Accomplishments/Planned Program (Cont.)

	FY 02	FY 03	FY 04	FY 05
Naval Wargaming Support	1.120	1.127	1.158	1.188

Brief Description of Naval Wargaming Support. As the nation's premier defense wargaming center, NWC conducts 50 - 60 major wargames annually, culminating in the annual Global War Game which involves several hundred participants from DoD, other government agencies and academe exploring a major scenario involving military, political and economic impacts.

FY 2002 ACCOMPLISHMENTS:

Conducted major wargames culminating in Global War Game '02.

FY 2003 PLANS:

Continue to conduct major wargames culminating in annual Global War Game, including maintenance and upgrade of Enhanced Naval Wargaming System and implementation of distributed gaming capability for wargames and Fleet Battle Experiments.

FY 2004 PLANS:

Continue to conduct major wargames culminating in annual Global War Game, including maintenance and upgrade of Enhanced Naval Wargaming System and implementation of distributed gaming capability for wargames and Fleet Battle Experiments.

FY 2005 PLANS:

Continue to conduct major wargames culminating in annual Global War Game, including maintenance and upgrade of Enhanced Naval Wargaming System and implementation of distributed gaming capability for wargames and Fleet Battle Experiments.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME R1767 Naval War College/Strategic Studies Support

B. Accomplishments/Planned Program (Cont.)

	FY 02	FY 03	FY 04	FY 05
NWC Student Research Projects	0.118	0.120	0.122	0.124

Brief Description of NWC Student Research Projects. Selected, top-performing NWC students are provided the opportunity to conduct advanced research projects under the direction of NWC research faculty, including extended research beyond the normal academic year provided under the Mahan Scholars Program.

FY 2002 ACCOMPLISHMENTS:
 Provided for selected NWC students to conduct advanced research projects, including expanded opportunities for advanced research under the Mahan Scholars program.

FY 2003 PLANS:
 Continue to provide for selected NWC students to conduct advanced research projects, including expanded opportunities for advanced research under the Mahan Scholars program.

FY 2004 PLANS:
 Continue to provide for selected NWC students to conduct advanced research projects, including expanded opportunities for advanced research under the Mahan Scholars program.

FY 2005 PLANS:
 Continue to provide for selected NWC students to conduct advanced research projects, including expanded opportunities for advanced research under the Mahan Scholars program.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																																														
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME R1767 Naval War College/Strategic Studies Support																																															
<p>C. PROGRAM CHANGE SUMMARY: Not Applicable</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Funding:</th> <th style="text-align: right;">FY 2002</th> <th style="text-align: right;">FY 2003</th> <th style="text-align: right;">FY 2004</th> <th style="text-align: right;">FY 2005</th> </tr> </thead> <tbody> <tr> <td>Previous President's Budget: (FY 03 Pres Controls)</td> <td style="text-align: right;">2.633</td> <td style="text-align: right;">3.021</td> <td style="text-align: right;">3.086</td> <td style="text-align: right;">3.138</td> </tr> <tr> <td>Current BES/President's Budget (FY04/05 OSD/OMB Controls)</td> <td style="text-align: right;">3.025</td> <td style="text-align: right;">2.951</td> <td style="text-align: right;">3.014</td> <td style="text-align: right;">3.062</td> </tr> <tr> <td>Total Adjustments</td> <td style="text-align: right; border-top: 1px solid black;">0.392</td> <td style="text-align: right; border-top: 1px solid black;">-0.070</td> <td style="text-align: right; border-top: 1px solid black;">-0.072</td> <td style="text-align: right; border-top: 1px solid black;">-0.076</td> </tr> <tr> <td colspan="5" style="padding-left: 20px;">Summary of Adjustments</td> </tr> <tr> <td style="padding-left: 40px;">Execution Adjustments</td> <td style="text-align: right;">0.428</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> </tr> <tr> <td style="padding-left: 40px;">Cong. Rescissions/Adjustments/Undist. Reductions</td> <td style="text-align: right;">-0.036</td> <td style="text-align: right;">-0.035</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> </tr> <tr> <td style="padding-left: 40px;">Pay Raise/Inflation Adjustments</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">-0.035</td> <td style="text-align: right;">-0.072</td> <td style="text-align: right;">-0.076</td> </tr> <tr> <td style="padding-left: 40px;">Subtotal</td> <td style="text-align: right; border-top: 1px solid black;">0.392</td> <td style="text-align: right; border-top: 1px solid black;">-0.070</td> <td style="text-align: right; border-top: 1px solid black;">-0.072</td> <td style="text-align: right; border-top: 1px solid black;">-0.076</td> </tr> </tbody> </table> <p style="margin-top: 20px;">Schedule: Not Applicable.</p> <p style="margin-top: 20px;">Technical: Not Applicable.</p>					Funding:	FY 2002	FY 2003	FY 2004	FY 2005	Previous President's Budget: (FY 03 Pres Controls)	2.633	3.021	3.086	3.138	Current BES/President's Budget (FY04/05 OSD/OMB Controls)	3.025	2.951	3.014	3.062	Total Adjustments	0.392	-0.070	-0.072	-0.076	Summary of Adjustments					Execution Adjustments	0.428	0.000	0.000	0.000	Cong. Rescissions/Adjustments/Undist. Reductions	-0.036	-0.035	0.000	0.000	Pay Raise/Inflation Adjustments	0.000	-0.035	-0.072	-0.076	Subtotal	0.392	-0.070	-0.072	-0.076
Funding:	FY 2002	FY 2003	FY 2004	FY 2005																																													
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Current BES/President's Budget (FY04/05 OSD/OMB Controls)	3.025	2.951	3.014	3.062																																													
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Subtotal	0.392	-0.070	-0.072	-0.076																																													

R-1 SHOPPING LIST - Item No.154

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE:	February 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	R1767 Naval War College/Strategic Studies Support	
<p>D. OTHER PROGRAM FUNDING SUMMARY:</p> <p>Navy Related RDT&E: Not Applicable Non-Navy Related RDT&E: Not Applicable</p> <p>E. ACQUISITION STRATEGY:</p> <p>Not Applicable</p> <p>F. MAJOR PERFORMERS:</p> <p>Not Applicable</p>			

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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6					R-1 ITEM NOMENCLATURE Program Element (PE) No. and Name		0605853N/Mgmt, Tech. and Intl. Spt.	
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost								
Project Unit A Number/Title R9263/Combatting Terrorism Wargaming Research	N/A	1.172	N/A	N/A	N/A	N/A	N/A	N/A
<p>Defense Emergency Response Funds (DERF) Funds: Identify DERF funds for the program/project by either inserting a resource line or by using a footnote immediately below the resource summary.</p> <p>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Combatting Terrorism Wargaming Research: The Naval War College, Newport, RI will conduct a series of wargames and research projects to identify potential terrorist threats and develop scenarios to counter those threats.</p>								

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt			PROJECT NUMBER AND NAME X2221 Assessment Program			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	11.392	12.446	12.901	13.126	13.423	13.713	13.971	14.226
RDT&E Articles Qty	4	4	4	4				

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Project X2221, Assessment Program, provides analytical and management support to the Planning segment of the Navy Planning, Programming and Budgeting System (PPBS) , analytically-based decision recommendations to Chief of Naval Operations (CNO) and assists in structuring follow-on OPNAV analyses. This project supports the independent analysis of annual Mission Capability Packages (MCP), Concept of Operations (CONOPS) analysis, and Chief of Naval Operations Program Analysis Memoranda (CPAM) assessments, which provide analytical underpinnings/basis for programmatic decisions of the Navy's top leadership regarding the integration of all Navy warfare and support requirements. This program provides the Navy input to the Vice Chairman Joint Chiefs of Staff (VCJCS) led Joint Warfighting Capability Assessment (JWCA) process, Joint Requirements Oversight Council (JROC), Joint Requirements Board (JRB), and Joint Review Panel Board (JRP). 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.

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 23 of 29)

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME X2221 Assessment Program

B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Navy Standard Scenarios	0.877	0.225	0.230	0.232

FY 2002 ACCOMPLISHMENTS:
Continued to develop, update and maintain detailed level Navy Standard scenarios based on Defense Planning Guidance. Developed Alternative Scenarios in Support of Quadrennial Defense Review (QDR), Joint Studies, and Navy Resource Analyses.

FY 2003 PLANS:
Continue to develop, update and maintain detailed level Navy Standard scenarios based on Defense Planning Guidance. Develop Alternative Scenarios in Support of Quadrennial Defense Review (QDR), Joint Studies, and Navy Resource Analyses.

FY 2004 PLANS:
Continue to develop, update and maintain detailed level Navy Standard scenarios based on Defense Planning Guidance. Develop Alternative Scenarios in Support of Quadrennial Defense Review (QDR), Joint Studies, and Navy Resource Analyses.

FY 2005 PLANS:
Continue to develop, update and maintain detailed level Navy Standard scenarios based on Defense Planning Guidance. Develop Alternative Scenarios in Support of Quadrennial Defense Review (QDR), Joint Studies, and Navy Resource Analyses.

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME X2221 Assessment Program

B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Mission Capability Packages (MCP) Analysis Support	0.000	5.797	8.860	9.083
Integrated Warfare Architectures Support	7.228	2.613	0	0

FY 2002 ACCOMPLISHMENTS:
Continued Integrated Warfare Architectures (IWARs) support. Performed assessments and developed the Chief of Naval Operations Program Analysis Memoranda (CPAM). Areas of focus included Air Dominance; Deterrence; Force Structure; Infrastructure; Manpower and Personnel; Training and Education; Power Projection; Readiness; Sea Dominance; Sensor Management/Information Superiority; Sustainment; Technology. Provided Navy input to Joint Warfighting Capabilities Assessment (JWCA) and Joint Requirement Oversight Council (JROC) processes.

FY 2003 PLANS:
Mission Capability Packages (MCP) Analysis support. Perform analytically-based decision recommendations to CNO for both warfighting and support areas. Develop Balanced Investment Strategy recommendations and perform assessments and develop the Chief of Naval Operations Program Analysis Memoranda (CPAM). Areas of focus include Air Dominance; Force Structure; Infrastructure; Manpower and Personnel; Training and Education; Power Projection; Readiness; Sea Dominance; Sensor Management/Information Superiority; Sustainment; Technology. Provide Navy input to Joint Requirement Oversight Council (JROC) and JROC Review Broad (JRB) processes. Finalize Integrated Warfare Architectures (IWARs) support.

FY 2004 PLANS:
Continue Mission Capability Packages (MCP) Analysis support. Perform analytically-based decision recommendations to CNO for both warfighting and support areas. Develop Balanced Investment Strategy recommendations and perform assessments and develop the Chief of Naval Operations Program Analysis Memoranda (CPAM). Areas of focus include Air Dominance; Force Structure; Infrastructure; Manpower and Personnel; Training and Education; Power Projection; Readiness; Sea Dominance; Sensor Management/Information Superiority; Sustainment; Technology. Provide Navy input to Joint Requirement Oversight Council (JROC) and JROC Review Broad (JRB) processes.

FY 2005 PLANS:
Continue Mission Capability Packages (MCP) Analysis support. Perform analytically-based decision recommendations to CNO for both warfighting and support areas. Develop Balanced Investment Strategy recommendations and perform assessments and develop the Chief of Naval Operations Program Analysis Memoranda (CPAM). Areas of focus include Air Dominance; Force Structure; Infrastructure; Manpower and Personnel; Training and Education; Power Projection; Readiness; Sea Dominance; Sensor Management/Information Superiority; Sustainment; Technology. Provide Navy input to Joint Requirement Oversight Council (JROC), Joint Requirements Board (JRB), and Joint Review Panel (JRP) processes.

R-1 SHOPPING LIST - Item No.154

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME X2221 Assessment Program

B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
IWAR and CPAM	1.805	0.600	0.600	0.600
MCPs and CONOPs	0	1.588	1.588	1.588

FY 2002 ACCOMPLISHMENTS:

Continued developing and accrediting IWAR and CPAM tool and improving analytic methodology. Continued support for Alternatives of Analysis (AOA) Support and Oversight. Continued support for the Chairman's Program Recommendation (CPR) and Chairman's Program Assessment (CPA).

FY 2003 PLANS:

Continue to finalize and accredit IWAR and develop CPAM tool and improve analytic methodology. Assess the products developed by Capability Sponsors. Continue support for Alternatives of Analysis (AOA) Support and Oversight (ACAT II and below). Continue support for the Chairman's Program Recommendation (CPR) and Chairman's Program Assessment (CPA).

FY 2004 PLANS:

Continue to develop Balanced Investment Strategy (new type of CPAM) tool and improve analytic methodology. Continue to assess the products developed by Capability Sponsors. Translate OPLAN into projected CONOPs and coordinate across OPNAV. Assist in structuring follow-on OPNAV analyses. Continue support for Alternatives of Analysis (AOA) Support and Oversight. Continue support for the Chairman's Program Recommendation (CPR) and Chairman's Program Assessment (CPA).

FY 2005 PLANS:

Continue to develop Balanced Investment Strategy (new type of CPAM) tool and improve analytic methodology. Continue to assess the products developed by Capability Sponsors. Translate OPLAN into projected CONOPs and coordinate across OPNAV. Assist in structuring follow-on OPNAV analyses. Continue support for Alternatives of Analysis (AOA) Support and Oversight. Continue support for the Chairman's Program Recommendation (CPR) and Chairman's Program Assessment (CPA).

R-1 SHOPPING LIST - Item No.154

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME X2221 Assessment Program

B. Accomplishments/Planned Program (Cont.)

	FY 02	FY 03	FY 04	FY 05
Database Architecture - Modeling and Simulation	1.482	1.623	1.623	1.623

FY 2002 ACCOMPLISHMENTS:
 Continued using the standard simulation and database architecture developed by Navy Modeling and Simulation to re-host legacy models into the new framework, vastly improving the utility of these tools to the assessment process. Continued developing new tools that utilized models in the standard simulation and database architecture. Coordinated/supported Joint Analytical Model Improvement Program (JAMIP).

FY 2003 PLANS
 Establish and manage authoritative data repository by locating best quality data for M&S for use by OPNAV and Navy-Wide organizations. Create an analytic infrastructure of data of forces, units, equipment, data, Read and Blue CONOPS. Continue to coordinate/support Joint Analytical Model Improvement Program (JAMIP).

FY2004 PLANS
 Continue to establish and manage authoritative data repository by locating best quality data for M&S for use by OPNAV and Navy-Wide organizations. Continue to create an analytic infrastructure of data of forces, units, equipment, data, Red and Blue CONOPS. Continue to coordinate/support Joint Analytical Model Improvement Program (JAMIP).

FY2005 PLANS
 Continue to manage and improve authoritative data repository by locating best quality data for M&S for use by OPNAV and Navy-Wide organizations. Improve and update an analytic infrastructure of data of forces, units, equipment, data, Read and Blue CONOPS. Continue to coordinate/support Joint Analytical Model Improvement Program (JAMIP).

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME X2221 Assessment Program			
C. PROGRAM CHANGE SUMMARY:					
Funding:		FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget: (FY 03 Pres Controls)		13.520	12.800	13.228	13.466
Current BES/President's Budget (FY04/05 OSD/OMB Controls)		11.392	12.446	12.901	13.126
Total Adjustments		-2.128	-0.354	-0.327	-0.340
Summary of Adjustments					
Execution adjustments		-1.875			
Cong. Rescissions/Adjustments/Undist. Reductions		-0.209			
Pay Raise/Inflation Adjustments			-0.148	-0.228	-0.284
Efficiencies at NWCF Activities				-0.099	-0.056
Programmatic adjustments		0.203	-0.206		
SBIR		-0.247			
Subtotal		-2.128	-0.354	-0.327	-0.340
Schedule: Not Applicable					
Technical: Not Applicable					

R-1 SHOPPING LIST - Item No.154

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME X2221 Assessment Program
D. OTHER PROGRAM FUNDING SUMMARY: Not Applicable		

R-1 SHOPPING LIST - Item No.154

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605856N
PROGRAM ELEMENT TITLE: Strategic Technical Support

COST: (Dollars in Thousands)

PROJECT NUMBER/TITLE	FY 2002 ACTUAL	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
R0128 Management and Technical Support, Strategic	1,345	1,407	1,438	1,464	1,496	1,526	1,553	1,582
R1038 Acoustic and Non-Acoustic Analysis Support	930*	878*	2,445	2,440	2,465	2,484	2,501	2,518
Total	2,275	2,285	3,883	3,904	3,961	4,010	4,054	4,100

*Funds executed in Project Z1038

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program 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 submarine warfare and undersea surveillance.

B. PROGRAM CHANGE SUMMARY:

	FY 2002	FY 2003	FY 2004	FY 2005
FY 2003 President's Submission:	2,369	2,340	2,388	2,411
Adjustments from FY 2003 President's Budget:				
FY2002 SBIR	-38			
Cong. Rescissions/Adjustments/Undist. Reductions	-12	-28		
NWCF Rate Adjustments				2
Execution Adjustments	-44			
Program Increase			1,600	1,600
Pay Raise/Inflation Adjustments		-27	-92	-98
Efficiencies at NWCF Activities			-13	-11
FY 2004/2005 OSD/OMB Budget Submission:	2,275	2,285	3,883	3,904

PROGRAM CHANGE SUMMARY EXPLANATION:

Schedule: Not applicable.
Technical: Not applicable.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605856N Project Number: R0128
PROGRAM ELEMENT TITLE: Strategic Technical Support Project Title: Management and Technical Support, Strategic

COST: (Dollars in Thousands)

PROJECT NUMBER/TITLE	FY 2002 ACTUAL	FY2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
R0128 Management and Technical Support, Strategic	1,345	1,407	1,438	1,464	1,496	1,526	1,553	1,582

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 research and development strategy development planning and implementation. 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:

	FY 02	FY 03	FY 04	FY 05
Management and Technical Support, Strategic	1,345	1,407	1,438	1,464

FY 2002 ACCOMPLISHMENTS:

- Continued to assess the strategic deterrence (conventional and nuclear) force structure, security and capability in the Navy. This included issues resulting from the Nuclear Posture review.
- Performed a study of countermeasures to submarine detection systems in littoral waters based on large fields of small sensors.
- Assessed implications of current technological innovations to guide future investments in research and development.
- Supported reviews of various submarine operations to assess the safety and security of the ships and missions assigned to determine problems that require further study.
- Developed models to assess the acoustic and non-acoustic vulnerability of nuclear-powered guided-missile submarines (SSGN) using existing ballistic missile submarine (SSBN) data and expected operating areas for SSGN.
- Examined the specific applications for submarine mine countermeasures and developed and integrated view of technology candidates to meet submarine needs.
- Investigated the effectiveness of Surveillance Towed Array Sonar Systems (SURTASS) to passively detect and track diesel submarines.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605856N
PROGRAM ELEMENT TITLE: Strategic Technical Support

Project Number: R0128
Project Title: Management and
Technical Support, Strategic

FY 2003 PLANS:

- Continue to assess the strategic deterrence (conventional and nuclear) force structure, security, and capability in the Navy.
- Perform an in-depth review of undersea warfare research and development requirements, past and present, and propose an investment strategy to maximize future capabilities.
- Assess implications of current technological innovations on undersea warfare developments in both near and far term systems and develop strategic concepts for future acquisitions through partnership with the Naval Postgraduate School.
- Assess the submarine forces ability to perform intelligence, surveillance and reconnaissance (ISR) and strike warfare missions to make recommendations on improved war-fighting capability. This will concentrate on the impact of SSGN.
- Continue to examine specific applications for submarine mine countermeasures and develop a strategy for ensuring submarine access to contested areas of the world.
- Continue 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.

FY 2004 PLANS:

- Continue to assess the strategic deterrence (conventional and nuclear) force structure, security, and capability in the Navy.
- Continue 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.
- Continue to perform technical and operational analysis of potential improvements or additions to submarine systems in order to understand their impact on submarine design, performance and safety.
- Continue 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.
- Continue to assess the current and future submarine force ability to perform Special Operations Forces (SOF) missions, strike warfare and ISR missions with emphasis on the capabilities of SSGN.
- Continue 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.

FY 2005 PLANS:

- Continue to assess the strategic deterrence (conventional and nuclear) force structure, security, and capability in the Navy.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605856N

PROGRAM ELEMENT TITLE: Strategic Technical Support

Project Number: R0128

Project Title: Management and
Technical Support, Strategic

- Continue 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.
- Continue to perform technical and operational analysis of potential improvements or additions to submarine systems in order to understand their impact on submarine design, performance and safety.
- Continue 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.
- Continue to assess the current and future submarine force ability to perform SOF missions, strike warfare and ISR missions with emphasis on the capabilities of SSGN.
- Continue 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.

C. OTHER PROGRAM FUNDING SUMMARY: Not applicable

D. ACQUISITION STRATEGY: Not applicable.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605856N
PROGRAM ELEMENT TITLE: Strategic Technical Support

Project Number: R1038
Project Title: Acoustic and
Non-Acoustic Analysis Support

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
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R1038 Acoustic and Non Acoustic Analysis Support	930*	878*	2,445	2,440	2,465	2,484	2,501	2,518
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*Executed as Project Z1038.

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 acoustics 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 study to determine long term impact of Low Frequency Active (LFA) Sonar on marine mammals.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 02	FY 03	FY 04	FY 05
Acoustic and Non-Acoustic Analysis Support	930*	878*	2,445	2,440

FY 2002 ACCOMPLISHMENTS:

- Continued development/documentation of architecture for future undersea surveillance capabilities.
- Continued to develop a high-level design specification for a new sound measurement system.
- Calibrated and certified fixed sensors for use in sound measurements.
- Updated Acoustic Model Applications Program (AMAP) software and associated database.
- Installed and tested new Acoustic Recording and Processing System (ARAPS).
- Developed software and documentation for adaptive beamforming utilities.
- Provided technical support for continued development of interfaces to facilitate data exchange.

FY 2003 PLAN:

- Continue development/documentation of architecture for future undersea surveillance capabilities.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605856N
PROGRAM ELEMENT TITLE: Strategic Technical Support

Project Number: R1038
Project Title: Acoustic and
Non-Acoustic Analysis Support

- Continue to work on the calibration and certification of fixed sensors for use in the development of sound measurements.
- Continue to update AMAP software and associated documentation.
- Conduct analysis of undersea technology for application for future undersea surveillance capabilities.
- Develop alternative IUSS mission requirements analysis; including detailed performance predictions against the latest threat.

FY 2004 PLAN:

- Conduct analysis of undersea technology for application for future undersea surveillance capabilities.
- Develop alternative IUSS mission requirements analysis; including detailed performance predictions against the latest Office of Naval Intelligence (ONI) documented threats.
- Continue development/documentation of architecture for future undersea surveillance capabilities.
- Develop an IUSS secure wide area secure information exchange system.
- Conduct study to determine the long-term effects of LFA Sonar on marine mammals.
- Assess the current and future IUSS warfare areas and potential allied Navy contributions.

FY 2005 PLAN:

- Continue analysis of undersea technology for application for future undersea surveillance capabilities.
- Continue development of alternative IUSS mission requirements analysis; including detailed performance predictions against the latest ONI documented threats.
- Continue development/documentation of architecture for future undersea surveillance capabilities.
- Continue to develop an IUSS real time performance analysis workstation.
- Assess the current and future IUSS warfare areas and potential allied Navy contributions.
- Continue study to determine the long-term effects of LFA Sonar on marine mammals.

C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. ACQUISITION STRATEGY: Not applicable

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605861N
PROGRAM ELEMENT TITLE: RDT&E Science and Technology Management

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
R0135 ONR Science and Technology Management	53,650	51,821	60,339	53,863	55,328	57,009	57,863	58,857
R0137 ONR S&T Instrumentation Modernization	915	989	1,056	1,110	1,185	1,212	1,057	1,077
R2353 DFAS Billings	2,921	2,927	3,490	3,560	3,115	3,173	3,234	3,293
Total	57,486	55,737	64,885	58,533	59,628	61,394	62,154	63,227

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element covers Office of Naval Research (ONR) expenses including salaries, utilities, printing, supplies, materials, information technology (IT), general support equipment and other day-to-day costs. The vast majority of these items represent fixed costs associated with scientists and engineers supporting the Navy's Science and Technology Program. The Defense Finance and Accounting Service (DFAS) Billings project provides funds for accounting services provided to Research and Development (R&D) activities.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605861N
PROGRAM ELEMENT TITLE: RDT&E Science and Technology Management

B. PROGRAM CHANGE SUMMARY:

	FY 2002	FY 2003	FY 2004	FY 2005
FY 2003 President's Submission:	54,340	59,447	59,531	61,715
Adjustments from FY 2003 President's Budget:				
NMCI Dispersal			+30	+30
Cong. Rescissions/Adjustments/Undist. Reductions	-150	-663		
Execution Adjustments	+3,296			
CSRS and FEHB Accrual Reversal		-3,004	-3,154	-3,268
Combine Select ONR/NRL Business			-1	-1
NCWF Rate Adjustments			-2	
Blast Mitigation Protection			+8,220	
Pay Raise/Inflation Adjustments		-43	+261	+57
FY 2004/2005 President's Budget Submission:	57,486	55,737	64,885	58,533

PROGRAM CHANGE SUMMARY EXPLANATION:

Schedule: Not applicable
Technical: Not applicable

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

Project Number: R0135

PROGRAM ELEMENT TITLE: RDT&E Science & Technology
Management

Project Title: ONR Science &
Technology Mgmt

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
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R0135 ONR Science and Technology Management

	53,650	51,821	60,339	53,863	55,328	57,009	57,863	58,857
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A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports Office of Naval Research (ONR) leadership, management and direction for the Naval Science and Technology program. This project funds salaries, utilities, supplies, and other fixed costs at ONR Headquarters and field offices. ONR sponsors scientific advances, which lead to future Naval capabilities, 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-profits and Navy 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; (5) program management and support to selected research programs of Missile Defense Agency (MDA) and Defense Advanced Research Projects Agency (DARPA); and (6) 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 (SBIR), Naval Research Advisory Committee, Navy Patent Program, Navy Historically Black Colleges and Universities Program, Navy Manufacturing Technology Program and the SSBN Security Program. In addition, this program 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.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2003

Exhibit R-2a

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

Project Number: R0135

PROGRAM ELEMENT TITLE: RDT&E Science & Technology
Management

Project Title: ONR Science &
Technology Mgmt

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 02	FY 03	FY 04	FY 05
S&T MGMT SUPPORT	53,650	51,821	60,339	53,863

- The project provides for basic costs of the ONR headquarters and its field activities in support of the entire Navy Science and Technology program. Almost all the funds in this project are fixed costs, such as salaries, communications, etc. The project provides support for the ONR headquarters and field offices. Specifically, it pays the salaries of scientific and engineering 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 and warfare centers, and private industry. In addition to its Navy Science and Technology mission, ONR provides important management and administrative support to MDA and DARPA. FY04 reflects an \$8.2M increase for structural security enhancements required for blast mitigation protection of the new Ballston Complex building being leased by GSA for ONR. Application of the Interagency Security Criteria for New Federal Office Buildings and Major Modernization Projects (dated May 28, 2001) in the design and construction will result in a 'Medium' level of protection, reducing the hazard to occupants. This includes reduced potential for progressive collapse, reduced hazard of impact from flying debris, isolating occupants from direct Blast pressures, and aid in the rescue of victims.

C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. ACQUISITION STRATEGY: Not applicable.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE:February 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

Project Number: R0137

PROGRAM ELEMENT TITLE: RDT&E Science and Technology
Management

Project Title: ONR S&T

Instrumentation Modernization

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
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R0137 ONR S&T Instrumentation Modernization	915	989	1,056	1,110	1,185	1,212	1,057	1,077
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A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project purchases information technology (IT) and general support equipment for the Office of Naval Research (ONR) headquarters and field offices.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 02	FY 03	FY 04	FY 05
IT and general support equipment	915	989	1,056	1,110

- This project purchases IT and general support equipment for ONR headquarters and field offices.

C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. ACQUISITION STRATEGY: Not applicable.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

Project Number: R2353

PROGRAM ELEMENT TITLE: RDT&E Science and Technology
Management

Project Title: DFAS Billings

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
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R2353 DFAS Billings	2,921	2,927	3,490	3,560	3,115	3,173	3,234	3,293
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A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides funding for accounting services provided to Research and Development (R&D) activities by the Defense Finance and Accounting Service (DFAS).

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 02	FY 03	FY 04	FY 05
Transactions processed in support of DON R&D	2,921	2,927	3,490	3,560

- 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, and the maintenance of trial balances and associated reporting.

C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. ACQUISITION STRATEGY: Not applicable.

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FY 2004 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605862N
 PROGRAM ELEMENT TITLE: RDT&E Instrumentation Modernization

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2002 ACTUAL	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
M0104 Navy Medical Management Support	11,439	11,347	12,547	13,219	13,537	13,863	14,128	14,376	Continue	Continue
M3047 Medical Force Protection	0	1,874	1,007	1,049	1,089	1,130	1,152	1,174	Continue	Continue
Total	11,439	13,221	13,554	14,268	14,626	14,993	15,280	15,550	Continue	Continue

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element includes RDT&E funds for operating and miscellaneous support costs at RDT&E laboratories and other installations, facility and civilian personnel costs not directly chargeable to RDT&E projects. Also includes RDT&E funds for RDT&E laboratories and facilities for research, support, equipment, minor construction and other investment and materiel support costs not directly chargeable to RDT&E projects. Excludes military manpower and related costs, non-RDT&E base operating costs, and military construction costs which are included in other appropriate programs.

PROGRAM CHANGE FOR TOTAL PE:

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Budget Item Justification
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FY 2004 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605862N
 PROGRAM ELEMENT TITLE: RDT&E Instrumentation Modernization

	<u>FY 2002</u>	<u>FY2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) FY 2003 President's Budget	10,101	13,289	14,422	15,288	15,691	16,110	16,416	16,729
(U) Adjustments from PRESBUDG:								
Force Protection	1,900							
BSO Incorporation of PBDs	1,500							
Section 8123: Management Reform	-119							
NWCF RATES – PWC (East Coast)			31	34	33	34	35	35
Business Process Reform		-54						
Economic Assumptions (SEC. 813	-32	-80						
IT Cost Growth (SEC. 8109)		-25						
PBD 701C backout			-815	-820	-850	-882	-921	-963
CSRS and FEHB		-814						
FY02 Actuals (30-Sept)	-1,911							
PWC PBD 426			-2					
Chem Bio Defense and AT/FP			-20	-21	-26	-40	-17	-13
PBD-602 Fuel Inflation			20	10	5	5	5	5
PBD-606 Military /Civilian Pay			-59	-200	-205	-210	-214	-218
Inflation Savings		-20						
Security Equipment for Med Labs		475						
Site Improvements for Med Labs		450						
PBD-604 Nonpay Purchase Inflation			-18					
PBD-604 Nonpay Inflation			-5					
PBD 604: FY05/09 Inflation				-23	-22	-24	-24	-25
(U) FY 2004 President's Budget Submission	11,439	13,221	13,554	14,268	14,626	14,993	15,280	15,550

(U) COST: (Dollars in Thousands)

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Budget Item Justification
 (Exhibit R-2, Page 2 of 6)

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FY 2004 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605862N
 PROGRAM ELEMENT TITLE: RDT&E Instrumentation Modernization

PROJECT NUMBER & TITLE	FY 2002 ACTUAL	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
M0104 Navy Medical Management Support	11,439	11,347	12,547	13,219	13,557	13,863	14,128	14,376	Continue	Continue

(U) PROGRAM ACCOMPLISHMENT AND PLANS:

1. (U) FY 2002 ACCOMPLISHMENTS:

- (U) (\$11,439) Provided funds for operating and miscellaneous support costs at BUMED research laboratories. Support included overhead expenses at our OCONUS laboratories, facilities, and general-purpose equipment.

2. (U) FY 2003 PLAN:

- (U) (\$11,347) Continue to provide operating and miscellaneous support costs at BUMED research laboratories. Continue to provide support for technologically advanced cutting edge research equipment for research and data acquisition, automated sampling and real time statistical analysis of biomedical research data utilizing data information systems integral with new equipment. Continue to provide replacement of obsolescent general- purpose research equipment. Continue to provide support to physical facility areas needing major repair, minor construction, and rehabilitation to meet mission requirements as well as meeting environmental compliance and pollution standards.

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Budget Item Justification
 (Exhibit R-2, Page 3 of 6)

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FY 2004 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605862N
PROGRAM ELEMENT TITLE: RDT&E Instrumentation Modernization

3. (U) FY 2004 PLAN:

- (U) (\$12,547) Continue to provide operating and miscellaneous support costs at BUMED research laboratories. Continue to provide support for technologically advanced equipment for research and data acquisition, automated sampling and real time statistical analysis of biomedical research data utilizing data information systems integral with new equipment. Continue to provide replacement of obsolescent research equipment. Continue to provide support to physical facility areas needing major repairs, replacement, minor construction, rehabilitation to meet mission requirements and environmental compliance and pollution standards.

B. (U) PROGRAM CHANGE SUMMARY: See Program Change for PE

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. (U) SCHEDULE PROFILE: Not applicable.

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Budget Item Justification
(Exhibit R-2, Page 4 of 6)

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FY 2004 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605862N
 PROGRAM ELEMENT TITLE: RDT&E Instrumentation Modernization

PROJECT NUMBER & TITLE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
M3037 Medical Force Protection	0	1,874	1,007	1,049	1,089	1,130	1,152	1,174	Continue	Continue

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides RDT&E,N funds for Force Protection Requirements at BUMED medical research laboratories

(U) PROGRAM ACCOMPLISHMENT AND PLANS:

1. (U) FY 2003 PLAN:

- (U) (\$1,874) Provided funds for the following Force Protection Requirements at BUMED medical research laboratories:

- Consolidation of Labs on Peruvian Navy Base
- Emergency Generator
- Metal Detectors
- Combination Safes
- Satellite Hand Held Radios and Telephones
- Vehicle and Base Radios
- Security Guard Costs
- Driver Training and Overtime
- Vehicle Maintenance

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Budget Item Justification
 (Exhibit R-2, Page 5 of 6)

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FY 2004 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605862N
PROGRAM ELEMENT TITLE: RDT&E Instrumentation Modernization

1. (U) FY 2004 PLAN:

- (U) (\$1,007) Continue to provide funds for Force Protection Requirements at BUMED medical research laboratories.

1. (U) FY 2005 PLAN:

- (U) (\$1,049) Continue to provide funds for Force Protection Requirements at BUMED medical research laboratories.

B. (U) PROGRAM CHANGE SUMMARY: See Program Change for PE

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. (U) SCHEDULE PROFILE: Not applicable.

R-1 Line Item 157

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Budget Item Justification
(Exhibit R-2, Page 6 of 6)

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6					R-1 ITEM NOMENCLATURE 0605863N - RDT&E, N Ship and Aircraft Support			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	70.956	69.867	78.648	88.912	82.404	84.576	86.190	87.849
K2924 RDT&E Self Defense Test Ship		3.125	9.260	11.272	7.485	8.846	9.093	9.347
S0354 RDT&E Ships Support	11.765	10.143	8.792	11.163	10.547	11.070	11.234	11.411
S2924 RDT&E Self-Defense Test Ship	3.165							
W0568 RDT&E Aircraft Flight Hours	27.785	27.741	28.044	28.423	29.977	29.641	30.183	30.749
W0569 RDT&E Aircraft Support	28.241	28.858	32.552	38.054	34.395	35.019	35.680	36.342

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, modification, repair, Aviation Depot Level Repairables, Special Flight Test Instrumentation Pool equipment, 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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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support			PROJECT NUMBER AND NAME K2924 - RDT&E Self Defense Test Ship			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		3.125	9.260	11.272	7.485	8.846	9.093	9.347
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

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. SDTS provides the capability of testing self-defense weapon systems within their minimum range. A major cost of this project is regularly scheduled ship maintenance. The remainder of the funds are used for purchase of supplies and equipment, fuel and petroleum products, repairs and supporting services. Most costs are fixed and are associated with simply having this platform in the inventory.

(U) Current and projected Anti-Ship Cruise Missile (ASCM) threats require self-defense weapons systems capable of adequately countering ASCMs into the year 2001 and beyond. The National Defense Authorization Act for FY87, section 910, "Testing of Certain Weapons Systems and Munitions," requires live-fire lethality testing of manned weapons systems. Operational and safety constraints limit realistic live-fire lethality testing with U.S. Navy ships and thus drive the requirement for having an afloat, unmanned, remotely controlled SDTS. SDTS plans call for testing PHALANX, Evolved Sea Sparrow Missile (ESSM), High Frequency Surface Wave Radar Advanced Technology Demonstration (ATD), the Rolling Airframe Missile (RAM), and future short-range Anti-Air Warfare systems against realistic threat presentation in an at-sea environment.

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EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2003
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support	PROJECT NUMBER AND NAME K2924 - RDT&E Self Defense Test Ship
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B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		3.125		
RDT&E Articles Quantity				

Self Defense Test Ship conducts live fire operations at NAVAIRWARCENWPNDIV Point Mugu, CA. Live Fire testing will include the RAM Helo Anti-Surface mode and the ESSM. NAVSURFWARCENDIV Port Hueneme, CA will plan, scheduled and perform HM& maintenance onboard SDTS in support of Long Pulse High Power Microwaves (HPM) System testing.

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost			9.260	
RDT&E Articles Quantity				

Self Defense Test Ship (SDTS) will initiate the stripping of EDDG 31 (EX Decatur) and begin conversion efforts to DD 964. NAVSURFWARCENDIV Port Hueneme, CA will plan, schedule and perform HM&E maintenance onboard SDTS in support of the conversion.

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				11.272
RDT&E Articles Quantity				

NAVSURFWARCENDIV Port Hueneme, CA will plan, schedule, and perform maintenance onboard DD 964 and complete conversion of the Self Defense Test Ship (SDTS-R).

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support	PROJECT NUMBER AND NAME K2924 - RDT&E Self Defense Test Ship			
C. PROGRAM CHANGE SUMMARY:					
Funding:		FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget: (FY 03 Pres Controls)			0.000	0.000	0.000
Current BES/President's Budget: (FY04/05 OSD/OMB Controls)			3.125	9.260	11.272
Total Adjustments		0.000	3.125	9.260	11.272
Summary of Adjustments					
Congressional program reductions					
Congressional undistributed reductions					
Congressional rescissions					
SBIR/STTR Transfer					
Economic Assumptions			-0.018		
Reprogrammings			3.199	9.881	12.062
Minor Program Adjustments			-0.056	-0.621	-0.790
Congressional increases					
Subtotal		0.000	3.125	9.260	11.272
Schedule:					
Not Applicable					
Technical:					
Not Applicable					

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2003
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APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support	PROJECT NUMBER AND NAME K2924 - RDT&E Self Defense Test Ship
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D. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Complete</u>	<u>Total Cost</u>
O&MN PE 0702228N		1.814								

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Exhibit R-3 Cost Analysis (page 1)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0605863N - RDT&E,N Ship and Aircraft Support			K2924 - RDT&E Self Defense Test Ship						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development											0.000	
Ancillary Hardware Development											0.000	
Component Development											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering	WR	Port Hueneme Division		3.125		9.260		11.272			23.657	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			0.000	3.125		9.260		11.272		0.000	23.657	
Remarks:												
Development Support											0.000	
Software Development											0.000	
Training Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6			PROGRAM ELEMENT 0605863N - RDT&E,N Ship and Aircraft Support			PROJECT NUMBER AND NAME K2924 - RDT&E Self Defense Test Ship						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation												0.000
Operational Test & Evaluation												0.000
Live Fire Test & Evaluation												0.000
Test Assets												0.000
Tooling												0.000
GFE												0.000
Award Fees												0.000
Subtotal T&E			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Contractor Engineering Support												0.000
Government Engineering Support												0.000
Program Management Support												0.000
Travel												0.000
Labor (Research Personnel)												0.000
SBIR Assessment												0.000
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Total Cost			0.000	3.125		9.260		11.272		0.000	23.657	
Remarks:												

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME Program Element (0605863N Ship and Aircraft Support)			PROJECT NUMBER AND NAME Project Unit (S0354 RDT&E Ship Support)			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	11.765	10.143	8.792	11.163	10.547	11.070	11.234	11.411
RDT&E Articles Qty								

MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

S0354, RDT&E Ships Support. This project provides for operation and maintenance of a platform used as Sea Based Test Site in support of the Navy Research, Development, Test and Evaluation (RDT&E) program. This project is for the USS DOLPHIN (AGSS-555). Testing aboard this platform reduces the number of fleet units required to support RDT&E efforts. A major cost of this project is regularly scheduled ship maintenance. The remainder of the funds are used for purchase of supplies and equipment, fuel and petroleum products, repairs, and supporting modifications. Most costs are fixed and are associated with simply having these platforms in the inventory. A lesser portion of the costs varies with the tempo and type of ship operations and provides for systems improvements and replacement planning. The nature of the operation os determined by the overall Navy/DoD R&D testing program.

USS DOLPHIN will support software upgrades testing of the MK50 and MK48 Advanced Capability (ADCAP) torpedoes, the "VA Class" Submarine Material Qualification Program, ONR Littoral Warfare Advanced Development (LWAD) Program, Improved Extended Echo Ranging (IEER), Advanced Extended Echo Ranging (AEER), Advanced Deployable System (ADS), Submarine Mast Detection Radar (SMDR), Laser Airborne System - Hyperspectral (LASH), Airborne Low Frequency Sonar (ALFS), Tripartied Technology Cooperation Program (TTCP) and the Advanced Sea /Air/Land (SEAL) Delivery Program. Mobile Inshore WARfare Unit Arrays and the Seabased Weapons and Tactics School (SWATS) are also frequently supported by USS DOLPHIN, USS DOLPHIN provides support for numerous undersea surveillance, sonar, weapons, communications and imaging programs.

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Exhibit R-2a, RDTE Project Justification
(Exhibit R-2a, page 8 of 29)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2003
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6	PROGRAM ELEMENT NUMBER AND NAME Program Element (0605863N Ship and Aircraft Support)	PROJECT NUMBER AND NAME Project Unit (S0354- RDT&E Ship Support)
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B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
USS DOLPHIN Ship Support	11.765			

FY2002 PLANS:

USS DOLPHIN experienced a MISHAP in May 02. Plans are underway to repair the USS DOLPHIN using FY02 and FY03 funds. During FY02 the USS DOLPHIN supported DT&E and OT&E testing of the LWAD, MK48 ADCAP, and MK54 torpedoes, AEER, ALFS, SWAT and ADS programs. USS DOLPHIN supported DT&E testing of the RADIANT BRONZE project for Tactical Exploitation of National Capabilities (TENCAP). USS DOLPHIN supported near ocean bottom operations, torpedo exercises and RDT&E programs modeling sonar propagation, testing sensors and communication systems.

	FY 02	FY 03	FY 04	FY 05
USS DOLPHIN Ship Support		10.143		

FY2003 PLANS:

USS DOLPHIN will complete TAV for the repair work and is scheduled to start RAV1-6 in Jan 03 and complete in May 03. USS DOLPHIN plans on supporting DT&E testing of the RADIANT BRONZE project for Tactical Exploitation of National Capabilities (TENCAP). USS DOLPHIN will support near ocean bottom operations, torpedo exercises and RDT&E programs modeling sonar propagation, testing sensors and communication systems. In addition, USS DOLPHIN plans to conduct periodic phased maintenance to maintain certification and procure material to support continued operations.

	FY 02	FY 03	FY 04	FY 05
USS DOLPHIN Ship Support			8.792	

FY 2004 PLANS:

USS DOLPHIN plans on supporting MK48 ADCAP CBASS Torpedo, MK54 Torpedo (Shallow Water ASW Target-SWAT Program, Low Frequency Sonar, Advanced Deployable System (ADS) AN/SQQ-89 ASW Combat System, USS DOLPHIN plans on conducting periodic phased maintenance to maintain certification and procure material to support continued operations.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2003
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME Program Element (0605863N Ship and Aircraft Support)	PROJECT NUMBER AND NAME Project Unit (S0354 RDT&E Ship Support)
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B. Accomplishments/Planned Program (Cont.)

	FY 02	FY 03	FY 04	FY 05
USS DOLPHIN SHIP SUPPORT				11.163

3. FY 2005 PLANS:
 USS DOLPHIN plans on supporting MK48 ADCAP CBASS Torpedo, MK54 Torpedo (Shallow Water ASW Target-SWAT Program, Low Frequency Sonar, Advanced Deployable system (ADS) AN/SQQ-89 ASW Combat System. USS DOLPHIN plans on conducting periodic phased maintenance to maintain certification and procure material to support continued operations.

	FY 02	FY 03	FY 04	FY 05

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				

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CLASSIFICATION:

			DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDTE&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME Program Element (PE 0605863N Ship and Aircraft Support)	PROJECT NUMBER AND NAME Project Unit (PU S0354 Ship Support)		
C. PROGRAM CHANGE SUMMARY:				
Funding:	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget: (FY 03 Pres Controls)	10.204	10.383	10.548	11.807
Current BES/President's Budget (FY04/05 Pres. Controls)	11.765	10.143	8.792	11.163
Total Adjustments	1.561	-0.240	-1.756	-0.644
Summary of Adjustments				
Congressional program reductions	-0.090	-0.061		
Congressional undistributed reductions				
Congressional rescissions				
SBIR/STTR Transfer	-0.064			
Economic Assumptions	-0.028	-0.179	-0.204	-0.273
Reprogrammings			-0.887	
Other Navy/OSD Adjustments	-0.025		-0.665	-0.371
FY02 Actuals (30 SEP) Increase	1.768			
Congressional increases				
Subtotal	1.561	-0.240	-1.756	-0.644
Schedule:				
Not Applicable				
Technical:				
Not Applicable				

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			Program Element (PE 0605863N Ship and Aircraft Support)			Project Unit (PU S0354 Ship Support)						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
RAV	WR	Portsmouth Naval Shipyard	42.326	6.356	10/02	2.860	10/03	6.518	10/04	Continuing	Continuing	
Planning Yard Support	WR	Portsmouth Naval Shipyard	9.797	2.005	10/02	3.317	10/03	2.555	10/04		17.674	
Ship Operations	WR	COMSUBPAC	1.150	0.537	10/02	0.910	10/03	0.721	10/04		3.318	
Maintenance/Homeporting	WR	SPAWAR	6.860	0.293	10/02	0.227	10/03	0.328	10/04		7.708	
			8.684	0.952	10/02	1.478	10/03	1.041	10/04		12.155	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Product Development			68.817	10.143		8.792		11.163		0.000	98.915	
<p>Remarks: This program has existed since 1968. The program management responsibilities were transferred to this office June 1997. Detailed execution data is not available prior to that date. The total prior year costs reflect execution data from FY97 through FY00.</p>												
Development Support											0.000	
Software Development											0.000	
Training Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	
<p>Remarks:</p>												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0605863N - RDT&E,N Ship and Aircraft Support			Project Unit (PU S0354 Ship Support)						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation											0.000	
Operational Test & Evaluation											0.000	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support											0.000	
Travel											0.000	
Labor (Research Personnel)											0.000	
SBIR Assessment											0.000	
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Total Cost			68.817	10.143		8.792		11.163		0.000	98.915	
Remarks:												

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support			PROJECT NUMBER AND NAME S2924 - RDT&E Self Defense Test Ship			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	3.165	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

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. SDTS provides the capability of testing self-defense weapon systems within their minimum range. A major cost of this project is regularly scheduled ship maintenance. The remainder of the funds are used for purchase of supplies and equipment, fuel and petroleum products, repairs and supporting services. Most costs are fixed and are associated with simply having this platform in the inventory.

(U) Current and projected Anti-Ship Cruise Missile (ASCM) threats require self-defense weapons systems capable of adequately countering ASCMs into the year 2001 and beyond. The National Defense Authorization Act for FY87, section 910, "Testing of Certain Weapons Systems and Munitions," requires live-fire lethality testing of manned weapons systems. Operational and safety constraints limit realistic live-fire lethality testing with U.S. Navy ships and thus drive the requirement for having an afloat, unmanned, remotely controlled SDTS. SDTS plans call for testing PHALANX, Evolved Sea Sparrow Missile (ESSM), High Frequency Surface Wave Radar Advanced Technology Demonstration (ATD), the Rolling Airframe Missile (RAM), and future short-range Anti-Air Warfare systems against realistic threat presentation in an at-sea environment.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2003
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support	PROJECT NUMBER AND NAME S2924 - RDT&E Self Defense Test Ship
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B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	3.165			
RDT&E Articles Quantity				

Conducted live fire operations at NAVAIRWARCENWPNDIV Point Mugu, CA. Life fire testing included the RAM Helo Anti-Surface mode and the ESSM. NAVSURFWARCENDIV Port Hueneme, CA planned, scheduled and performed HM&E maintenance onboard Self Defense Test Ship (SDTS) in support of Long Pulse Hgh Power Microwaves (HPM) System testing.

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support	PROJECT NUMBER AND NAME S2924 - RDT&E Self Defense Test Ship			
C. PROGRAM CHANGE SUMMARY:					
Funding:		FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget: (FY 03 Pres Controls)		3.272	3.199	3.042	2.871
Current BES/President's Budget: (FY04/05 OSD/OMB Controls)		3.165	0.000	0.000	0.000
Total Adjustments		-0.107	-3.199	-3.042	-2.871
Summary of Adjustments					
Congressional program reductions					
Congressional undistributed reductions					
Congressional rescissions					
SBIR/STTR Transfer		-0.006			
Economic Assumptions		-0.009			
Minor Program Adjustments		-0.027			
Reprogrammings		-0.065	-3.199	-3.042	-2.871
Congressional increases					
Subtotal		-0.107	-3.199	-3.042	-2.871
Schedule:					
Not Applicable					
Technical:					
Non Applicable					

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0605863N - RDT&E,N Ship and Aircraft Support			S2924 - RDT&E Self Defense Test Ship						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development											0.000	
Ancillary Hardware Development											0.000	
Component Development											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering	WR	Port Hueneme Division	3.165	0.000							3.165	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			3.165	0.000		0.000		0.000		0.000	3.165	
Remarks:												
Development Support											0.000	
Software Development											0.000	
Training Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0605863N - RDT&E,N Ship and Aircraft Support			S2924 - RDT&E Self Defense Test Ship						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation											0.000	
Operational Test & Evaluation											0.000	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support											0.000	
Travel											0.000	
Labor (Research Personnel)											0.000	
SBIR Assessment											0.000	
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Total Cost			3.165	0.000		0.000		0.000		0.000	3.165	
Remarks:												

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 18 of 29)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support			PROJECT NUMBER AND NAME W0568 - RDT&E Aircraft Flight Hours			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	27.785	27.741	28.044	28.423	29.977	29.641	30.183	30.749
RDT&E Articles Qty								

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, as well as annual flight simulator training for Naval Air Warfare Center (NAWC) activities.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2003
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support	PROJECT NUMBER AND NAME W0568 - RDT&E Aircraft Flight Hours
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B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	27.785	27.741	28.044	28.423
RDT&E Articles Quantity				

Currently meeting 80% of post-maintenance test flights, aircrew training, and proficiency flight hours requirements. Provide organizational and intermediate-level maintenance, supply and Petroleum, Oil and Lubricants (POL) in support of RDT&E aircraft operations. FY03-FY05 plans are to continue to provide 80-85% of these requirements.

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support	PROJECT NUMBER AND NAME W0568 - RDT&E Aircraft Flight Hours			
C. PROGRAM CHANGE SUMMARY:					
Funding:		FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget:		29.131	28.397	29.446	29.927
Current BES/Presidents Budget		27.785	27.741	28.044	28.423
Total Adjustments		-1.346	-0.656	-1.402	-1.504
Summary of Adjustments					
Congressional program reductions					
Congressional undistributed reductions			-0.166		
Congressional rescissions		-0.069			
SBIR/STTR Transfer					
Economic Assumptions		-0.080	-0.490	-0.200	-0.863
Reprogrammings		-1.197			
Other Navy/OSD adjustments				-1.202	-0.641
Congressional increases					
Subtotal		-1.346	-0.656	-1.402	-1.504
Schedule:					
Not Applicable.					
Technical:					
Not Applicable.					

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0605863N - RDT&E,N Ship and Aircraft Support			W0568 - RDT&E Aircraft Flight Hours						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Flight Hours	WX	NAWC AD, Pax River MD	118.770	17.916	10/02	17.948	10/03	18.191	10/04	Continuing	Continuing	
Flight Hours	WX	NAWC WD, Pt. Mugu CA	78.671	7.328	10/02	7.571	10/03	7.590	10/04	Continuing	Continuing	
Flight Hours	WX	NSWC Panama City FL	12.705	0.480	10/02	0.500	10/03	0.520	10/04	Continuing	Continuing	
Flight Hours	WX	NRL Patuxent River MD	25.724	1.188	10/02	1.238	10/03	1.288	10/04	Continuing	Continuing	
Flying Lab Study/Omega Tanker Proj	PD	Various	3.321								3.321	
Miscellaneous	WX/WR	Various	8.338	0.829	Var	0.787	Var	0.834	Var	Continuing	Continuing	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Product Development			247.529	27.741		28.044		28.423		Continuing	Continuing	
Remarks:												
Development Support											0.000	
Software Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0605863N - RDT&E,N Ship and Aircraft Support			W0568 - RDT&E Aircraft Flight Hours						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation											0.000	
Operational Test & Evaluation											0.000	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support											0.000	
Travel											0.000	
Transportation											0.000	
SBIR Assessment											0.000	
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Total Cost			247.529	27.741		28.044		28.423		Continuing	Continuing	
Remarks:												

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support			PROJECT NUMBER AND NAME W0569 - RDT&E Aircraft Support			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	28.241	28.858	32.552	38.054	34.395	35.019	35.680	36.342
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

RDT&E Aircraft Support. This continuing project funds costs associated with Navy 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. In FY 1998, AVDLR costs were reclassified as direct (customer-funded) costs, and a portion of the AVDLR funding to support customer programs were redistributed to customers. The remainder of AVDLR funding was retained in the account to support overhead maintenance related flight operations, aircrew training, and proficiency flight hours. This project also funds airframe Standard Depot Level Maintenance (SDLM), in-service repairs, modifications, emergency repairs, and engine repair, as well as aircraft material condition and field inspections. Additionally, it funds Individual Material Readiness List (IMRL) tools and support equipment, modification of in-service aircraft, and other systems for application to and compatibility with RDT&E requirements. Special Flight Test Instrumentation Pool (SFTIP) equipment, shared by programs to reduce or eliminate procurement lead times and save money, is also supported.

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support	PROJECT NUMBER AND NAME W0569 - RDT&E Aircraft Support

B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	14.715	17.238	19.029	24.194
RDT&E Articles Quantity				

Continuing the transition from ASPA/SDLM to the PDM program, while sustaining the following programs: IMRL, engine, in-service repairs support and modifications of aircraft in the RDT&E inventory. Continuing operation and implementation of maintenance and material management programs at Naval Air Warfare Center activities. FY03-FY05 plans are to continue to support these requirements. FY05 plans include transition of P-3 palletized systems into C-130's.

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	11.021	11.052	11.329	11.612
RDT&E Articles Quantity				

Providing AVDLR support for NAVAIRWARCENACDIV Patuxent River, Maryland; NAVAIRWARCENWPNDIV Point Mugu, California; Naval Research Laboratory, Patuxent River, Maryland; and Coastal Systems Station, Panama City, Florida for overhead flight hours, with RDT&E projects funding those AVDLR costs associated with project flight hours. FY03-FY05 plans are to continue to support this requirement.

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	2.505	0.568	2.194	2.248
RDT&E Articles Quantity				

Supporting Special Flight Test Instrumentation Pool (SFTIP) equipment, shared by programs to reduce or eliminate procurement lead times and save money, at NAVAIRWARCENACDIV Patuxent River, Maryland. FY03-FY05 plans are to continue to support this requirement.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support	PROJECT NUMBER AND NAME W0569 - RDT&E Aircraft Support			
C. PROGRAM CHANGE SUMMARY:					
Funding:		FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget:		28.584	29.540	33.864	39.411
Current BES/Presidents Budget		28.241	28.858	32.552	38.054
Total Adjustments		-0.343	-0.682	-1.312	-1.357
Summary of Adjustments					
Congressional program reductions					
Congressional undistributed reductions			-0.172		
Congressional rescissions		-0.068			
SBIR/STTR Transfer		-0.102			
Economic Assumptions		-0.079	-0.510	-0.867	-0.918
Reprogrammings		-0.094			
Other Navy/OSD adjustments				-0.445	-0.439
Congressional increases					
Subtotal		-0.343	-0.682	-1.312	-1.357
Schedule:					
Not Applicable					
Technical:					
Not Applicable.					

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N / BA-6			0605863N - RDT&E,N Ship and Aircraft Support				W0569 - RDT&E Aircraft Support					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Av Depot Level Repairables	WX	NAWC AD Pax Riv MD		6.268	10/02	6.425	10/03	6.586	10/04	Continuing	Continuing	
Av Depot Level Repairables	WX	NAWC WD Pt. Mugu CA		3.849	10/02	3.945	10/03	4.044	10/04	Continuing	Continuing	
Av Depot Level Repairables	WX	Various		0.936	Var	0.959	Var	0.983	Var	Continuing	Continuing	
Acft Rework	WX	Various		3.150	Var	2.462	Var	0.773	Var	Continuing	Continuing	
Acft Rework	WX	NADEP North Island CA		1.612	10/02	1.653	10/03	1.924	10/04	Continuing	Continuing	
Acft Rework	C/FFP	LMAC Greenville SC		5.643	10/02	1.653	10/03	0.847	10/04	Continuing	Continuing	
Acft Rework P-3 systems to C-130s	C/FFP	Lockheed Palmdale CA				5.996	10/03	12.659	10/04	Continuing	Continuing	
Engines	WX	NADEP Jacksonville FL		1.653	10/02	1.056	10/03	1.515	10/04	Continuing	Continuing	
Engines	WX/MP	Various		1.557	Var	2.234	Var	1.858	Var	Continuing	Continuing	
In-Service Repairs	WX	NADEP Jacksonville FL		1.012	10/02	1.038	10/03	1.064	Var	Continuing	Continuing	
In-Service Repairs	WX	Various		0.466	Var	0.478	Var	0.490	Var	Continuing	Continuing	
Spec Flt Test Inst Pool	WX	NAWC AD Pax Riv MD		0.568	10/02	2.194	10/03	2.248	10/04	Continuing	Continuing	
Miscellaneous	WX/WR	Miscellaneous		0.411	Var	0.350	Var	0.441	Var	Continuing	Continuing	
Miscellaneous PY Costs			500.899								500.899	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Product Development			500.899	27.125		30.443		35.432		Continuing	Continuing	
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)									DATE: February 2003			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0605863N - RDT&E,N Ship and Aircraft Support			W0569 - RDT&E Aircraft Support						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation											0.000	
Operational Test & Evaluation											0.000	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Miscellaneous	WX/RX	Various		0.273	Var	0.139	Var	0.142	Var	Continuing	Continuing	
Travel	WX	NAWC AD Pax Riv MD		0.285	10/02	0.291	10/03	0.298	10/04	Continuing	Continuing	
Civil Service Labor	WX	NAWC AD Pax Riv MD		1.175	10/02	1.679	10/03	2.182	10/04	Continuing	Continuing	
Transportation											0.000	
SBIR Assessment											0.000	
Subtotal Management			0.000	1.733		2.109		2.622		Continuing	Continuing	
Remarks:												
Total Cost			500.899	28.858		32.552		38.054		Continuing	Continuing	
Remarks:												

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6					R-1 ITEM NOMENCLATURE 0605864N Test and Evaluation Support			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	274.223	272.417	258.471	260.082	263.006	267.816	272.576	277.534
W0541 Atlantic Undersea Test and Evaluation Center	47.710	47.021	47.908	46.330	46.898	47.976	48.732	49.559
W0566 NAVAIR Environmental Compliance	3.871	4.260	3.997	4.360	4.441	3.948	4.021	4.098
W0653 Naval Air Warfare Center Weapons Division	116.217	115.473	108.748	111.559	113.286	115.662	117.780	119.969
W0654 Naval Air Warfare Center Aircraft Division	86.487	86.894	78.849	78.593	78.772	80.287	81.672	83.106
W2921 Pacific Missile Range Facility	2.005	2.074	2.134	2.223	2.323	2.415	2.461	2.507
W2922 Maintenance and Repair	14.078	16.695	16.835	17.017	17.286	17.528	17.910	18.295
W9094 Safety & Surviv Study of Protec Pumice Tech	2.175	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W9095 Collaborative Virtual Inter Design Environment	1.680	0.000	0.000	0.000	0.000	0.000	0.000	0.000
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:								
<p>This program provides institutional maintenance and operations support for: the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center (NAVUNSEAWARCEN DET AUTECE), Andros Island, Bahamas; the Naval Air Systems Command MRTFB 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; and Maintenance and Repair at NAVAIRWARCENWPNDIV and NAVAIRWARCENACDIV; the Congressionally mandated Safety and Survivability Study of Protective Pumice Technology and Collaborative Virtual Interactive Design Environment projects. 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.</p>								

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N I BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W0541 Atlantic Undersea Test and Evaluation Center				
COST (\$ in Millions)		FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		47.710	47.021	47.908	46.330	46.898	47.976	48.732	49.559
RDT&E Articles Qty									
<p>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>This project provides continuing maintenance and operations support for the Atlantic Undersea Test and Evaluation Center (AUTEC), a Test and Evaluation (T&E) facility for collecting selected underwater, surface and air tracking data on test participants. NAVUNSEAWARCEN DET AUTEC, Andros Island, Bahamas, includes the Weapons Range, Shallow Water Range and Minefield, NATO Naval Forces Sensor & Weapon Accuracy Check Site, Weapons Acoustic Measurement Capability, and an Ocean Haul Down Facility for flow noise testing on large, buoyant bodies. The Weapons Range provides three-dimensional (undersea, surface and air) precision tracking capability in support of Anti-Submarine Warfare Developmental trials. The Shallow Water Range and Minefield provide similar three-dimensional tracking capability in water depths between 200 and 2,000 feet, plus a variety of moored and tethered mine-shaped targets. The NATO Fleet Operational Readiness Accuracy Check Site (FORACS) provides the capability to accurately calibrate and align electronic, optical, acoustic, and navigational systems installed on submarines, surface ships and helicopters. AUTEC also has a portable, 3-D tracking capability, the Buoyed Acoustic Real-Time Tracking System (BARTS). The NAVUNSEAWARCEN DET AUTEC at West Palm Beach, Florida provides technical expertise in tracking systems, liaison and test planning with range users, test scheduling, and logistics support.</p>									

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W0541 Atlantic Undersea Test and Evaluation Center

(U) B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	23.946	22.575	22.632	20.485
RDT&E Articles Quantity				

Maintain and operate core test support resources, instrumentation systems, and marine craft required to perform AUTEK's mission. Replenish spares inventory to minimum levels. Provide maintenance and repair efforts to perform high priority items deferred from previous years. Perform contract oversight and administration support on the AUTEK maintenance and operations support contract.

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	10.668	10.850	10.850	10.850
RDT&E Articles Quantity				

Provide rental payments to the Bahamian government for use of land and ocean in the Bahamas.

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	13.096	13.596	14.426	14.995
RDT&E Articles Quantity				

Provide civilian pay; travel; transportation; utilities/leases/rentals; communications; aircraft/ship/miscellaneous petroleum, oil, lubricants (POL); supplies; general and administrative efforts; and, lease payments to the General Services Administration (GSA) for facilities at West Palm Beach, FL required to maintain and operate AUTEK resources and capabilities.

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EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2003					
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W0541 Atlantic Undersea Test and Evaluation Center				
(U) C. PROGRAM CHANGE SUMMARY:									
(U) Funding:		FY 2002	FY 2003	FY 2004	FY 2005				
Previous President's Budget:		47.633	48.136	50.724	49.072				
Current BES/President's Budget		47.710	47.021	47.908	46.330				
Total Adjustments		0.077	-1.115	-2.816	-2.742				
Summary of Adjustments									
Congressional program reductions									
Congressional undistributed reductions			-0.284						
Congressional rescissions		-0.114							
SBIR/STTR Transfer		-0.249							
Economic Assumptions		-0.131	-0.831	-1.006	-0.880				
Reprogrammings		0.571							
Congressional increases									
Other Navy/OSD Adjustments				-1.810	-1.862				
Subtotal		0.077	-1.115	-2.816	-2.742				
Schedule: Not Applicable									
Technical: Not Applicable									
D. OTHER PROGRAM FUNDING SUMMARY:									
<u>Line Item No. & Name</u>		<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Not Applicable									
(U) P. E. 0604759, Major Test and Evaluation Investment									
E. ACQUISITION STRATEGY: Not Applicable									

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6			PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W0566 NAVAIR Environmental Compliance		
COST (\$ in Millions)			FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Project Cost			3.871	4.260	3.997	4.360	4.441	3.948
RDT&E Articles Qty								
<p>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>This continuing project supports environmental compliance, conservation and pollution prevention related efforts at the Navy Major Test Facility Bases (MRTFB) located at Patuxent River, MD, China Lake, CA, Point Mugu, CA, and Atlantic Undersea Test and Evaluation Center (AUTEK), Bahamas. The Navy MRTFB environmental projects include ongoing efforts to comply with Federal, State, and local environmental requirements.</p>								

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W0566 NAVAIR Environmental Compliance		
(U) B. Accomplishments/Planned Program				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	3.871	4.260	3.997	4.360
RDT&E Articles Quantity				
<p>Continue UST remediations at Patuxent River. Conduct a UST closure/change in service at Patuxent River. Continue the removal and disposal of Polychlorinated Biphenyl (PCB) contaminated items at China Lake and Patuxent River. Continue upgrade of an oily waste/waste oil (OW/WO) management/recycle facility at Patuxent River. Continue refrigeration system replacement at China Lake's SKYTOP test area. Continue comprehensive air pollution meteorology studies at Point Mugu.</p>				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003						
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W0566 NAVAIR Environmental Compliance							
(U) C. PROGRAM CHANGE SUMMARY:									
(U) Funding:		FY 2002	FY 2003	FY 2004	FY 2005				
Previous President's Budget:		3.931	4.360	4.219	4.586				
Current BES/President's Budget		3.871	4.260	3.997	4.360				
Total Adjustments		-0.060	-0.100	-0.222	-0.226				
Summary of Adjustments									
	Congressional program reductions								
	Congressional undistributed reductions		-0.025						
	Congressional rescissions	-0.008							
	SBIR/STTR Transfer								
	Economic Assumptions	-0.011	-0.075	-0.125	-0.128				
	Reprogrammings	-0.041							
	Congressional increases								
	Other Navy/OSD Adjustments			-0.097	-0.098				
	Subtotal	-0.060	-0.100	-0.222	-0.226				
Schedule: Not Applicable									
Technical: Not Applicable									
D. OTHER PROGRAM FUNDING SUMMARY:									
<u>Line Item No. & Name</u>		<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Not Applicable									
(U) P. E. 0604759, Major Test and Evaluation Investment									
E. ACQUISITION STRATEGY: Not Applicable									

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Exhibit R-2a, RDTEN Project Justification

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W0653 Naval Air Warfare Center Weapons Division			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	116.217	115.473	108.748	111.559	113.286	115.662	117.780	119.969
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Project provides continuing maintenance and operational support for the 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 Test and Evaluation (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, multiateration 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 full 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; parachute/weapon recovery system test facilities; and gun ranges. This project funds costs not chargeable to customers.

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W0653 Naval Air Warfare Center Weapons Division		
(U) B. Accomplishments/Planned Program				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	51.294	51.298	53.493	55.28
RDT&E Articles Quantity				
Operate and maintain mission essential/core MRTFB capabilities to meet customer test workload. Fund civilian labor required to manage, operate, and maintain the MRTFB.				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	4.880	5.040	4.295	4.749
RDT&E Articles Quantity				
Provide travel, transportation, collateral equipment, and supplies required to support continued operations of the MRTFB.				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	23.259	22.631	25.319	25.960
RDT&E Articles Quantity				
Provide communications, purchased equipment maintenance, printing and reproduction, and purchased service contracts necessary to manage and sustain MRTFB operations.				

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W0653 Naval Air Warfare Center Weapons Division		
(U) B. Accomplishments/Planned Program				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	32.006	31.369	20.966	20.854
RDT&E Articles Quantity				
Reimburse the Command for essential General and Administrative (G&A) support services and NMCI, (e.g., comptroller, contracting, personnel, and other services.				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	4.778	5.135	4.675	4.716
RDT&E Articles Quantity				
Provide mission essential annual utility costs, equipment rentals, and land, building and facility leases.				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003						
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W0653 Naval Air Warfare Center Weapons Division							
(U) C. PROGRAM CHANGE SUMMARY:									
(U) Funding:		FY 2002	FY 2003	FY 2004	FY 2005				
Previous President's Budget:		115.893	118.181	119.976	123.177				
Current BES/President's Budget		116.217	115.473	108.748	111.559				
Total Adjustments		0.324	-2.708	-11.228	-11.618				
Summary of Adjustments									
Congressional program reductions									
Congressional undistributed reductions		-0.018	-0.689						
Congressional rescissions		-0.279							
SBIR/STTR Transfer									
Economic Assumptions		-0.321	-2.019	-0.918	-4.380				
Reprogrammings		0.942							
Congressional increases									
Other Navy/OSD Adjustments				-10.310	-7.238				
Subtotal		0.324	-2.708	-11.228	-11.618				
Schedule: Not Applicable									
Technical: Not Applicable									
D. OTHER PROGRAM FUNDING SUMMARY:									
<u>Line Item No. & Name</u>		<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Not Applicable									
(U) P. E. 0604759, Major Test and Evaluation Investment									
(U) P. E. 0604256N, Threat Simulator Development									
(U) P. E. 0604258N, Threat Systems Development									
(U) P. E. 0605863N, RDT&E Ship and Aircraft Support									
E. ACQUISITION STRATEGY: Not Applicable									

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Exhibit R-2a, RDTEN Project Justification
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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W0654 Naval Air Warfare Center Aircraft Division				
COST (\$ in Millions)		FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		86.487	86.894	78.849	78.593	78.772	80.287	81.672	83.106
RDT&E Articles Qty									
<p>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>This project provides funds for the maintenance and operations of the NAVAIRWARCENACDIV's capabilities to conduct test and evaluation and provide fleet support for air platforms. NAVAIRWARCENACDIV has extensive airfield, flight test ranges, aircraft systems test facilities and simulation laboratories to support aircraft 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 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 not chargeable to customers.</p>									

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W0654 Naval Air Warfare Center Aircraft Division		
(U) B. Accomplishments/Planned Program				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	26.794	28.784	29.885	30.939
RDT&E Articles Quantity				
Operate and maintain mission essential/core MRTFB capabilities to meet customer test workload. Fund civilian labor required to manage, operate, and maintain the MRTFB.				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	4.679	5.441	5.084	4.445
RDT&E Articles Quantity				
Provide travel, transportation, collateral equipment, and supplies required to support continued operations of the MRTFB.				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	29.040	25.313	24.417	23.113
RDT&E Articles Quantity				
Provide communications, purchased equipment maintenance, printing and reproduction, and purchased service contracts necessary to manage and sustain MRTFB operations.				

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W0654 Naval Air Warfare Center Aircraft Division		
(U) B. Accomplishments/Planned Program				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	23.509	23.702	15.742	16.310
RDT&E Articles Quantity				
Reimburse the Command for essential General and Administrative (G&A) support services and NMCI, (e.g., comptroller, contracting, personnel, and other services).				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	2.465	3.654	3.721	3.786
RDT&E Articles Quantity				
Provide mission essential annual utility costs, equipment rentals, and land, building and facility leases.				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				

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Previous President's Budget:		86.114	88.949	87.580	87.636																																																																																													
Current BES/President's Budget		86.487	86.894	78.849	78.593																																																																																													
Total Adjustments		0.373	-2.055	-8.731	-9.043																																																																																													
Congressional program reductions																																																																																																		
Congressional undistributed reductions			-0.519																																																																																															
Congressional rescissions		-0.201																																																																																																
SBIR/STTR Transfer																																																																																																		
Economic Assumptions		-0.240	-1.536	1.012	1.193																																																																																													
Reprogrammings		0.814																																																																																																
Congressional increases																																																																																																		
Other Navy/OSD Adjustment				-9.743	-10.236																																																																																													
Subtotal		0.373	-2.055	-8.731	-9.043																																																																																													
<u>Line Item No. & Name</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>																																																																																										
Not Applicable																																																																																																		

R-1 SHOPPING LIST - Item No. 159

UNCLASSIFIED

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W2921 Pacific Missile Range Facility				
COST (\$ in Millions)		FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		2.005	2.074	2.134	2.223	2.323	2.415	2.461	2.507
RDT&E Articles Qty									
<p>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), the Stabilized High-accuracy Optical Tracking System (SHOTS), and the Mobile Telemetry Receiver Systems (MRTS). These assets support Navy, DOD, and Army Missile Defense Test & Evaluation. This project funds costs not chargeable to customers.</p>									

R-1 SHOPPING LIST - Item No. 159

UNCLASSIFIED

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W2921 Pacific Missile Range Facility		
(U) B. Accomplishments/Planned Program				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	1.608	1.584	1.615	1.683
RDT&E Articles Quantity				
Operate and maintain mission core MRTFB assets to meet customer test workload.				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.365	0.450	0.468	0.487
RDT&E Articles Quantity				
Provide civilian labor required to manage, operate, and maintain PMRF's MRTFB capabilities.				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.033	0.040	0.051	0.053
RDT&E Articles Quantity				
Provide essential travel, transportation, and training to support the operations of the PMRF T&E capability.				

R-1 SHOPPING LIST - Item No. 159

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:		February 2003			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME						
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W2921 Pacific Missile Range Facility						
(U) C. PROGRAM CHANGE SUMMARY:								
(U) Funding:	FY 2002	FY 2003	FY 2004	FY 2005				
Previous President's Budget:	2.059	2.123	2.187	2.280				
Current BES/President's Budget	2.005	2.074	2.134	2.223				
Total Adjustments	-0.054	-0.049	-0.053	-0.057				
Summary of Adjustments								
Congressional program reductions								
Congressional undistributed reductions		-0.012						
Congressional rescissions	-0.001		-0.051	-0.055				
SBIR/STTR Transfer								
Economic Assumptions	-0.006	-0.037						
Reprogrammings	-0.047							
Congressional increases								
Other Navy/OSD Adjustments			-0.002	-0.002				
Subtotal	-0.054	-0.049	-0.053	-0.057				
Schedule: Not Applicable								
Technical: Not Applicable								
D. OTHER PROGRAM FUNDING SUMMARY:								
<u>Line Item No. & Name</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Not Applicable								
(U) P. E. 0604759, Major Test and Evaluation Investment								
E. ACQUISITION STRATEGY: Not Applicable								

R-1 SHOPPING LIST - Item No. 159

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W2922 Maintenance and Repair				
COST (\$ in Millions)		FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		14.078	16.695	16.835	17.017	17.286	17.528	17.910	18.295
RDT&E Articles Qty									
<p>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <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 (W0654). 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>									

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W2922 Maintenance and Repair																	
(U) B. Accomplishments/Planned Program																			
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">FY 02</td> <td style="text-align: center;">FY 03</td> <td style="text-align: center;">FY 04</td> <td style="text-align: center;">FY 05</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td style="text-align: center;">14.078</td> <td style="text-align: center;">16.695</td> <td style="text-align: center;">16.835</td> <td style="text-align: center;">17.017</td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	14.078	16.695	16.835	17.017	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	14.078	16.695	16.835	17.017															
RDT&E Articles Quantity																			
Support mission critical emergency services, recurring maintenance and repair, and major repair efforts at the Naval Air Warfare Center Weapons.																			
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">FY 02</td> <td style="text-align: center;">FY 03</td> <td style="text-align: center;">FY 04</td> <td style="text-align: center;">FY 05</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost					RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost																			
RDT&E Articles Quantity																			
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">FY 02</td> <td style="text-align: center;">FY 03</td> <td style="text-align: center;">FY 04</td> <td style="text-align: center;">FY 05</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost					RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost																			
RDT&E Articles Quantity																			

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003						
APPROPRIATION/BUDGET ACTIVITY RDTE&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W2922 Maintenance and Repair							
(U) C. PROGRAM CHANGE SUMMARY:									
(U) Funding:		FY 2002	FY 2003	FY 2004	FY 2005				
Previous President's Budget:		16.972	17.089	19.933	20.140				
Current BES/President's Budget		14.078	16.695	16.835	17.017				
Total Adjustments		-2.894	-0.394	-3.098	-3.123				
Summary of Adjustments									
Congressional program reductions			-0.099						
Congressional undistributed reductions									
Congressional rescissions		-0.003							
SBIR/STTR Transfer									
Economic Assumptions		-0.047	-0.295	-0.550	-0.519				
Reprogrammings		-2.844							
Congressional increases									
Other Navy/OSD Adjustments				-2.548	-2.604				
Subtotal		-2.894	-0.394	-3.098	-3.123				
Schedule: Not Applicable									
Technical: Not Applicable									
D. OTHER PROGRAM FUNDING SUMMARY:									
<u>Line Item No. & Name</u>		<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Not Applicable									
(U) P. E. 0604759, Major Test and Evaluation Investment									
E. ACQUISITION STRATEGY: Not Applicable									

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605865N
PROGRAM ELEMENT TITLE: Operational Test and Evaluation Capability

COST: (Dollars in Thousands)

PROJECT NUMBER/TITLE	FY 2002 ACTUAL	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
R0831 OPERATIONAL TEST AND EVALUATION FORCE SUPPORT	11,117	11,067	11,608	12,541	12,752	12,929	13,141	13,350
R2923 NAVY JT&E SUPPORT	356	488	486	486	489	488	497	506
Total	11,473	11,555	12,094	13,027	13,241	13,417	13,638	13,856

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element provides Commander, Operational Test and Evaluation Force (COMOPTEVFOR) general support funding. This funding ensures COMOPTEVFOR's compliance with requirements established by Title 10 Law and directives from the Secretary of Defense and the Secretary of the Navy to carry out independent operational testing and evaluation. This funding is used for planning, conducting, and reporting the results of operational tests and evaluations of weapon systems projects, and for tactics validation for the use of those systems. Funding is also provided for Navy support of the OSD-sponsored Joint Test and Evaluation (JT&E) program.

B. PROGRAM CHANGE SUMMARY:

	FY 2002	FY 2003	FY 2004	FY 2005
2003 President's Budget Submission:	11,546	12,642	13,609	15,049
Adjustments from FY 2003 President's Budget:				
NWCF Rate Adjustments			-1	-1
SBIR Assessment	-13			
Cong.Recissions/Adjustments/Undist.Reductions	-60	-140		
PayRaise/Inflation Adjustments		-137	-78	-519
Reduction of COMOPTEVFOR Infra			-634	-656
CSRS and FEHB		-810	-802	-846
2004/2005 President's Budget Submission:	11,473	11,555	12,094	13,027

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605865N
PROGRAM ELEMENT TITLE: Operational Test and Evaluation Capability

PROGRAM CHANGE SUMMARY EXPLANATION:

Schedule: Not applicable
Technical: Not applicable

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605865N PROJECT NUMBER: R0831
PROGRAM ELEMENT TITLE: Operational Test and Evaluation Capability PROJECT TITLE: OPTEVFOR Support

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
R0831 Operational Test & Evaluation Force Support	11,117	11,067	11,608	12,541	12,752	12,929	13,141	13,350

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides Commander, Operational Test and Evaluation Force (COMOPTEVFOR) general support funding. This funding ensures COMOPTEVFOR's compliance with requirements established by Title 10 Law and directives from the Secretary of Defense and the Secretary of the Navy to carry out independent operational testing and evaluation. This funding is used for planning, conducting, and reporting the results of operational tests and evaluations of weapon systems projects, and for tactics validation for the use of those systems.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 02	FY 03	FY 04	FY 05
OPTEVFOR Support	11,117	11,067	11,608	12,541

FY 2002 ACCOMPLISHMENTS:

- Operationally tested and evaluated Chief of Naval Operations (CNO) projects commensurate with authorized funding level.
- Maintained level of effort associated with the DoD 5000-acquisition guidance, which required increased COMOPTEVFOR involvement in early operational assessments, developmental testing, advanced concept technology demonstrations, and advanced technology demonstrations.

FY 2003 PLANS:

- Operationally test and evaluate CNO projects commensurate with authorized funding level.
- 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.

FY 2004 PLANS:

- Continue to operationally test and evaluate CNO projects commensurate with authorized funding level.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605865N
PROGRAM ELEMENT TITLE: Operational Test and
Evaluation Capability

PROJECT NUMBER: R0831
PROJECT TITLE: OPTEVFOR Support

- Continue 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.

FY 2005 PLANS:

- Continue to operationally test and evaluate CNO projects commensurate with authorized funding level.
- Continue 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.

C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. ACQUISITION STRATEGY: Not applicable.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605865N PROJECT NUMBER: R2923
PROGRAM ELEMENT TITLE: Operational Test and Evaluation Capability PROJECT TITLE: Navy JT&E Support

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
R2923 Navy Joint Test and Evaluation Support	356	488	486	486	489	488	497	506

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides funding for Navy support of the OSD-sponsored Joint Test and Evaluation (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 Secretary of Defense to carry out the JT&E program. The funding is used for planning, conducting, and reporting of 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 this critical joint areas.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 02	FY 03	FY 04	FY 05
Joint Test & Evaluation	356	488	486	486

FY 2002 ACCOMPLISHMENTS:

- Supported JT&E projects as directed by the JT&E Senior Advisory Council such as the Joint Shipboard Helicopter Integration Process (JSHIP) and Joint Methodology to Assess Command, Control, Communications, Computers, Intelligence Surveillance, and Reconnaissance (C4ISR) Architectures (JMACA) Joint Test Forces.

FY 2003 PLANS:

- Support JT&E projects as directed by the JT&E Senior Advisory Council.

FY 2004 PLANS:

- Continue to support JT&E projects as directed by the JT&E Senior Advisory Council.

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2003

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605865N
PROGRAM ELEMENT TITLE: Operational Test and
Evaluation Capability

PROJECT NUMBER: R2923
PROJECT TITLE: Navy JT&E Support

FY 2005 PLANS:

- Continue to support JT&E projects as directed by the JT&E Senior Advisory Council.

C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. ACQUISITION STRATEGY: Not applicable.

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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification										DATE: FEBRUARY 2003	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6						R-1 ITEM NOMENCLATURE 0605866N Navy Space and Electronic Warfare (SEW) Support					
COST (\$ in Millions)	Prior Years Cost	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Total PE Cost	0.000	7.200	3.154	3.187	3.279	3.608	3.683	3.753	3.822	Continuing	Continuing
R0739 Navy C4I Top Level Requirements		5.462	1.500	1.361	1.411	1.698	1.731	1.764	1.795	Continuing	Continuing
X0706 EMI Reduction and Radio Frequency Mgmt.		1.738	1.654	1.826	1.868	1.910	1.952	1.989	2.027	Continuing	Continuing
											0.000
											0.000
											0.000
											0.000
Quantity of RDT&E Articles											0
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:											
<p>Project R0739, Navy C4I Top Level Requirements - Provides analysis of both Fleet requirements and research and development technology, to develop top level plans for Navy Communications, Command, Control, Communication, Computer Intelligence (C4I), and space systems in the Space and Electronic Warfare mission area.</p> <p>Project X0706, Electromagnetic Interference (EMI) Reduction and Radio Frequency (RF) Management - Develops advanced technology to identify and reduce EMI sources from Navy systems and platforms.</p>											
(U) 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.											

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 1 of 11)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: FEBRUARY 2003			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605866N Navy Space and Electronic Warfare (SEW) Support				PROJECT NUMBER AND NAME R0739 Navy C4I Top Level Requirements					
COST (\$ in Millions)	Prior Years Cost	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost		5.462	1.500	1.361	1.411	1.698	1.731	1.764	1.795	Continuing	Continuing
RDT&E Articles Qty											0

(U) 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 for Navy Communications, Command, Control, Communication, Computer Intelligence (C4I), and space systems in the Space and Electronic Warfare mission area.

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Exhibit R-2a, RDTEEN Project Justification
(Exhibit R-2a, page 2 of 11)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: FEBRUARY 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605866N SEW Support	PROJECT NUMBER AND NAME R0739 Navy C4I Top Level Requirements

(U) B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	5.462			
RDT&E Articles Quantity				

- Extended previously-developed quantitative analyses of Command, Control, and Communications (C3), and network performance to Battle Group missile defense. Developed scenarios that were applied to the Advanced Command and Control (C2) War Game.
- Carried out analyses of architectural alternatives for distributing Command, Control, Communications, and Computer (C4) services between Naval Computer and Telecommunications Area Master Stations (NCTAMS) and TELEPORTS. Also, developed initial cost estimates for the alternatives examined.
- Developed Operational View and System View architecture products in support of the network backbone for the Expeditionary Command and Control, Communications, Computers, and Combat Systems Grid (EC5G). Carried out systems engineering investigations for the development.
- Developed characterizations of Battle Force C2 (BFC2) requirements for the time-critical targeting function and represented the requirements within the DoD architectural framework. The resulting framework included the high-level operational concept, operational node connectivity diagrams, the operational informational exchange matrix, and the activity model for BFC2.

? Supported the Naval Information Technology, Information Operations and Space efforts.

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		1.500		
RDT&E Articles Quantity				

? Apply previously-developed models and analytic methods to identify areas of highest sensitivity in C3 performance.

? Extend previous architectural work on Naval operational functions and networks to detailed analyses of C3 and network requirements.

? Extend previous system engineering results to newly emerging implementation issues.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: FEBRUARY 2003
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605866N SEW Support	PROJECT NUMBER AND NAME R0739 Navy C4I Top Level Requirements
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(U) B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost			1.361	
RDT&E Articles Quantity				

- Conduct System Engineering investigations into architectural issues in network developments such as EC5G.
- ? Apply previously-developed analytic formulations and results to the specification of network requirements.
- ? Conduct additional analytical investigations of emerging problems in Space and Electronic Warfare.

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				1.411
RDT&E Articles Quantity				

- Conduct System Engineering investigations into architectural issues in network developments such as EC5G.
- ? Apply previously-developed analytic formulations and results to the specification of network requirements.
- ? Conduct additional analytical investigations of emerging problems in Space and Electronic Warfare.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: FEBRUARY 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605866N SEW Support	PROJECT NUMBER AND NAME R0739 Navy C4I Top Level Requirements			
(U) C. PROGRAM CHANGE SUMMARY:					
(U) Funding:		FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget:		1.573	1.549		
Current BES/President's Budget		5.462	1.500	1.361	1.411
Total Adjustments		3.889	-0.049	1.361	1.411
Summary of Adjustments					
SBIR/STTR Transfer		-0.030			
FY2002 Miscellaneous Adjustments		3.969			
Section 8123 Management Reform Initiative		-0.014			
PBD-630 FFRDC		-0.018			
Sec. 313 PL 107-206: Revised		-0.003			
Economic Assumptions		-0.015	-0.009		
Business Process Reform			-0.006		
IT Cost Growth			-0.003		
FY03 FFRDC Reduction			-0.013		
Inflation Savings			-0.018		
Subtotal		3.889	-0.049	0.000	0.000
(U) Schedule:					
Not Applicable					
(U) Technical:					
Not Applicable.					

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: FEBRUARY 2003																										
37653																																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6			PROGRAM ELEMENT NUMBER AND NAME 0605866N SEW Support			PROJECT NUMBER AND NAME R0739 Navy C4I Top Level Requirements																										
<p>(U) D. OTHER PROGRAM FUNDING SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Line Item No. & Name</th> <th style="text-align: center; border-bottom: 1px solid black;"><u>FY 2002</u></th> <th style="text-align: center; border-bottom: 1px solid black;"><u>FY 2003</u></th> <th style="text-align: center; border-bottom: 1px solid black;"><u>FY 2004</u></th> <th style="text-align: center; border-bottom: 1px solid black;"><u>FY 2005</u></th> <th style="text-align: center; border-bottom: 1px solid black;"><u>FY 2006</u></th> <th style="text-align: center; border-bottom: 1px solid black;"><u>FY 2007</u></th> <th style="text-align: center; border-bottom: 1px solid black;"><u>FY 2008</u></th> <th style="text-align: center; border-bottom: 1px solid black;"><u>FY 2009</u></th> <th style="text-align: center; border-bottom: 1px solid black;">To Complete</th> <th style="text-align: center; border-bottom: 1px solid black;">Total Cost</th> </tr> </thead> <tbody> <tr> <td colspan="11" style="padding: 10px;">Not Applicable.</td> </tr> </tbody> </table> <p>(U) E. ACQUISITION STRATEGY:</p> <p style="padding-left: 20px;">Not Applicable.</p>											Line Item No. & Name	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	To Complete	Total Cost	Not Applicable.										
Line Item No. & Name	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	To Complete	Total Cost																						
Not Applicable.																																

R-1 SHOPPING LIST - Item No. 161

UNCLASSIFIED

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification									DATE: FEBRUARY 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605866N Navy Space and Electronic Warfare (SEW) Support				PROJECT NUMBER AND NAME X0706 EMI Reduction and Radio Frequency Management					
COST (\$ in Millions)	Prior Years Cost	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	0.000	1.738	1.654	1.826	1.868	1.910	1.952	1.989	2.027	Continuing	Continuing
RDT&E Articles Qty											0

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Electromagnetic Interference (EMI) Reduction and Radio Frequency (RF) Management. This project develops tools to identify and reduce EMI sources from Navy systems and platforms. There are several tools under development to identify and reduce EMI through proper use of the electromagnetic spectrum. Automated capabilities will be developed that reflect research into new operational fleet battle group frequency management processes that reflect current fleet needs for a communications planning and frequency management tool used to plan communication links and analyze, allocate, and assign communication and radar frequencies for fleet operations. Research also includes EMI models for phased arrays, development of new analysis techniques and technologies to avoid EMI, and development of guidance to harmonize commercial EMI practices.

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 7 of 11)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: FEBRUARY 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605866N SEW Support	PROJECT NUMBER AND NAME X0706 EMI Reduction and Radio Frequency Management

(U) B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
CPM and EMCAP	0.960			
RDT&E Articles Quantity				

· (U) Developed applications that tie into not only Navy C4ISR systems but into commercial communication systems being used by the Navy and ensure their operational use is not a source or victim of interference to find available spectrum automatically. CPM and EMCAP developments satisfy the information technology and security requirements for IT21/NMCI infrastructure and web based infrastructure.

	FY 02	FY 03	FY 04	FY 05
Automated Tools		0.913	1.009	1.032
RDT&E Articles Quantity				

· (U) Automated Tools: Develop interfaces for EMCAP, CPM, and other automated tools to interface with evolving network protocols 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 to ensure they are not a source or victim of interference.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: FEBRUARY 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605866N SEW Support	PROJECT NUMBER AND NAME X0706 EMI Reduction and Radio Frequency Management		
(U) B. Accomplishments/Planned Program				
	FY 02	FY 03	FY 04	FY 05
C4I EMC	0.473	0.451	0.497	0.509
RDT&E Articles Quantity				
<p>· (U) C4I EMC: Due to congested topside environment, develop enhancements to antennas to reduce incidences of interference. In FY02, developed models to analyze antenna enhancements to be repeatable on other platforms. Beginning in FY03, develop models to analyze antenna enhancements, and research the interference for below decks emitters such as wireless LANs to the topside and below decks environments. Beginning in FY05, research new technology efforts related to implementation of advanced capabilities that foster the implementation of cutting edge C4ISR transport capabilities.</p>				
	FY 02	FY 03	FY 04	FY 05
C4I EMC Criteria	0.305	0.290	0.320	0.327
RDT&E Articles Quantity				
<p>· (U) C4I EMC Criteria : Incorporate commercial systems practices and standards into EMC C4I criteria and incorporate into Navy practices. In FY02, incorporated new communications and radar planning techniques including phased array antennas. In FY03, assist battle group staffs in developing frequency management process improvements. Beginning in FY 04, institutionalize frequency management process for operational fleet by developing procedures that can be utilized by all Navy Battle groups.</p>				

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: FEBRUARY 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605866N SEW Support	PROJECT NUMBER AND NAME X0706 EMI Reduction and Radio Frequency Management			
(U) C. PROGRAM CHANGE SUMMARY:					
(U) Funding:		FY 2002	FY 2003	FY 2004	FY 2005
President's Budget:		1.860	1.693		
Current BES/President's Budget		1.738	1.654	1.826	1.868
Total Adjustments		-0.122	-0.039	1.826	1.868
Summary of Adjustments					
Section 8123-Management Reform Initiative		-0.016			
FY02 SBIR		-0.023			
JMPS JCI Program		-0.036			
Sec. 313, PL 107-206: Rev Economic Assumptions		-0.004			
Economic Assumptions (SEC. 8135)		-0.005	-0.009		
Miscellaneous Navy Adjustments		-0.038			
Business Process Reform (SEC. 8100)			-0.007		
IT Cost Growth (SEC. 8109)			-0.003		
Miscellaneous Departmental Adjustments			-0.020		
Subtotal		-0.122	-0.039	0.000	0.000
(U) Schedule:					
Not Applicable					
(U) Technical:					
Not Applicable.					

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: FEBRUARY 2003			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605866N SEW Support			PROJECT NUMBER AND NAME X0706 EMI Reduction and Radio Frequency Management					
(U) D. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Complete</u>	<u>Total Cost</u>
Not Applicable.										
(U) E. ACQUISITION STRATEGY: *										
Not Applicable.										

R-1 SHOPPING LIST - Item No. 161

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Exhibit R-2, RDT&E Budget Item Justification									Date: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/6					R-1 ITEM NOMENCLATURE 0605867N Link Crimson		Space and Electronic Warfare Surveillance/ Reconnaissance Support			
COST (\$ in Millions)	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	Cost to Complete	Total Cost
Total PE Cost	16.254	11.836	12.091	12.569	13.619	13.870	14.118	14.369	CONT	CONT
Link Crimson/Z1034	16.010	11.836	12.091	12.569	13.619	13.870	14.118	14.369	CONT	CONT
Space Management Support/R2007	.244	0	0	0	0	0	0	0	CONT	CONT
Quantity of RDT&E Articles	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Established to exploit all National and Selected Service sensor systems to improve tactical support to fleet operational commanders. Project also supports fleet exercises, which provide the venue for testing modifications to existing programs and being made aware of new requirements. Additional detailed information is available at a higher level of classification.

(U) Z1034: Established to exploit all National and Service sensor systems to improve tactical support to fleet operational commanders. Project also supports fleet exercises, which provide the venue for testing modifications to existing programs and being made aware of new requirements.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2003 PLAN:

- (U) (\$0.5) Joint Exercises/Training
- (U) (\$0.4) Support to TBMD
- (U) (\$2.7) Support to Littoral/Expeditionary Warfare
- (U) (\$3.4) Precision Strike/Mission Planning
- (U) (\$2.2) Improved Data Dissemination/Exploitation
- (U) (\$1.6) Sensor Awareness/Mission Planning
- (U) (\$1.0) Assured Communication/Navigation

2. (U) FY 2004 PLAN:

- (U) (\$0.6) Joint Exercises/Training
- (U) (\$0.4) Support to TBMD
- (U) (\$3.1) Support to Littoral/Expeditionary Warfare
- (U) (\$3.2) Precision Strike/Mission Planning
- (U) (\$2.6) Improved Data Dissemination/Exploitation
- (U) (\$1.3) Sensor Awareness/Mission Planning
- (U) (\$0.9) Assured Communication/Navigation

3. (U) FY 2005 PLAN:
- (U) (\$0.7) Joint Exercises/Training
 - (U) (\$0.5) Support to TBMD
 - (U) (\$2.1) Support to Littoral/Expeditionary Warfare
 - (U) (\$4.0) Precision Strike/Mission Planning
 - (U) (\$3.3) Improved Data Dissemination/Exploitation
 - (U) (\$1.1) Sensor Awareness/Mission Planning
 - (U) (\$0.9) Assured Communication/Navigation

B. Program Change Summary:

	<u>FY02</u>	<u>FY03</u>	<u>FY04</u>	<u>FY05</u>
PB03	12.327	12.120	12.460	12.924
PB04	16.010	11.836	12.091	12.569
Total Adjustments	+3.683	-0.284	-0.369	-0.355
Congressional Increase	+3.766			
Inflation, Working Capital Fund and other Misc. Adjustments	-0.083	-0.284	-0.369	-0.355

FY2002 Adjustments are Congressional Increases: Time Critical Strike (.991), Radiant Argon (2.775).

C. Other Program Funding Summary:

	<u>FY02</u>	<u>FY03</u>	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	To Complete	Total Cost
O&M/1C3C	.467	.396	.426	.438	.448	.458	.470	.482	Con't	Con't
DERF (Category 1)	4.000									

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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification

DATE:

February 2003

APPROPRIATION/BUDGET ACTIVITY
RDT&E, N /BA-6 Management Support

PROGRAM ELEMENT (PE) NAME AND NO.
0605873M Marine Corps Program Wide Support

COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Total PE Cost	20.023	27.476	16.635	19.766	25.669	30.355	34.122	32.537	Cont	Cont
C0030 Marine Corps Studies and Analyses	5.249	6.167	5.721	5.900	6.114	6.238	6.438	6.566	Cont	Cont
C0033 Marine Corps Operational Testing & Evaluation Activity	2.558	2.389	2.770	2.713	2.766	2.816	2.901	2.958	Cont	Cont
C2330 Family of Incident Response Systems (FIRS)	11.267	16.469	1.898	2.870	7.418	10.860	13.970	11.858	Cont	Cont
C2930 Phase 0 Activities	0.949	2.451	6.246	8.283	9.371	10.441	10.813	11.155	Cont	Cont
Quantity of RDT&E Articles										

(U) 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, supporting the Concepts Based Requirements Systems and Combat Development Process. In addition, the PE supports Marine Corps Operational Test and Evaluation (OT&E) Activities.

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

	<u>FY2002</u>	<u>FY2003</u>	<u>FY2004</u>	<u>FY2005</u>
(U) FY 2003 President's Budget:	20.133	12.208	12.917	13.867
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions	-0.055	-0.657	-1.161	-1.351
(U) Congressional Rescissions				
(U) Congressional Increases		15.925		
(U) Reprogrammings	0.239		4.879	7.250
(U) SBIR/STTR Transfer	-0.294			
(U) Minor Affordability Adjustment				
(U) FY 2004 President's Budget:	20.023	27.476	16.635	19.766

CHANGE SUMMARY EXPLANATION:

- (U) Funding: See Above.
- (U) Schedule: Not Applicable.
- (U) Technical: Not Applicable.

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EXHIBIT R-2a, RDT&E Project Justification					DATE: February 2003					
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME					
RDT&E, N/BA-6 Management Support	0605873M Marine Corps Program Wide Support				C0030 Marine Corps Studies and Analyses					
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY2009	Cost to Complete	Total Program
Project Cost	5.249	6.167	5.721	5.900	6.114	6.238	6.438	6.566	Cont	Cont
RDT&E Articles Qty										
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:										
<p>This project funds the general studies and analyses portion of the Marine Corps Studies System (MCSS) and provides the analytical underpinnings and foundation for the MCSS. The project funds a variety of studies and analyses approved for execution in the annual Marine Corps Studies Master Plan (MCSMP) 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, cost benefit analysis, training assessments, feasibility analysis, scenario development, and other analyses in support of the Program Objective Memorandum (POM) initiatives and the Marine Corps, as a whole. The MCSS also supports the front end of the Marine Corps' acquisition system, the Expeditionary Force Development System (EFDS), and the Combat Development Process (CDP). The MAA process provides quantitative and qualitative information to decision makers for basing decisions effecting improvements in operational concepts, doctrine, force structure, education, training, and procurement. The MCSS also provides analytical support to decision makers for the resolution of current problems and issues identified by the operating forces. The MCSS also makes use of the Marine Corps Research University to conduct studies and analysis projects in the areas of basic and applied research and Advanced Technology Development.</p>										
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:										
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005						
Accomplishment/Effort Subtotal Cost	1.331	0.000	0.000	0.000						
RDT&E Articles Qty										
<p>In FY-02, completed the Mission Area Analyses (MAA) for Peacekeeping, Marine Expeditionary Brigade Sustained Operations Ashore, Humanitarian Assistance/Disaster Relief, Northeast Asia Forcible Entry, and Military Operations on Urban Terrain.</p>										
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005						
Accomplishment/Effort Subtotal Cost	3.011	5.171	4.818	4.995						
RDT&E Articles Qty										
<p>In FY-02, commenced the Sustainment Consequences of Acquisition Decisions and Deployability Readiness, Expeditionary Fires, Remain Behind Equipment, and Depot Future studies.</p> <p>In FY-02, commenced and completed the Aviation Logistics Support Aboard Maritime Prepositioning Force Future, Sustainment Consequences of Acquisition Decisions, Joint Warfare System, Officer Candidate School Data Analysis, Officer Recruiting Structure II, Marine Corps Deployment Tempo, Utility of High Speed Vessel for United States Marine Corps Operations, Regimental Command and Control (C2) Architecture, Alternatives for Improving Critical Secondary Military Occupation Specialty (MOS), Ground Reconnaissance in Support of Expeditionary Maneuver Warfare, Tactical Air, Military Transformation in the United States Marine Corps, Imagery Analysis Support to Precision Targeting, Operational Support Airlift, Identification and Analysis of the Demographic Trends Impacting Reserves, Quality of Life, and facilitating Engagement in East Africa studies, and the Multi Role Radar System Alternatives of Analysis. Additionally, the Military Transformation in the USMC Study that identified efforts designed to ensure that the Marine Corps remains the force of choice for small scale contingency operations and critical contributions in large scale theater conflicts was completed. The MCSS also provided USMC participation in the DoN Tactical Air Support study and a Maritime Pre-Position Force (MPFF) transformation study.</p> <p>In FY-03, commence the Marine Expeditionary Brigade 2015 Command and Control (C2) and Combat Service Support (CSS) Capabilities, Advanced Amphibious Assault Vehicle (AAAV) Carry Capacity Key Performance Parameters (KPP) and Analysis of Alternatives, Joint Tactical Radio System (JTRS) Migration Strategy, United States Marine Corps Fuel Use Reduction, Light Tactical Wheeled Vehicle, Analysis of Alternatives for Advanced Antitank Weapon System - Heavy, United States Marine Corps Overarching Battery, Marine Air Ground Task Force (MAGTF) Expeditionary Family of Fighting Vehicles Capabilities Requirements, United States Marine Corps Manpower Requirements Criteria, Enabling Logistics Processes with Portable and Wireless Technology, Establishing Time Criteria for Logistics Tasks, Logistics Community Training for Officers and Staff Non-commissioned Officers, Logistics Performance Measurement, Injury Prevention and Rehabilitation, and Bumper to Bumper Maintenance Policy studies.</p> <p>Initiate the high priority study and analysis projects approved in the FY2004-2005 Marine Corps Studies Master Plan (MCSMP) and initiate new Analysis of Alternatives support as nominated and approved.</p>										

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME		
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support		C0030 Marine Corps Studies and Analyses		
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	0.907	0.996	0.903	0.905	
RDT&E Articles Qty					
<p>In FY-02, completed the Force Protection and Electro-Optical Equipment Inventory and Maintenance Study, Signals Intelligence (SIGINT) Electronic Warfare Assessment study, and Force Protection II study with the Marine Corps Research University.</p> <p>In FY-03, continue and complete the Concept of Link Employment (COLE), Marine Corps Meteorological and Oceanographic Support studies. Commence and complete the Integration of Diagnostics into Ground Equipment Life Cycle Management, and Protective Technology Research, Development, and Implementation in Support of Defense Protective Needs studies.</p> <p>Initiate high priority study and analysis projects and studies nominated and approved in the FY2003-2005 Marine Corps Studies Master Plan (MCSMP).</p>					
(U) Total \$	0.000	5.249	6.167	5.721	5.900
(U) PROJECT CHANGE SUMMARY	FY2002	FY2003	FY2004	FY2005	
(U) FY 2003 President's Budget:	5.131	6.318	6.505	6.679	
(U) Adjustments from the President's Budget:					
(U) Congressional/OSD Program Reductions	-0.014	-0.151	-0.784	-0.779	
(U) Congressional Rescissions					
(U) Congressional Increases					
(U) Reprogrammings	0.217				
(U) SBIR/STTR Transfer	-0.085				
(U) Minor Affordability Adjustment					
(U) FY 2004 President's Budget:	5.249	6.167	5.721	5.900	
(U) CHANGE SUMMARY EXPLANATION:					
(U) Funding: See Above.					
(U) Schedule: Not Applicable.					
(U) Technical: Not Applicable.					
(U) C. OTHER PROGRAM FUNDING SUMMARY:	Not Applicable.				
(U) Related RDT&E:	PE 0605154N (Center for Naval Analyses (CNA), Project C0031 (Marine Corps Operations Analysis Group)				
(U) D. ACQUISITION STRATEGY:	Not Required.				
(U) E. MAJOR PERFORMERS:	Indefinite Delivery Indefinite Quantity contracts as follows:				
FY 02	Northrop Grumman Information Technology (NGIT), San Diego, CA for Mission Area Analysis support services. Sep 01.				
FY 02 - FY04	Decision Engineering Associates LLC, Dumfries, VA for analytical and support services. Mar 02.				
FY 02 - FY04	Computing Technologies Inc. (CoTs) Fairfax, VA for analytical and support services. Dec 01				
FY 02 - FY04	Marine Corps Research University at Pennsylvania State, State College, PA for analytical and support services. May 02.				
FY 02 - FY04	Northrop Grumman Mission Systems (NGMS) (Formerly TRW Inc), Fairfax, VA for Analytical and support services. Nov 01.				
(U) SCHEDULE PROFILE:	Not Applicable				

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EXHIBIT R-2a, RDT&E Project Justification					DATE: February 2003					
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME					
RDT&E, N/BA-6 Management Support	0605873M Marine Corps Program Wide Support				C0033 Marine Corps Operational Testing & Evaluation Activity					
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	2.558	2.389	2.770	2.713	2.766	2.816	2.901	2.958	Cont	Cont
RDT&E Articles Qty										
(U) 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 USMC Operational Test (OT) programs for the Acquisition Category (ACAT) I through ACAT IV less OT of manned aircraft and to perform such other functions as 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 at decision point. MCOTEA must ensure that the Marines in the Operating Forces receive the very best possible equipment and support. MCOTEA must ensure each system proposed for acquisition is tested adequately, evaluated objectively and reported independently.</p>										
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:										
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005						
Accomplishment/Effort Subtotal Cost	0.753	0.578	0.771	0.771						
RDT&E Articles Qty										
MCOTEA: Provide for organizational support and utilities.										
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005						
Accomplishment/Effort Subtotal Cost	1.461	1.600	1.520	1.520						
RDT&E Articles Qty										
MCOTEA: Provide for organizational salaries.										
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005						
Accomplishment/Effort Subtotal Cost	0.344	0.211	0.479	0.422						
RDT&E Articles Qty										
MCOTEA: Provide organizational support, utilities, and salaries for the New Automation Information Systems (AIS) test branch.										
(U) Total \$	2.558	2.389	2.770	2.713						

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME		
RDT&E, N/BA-6 Management Support	0605873M Marine Corps Program Wide Support	C0033 Marine Corps Operational Testing & Evaluation Activity		
	FY2002	FY2003	FY2004	FY2005
(U) Project Change Summary				
(U) FY 2003 President's Budget:	2.485	2.447	2.863	2.806
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions	-0.007	-0.058	-0.093	-0.093
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	0.080			
(U) SBIR/STTR Transfer				
(U) Minor Affordability Adjustment				
(U) FY 2004 President's Budget:	2.558	2.389	2.770	2.713
CHANGE SUMMARY EXPLANATION:				
(U) Funding: See Above.				
(U) Schedule: Not Applicable.				
(U) Technical: Not Applicable.				
(U) C. OTHER PROGRAM FUNDING SUMMARY:	Not Applicable.			
(U) Related RDT&E:	Not Applicable.			
(U) D. ACQUISITION STRATEGY:	Not Required.			
(U) E. MAJOR PERFORMERS:	This project provides funds for organizational support (travel, salaries) of MCOTEA.			
(U) SCHEDULE PROFILE:	Not Applicable.			

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EXHIBIT R-2a, RDT&E Project Justification					DATE: February 2003					
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME					
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support				C2330 Family of Incident Response Systems (FIRS)					
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	11.267	16.469	1.898	2.870	7.418	10.860	13.970	11.858	Cont	Cont
RDT&E Articles Qty										
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:										
The Family of Incident Response Systems (FIRS) consists of equipment, systems, and services designed to provide federal, state, and local weapons of mass destruction (WMD) incident response forces the capabilities they need to effectively respond to a terrorist attack using Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives (CBRNE) weapons of mass destruction. The Family 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 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 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.										
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:										
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005						
Accomplishment/Effort Subtotal Cost	0.411	0.441	0.100	1.168						
RDT&E Articles Qty										
CBIRF: Research and development of a device that senses victims through debris of a collapsed building or through standing structures, such as walls and doors.										
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005						
Accomplishment/Effort Subtotal Cost	0.080	0.250	0.562	0.200						
RDT&E Articles Qty										
CBIRF: Research and development of a hand-held broad spectrum detector capable of real-time detection and identification of chemical warfare agents (CWA), Toxic Industrial Chemicals/Materials (TIC/TIM) below the Immediately Dangerous to Life and Health (IDLH) level.										
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005						
Accomplishment/Effort Subtotal Cost	0.088	0.000	0.000	0.000						
RDT&E Articles Qty										
CBIRF: Live agent testing of the Portable Gas Chromatograph/Mass Spectrometer (GC/MS) upgrade to validate its level of TIC/TIM detection and identification.										
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005						
Accomplishment/Effort Subtotal Cost	0.735	0.000	0.000	0.000						
RDT&E Articles Qty										
CBIRF: Research and development of a lightweight cooling system capable of cooling personnel wearing various levels of chem-bio protective equipment.										
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005						
Accomplishment/Effort Subtotal Cost	0.265	0.000	0.000	0.000						
RDT&E Articles Qty										
CBIRF: Research and development of a device that will identify isotopes of radiological hazards to help characterize an incident and determine the duration of a hazard.										

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EXHIBIT R-2a, RDT&E Project Justification			DATE:	
			February 2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
RDT&E, N/BA-6 Management Support	0605873M Marine Corps Program Wide Support		C2330 Family of Incident Response Systems (FIRS)	
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.760	2.732	0.000	0.000
RDT&E Articles Qty				
ECASOL: Research and development of environmentally benign, patient-safe chem-bio decontaminant Electro-Chemical Activated Solution.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.300	0.253	1.226	0.420
RDT&E Articles Qty				
CBIRF: Research and development of a hand-held detector capable of real-time collection detection and identification of biological warfare agents (BWA) below the infective dosage level.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.240	0.000	0.000	0.000
RDT&E Articles Qty				
CBIRF: Research and development of a structural triage technology capable of detecting hidden structural damage and identifying structural hazards.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.949	1.000	0.000	0.000
RDT&E Articles Qty				
CBIRF: Research and development of improved respiratory protection.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.200	1.463	0.000	0.076
RDT&E Articles Qty				
NANOTECH RESPONSES: Research of nanoparticle technology, specifically begin evaluation and development of protocols for neutralization of chem-bio agents.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.775	0.000	0.000	0.000
RDT&E Articles Qty				
NANOTECH RESPONSES: Research of nanoparticle technology, specifically begin evaluation and determine efficacy with regard to remediation of contaminated rooms and buildings.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	1.640	2.073	0.000	0.000
RDT&E Articles Qty				
CB MSS/Analyzer Detector: Research and development of a Multi-Sensor/Analyzer Detector (MSAD) and data-fusion architecture for chem-bio agents, toxic industrial chemicals/materials (TIC/TIM) and toxins.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	4.824	0.000	0.000	0.000
RDT&E Articles Qty				
CMIS: Research and development of the Consequence Management Interoperability System (CMIS), including fielding a "Fast Track" capability in response to the Sept. 11th, 2001 requirements.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.076	0.010	0.000
RDT&E Articles Qty				
CBIRF: Research and development of a patient tracking and following system.				

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EXHIBIT R-2a, RDT&E Project Justification			DATE:	
			February 2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
RDT&E, N/BA-6 Management Support	0605873M Marine Corps Program Wide Support		C2330 Family of Incident Response Systems (FIRS)	
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.000	0.353
RDT&E Articles Qty				
CBIRF: Development of field rugged Gas Chromatograph/Mass Spectrometer (GC/MS).				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.000	0.653
RDT&E Articles Qty				
CBIRF: Development of an improved mass casualty decontamination system.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	3.415	0.000	0.000
RDT&E Articles Qty				
CB Warfare: Development of chem/bio warfare agent chip detector .				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.200	0.000	0.000
RDT&E Articles Qty				
CBIRF: Development and user evaluation of a Personnel and Equipment Transport Vehicle (PETV) for transportation of incident response force and equipment in a vehicle configured for team integrity, movement command and control, and mission planning.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.610	0.000	0.000
RDT&E Articles Qty				
CBIRF: Development of Stand-Off Chemical Agent Detector (SCAD).				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.010	0.000	0.000
RDT&E Articles Qty				
CBIRF: Development of a Radiation Protective Suit Prototype.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.694	0.000	0.000
RDT&E Articles Qty				
CBIRF: Research and development of a chem/bio wearable protector capable of detection of chem/bio warfare agents and toxic industrial chemicals.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	1.788	0.000	0.000
RDT&E Articles Qty				
CBIRF: Validation and verification of COTS technologies for improve operational capabilities of incident response forces to meet emerging terrorist threat.				

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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME		
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support	C2330 Family of Incident Response Systems (FIRS)		
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.488	0.000	0.000
RDT&E Articles Qty				
MC Research University: Conduct studies and analysis of 1/ Integration of Diagnostics into Ground Equipment Life Cycle Management, 2/ Establishing Time Criteria for Logistics Tasks, and 3/ the Logistics Community Training for Officers and Staff-Noncommissioned Officers.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.976	0.000	0.000
RDT&E Articles Qty				
CPAC: Testing of sustainment corrosion products on military equipment to include silane crystal technology.				
Total	11.267	16.469	1.898	2.870
(U) PROJECT CHANGE SUMMARY:				
	FY2002	FY2003	FY2004	FY2005
(U) FY 2003 President's Budget:	11.371	0.933	0.981	1.760
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions	-0.031	-0.389	-0.083	-0.190
(U) Congressional Rescissions				
(U) Congressional Increases		15.925		
(U) Reprogrammings	-0.073		1.000	1.300
(U) SBIR/STTR Transfer				
(U) Minor Affordability Adjustment				
(U) FY 2004 President's Budget:	11.267	16.469	1.898	2.870
CHANGE SUMMARY EXPLANATION:				
(U) Funding: See Above.				
(U) Schedule: Not Applicable.				
(U) Technical: Not Applicable.				

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support	C2330 Family of Incident Response Systems (FIRS)
(U) C. OTHER PROGRAM FUNDING SUMMARY:		
<u>Line Item No. & Name</u>	<u>FY 2002</u>	<u>FY 2003</u>
(U) PMC Line (BLI# 652100) FIRS Family of Incident Response Systems	0.000	0.000
	<u>FY 2004</u>	<u>FY 2005</u>
	3.447	4.243
	<u>FY 2006</u>	<u>FY 2007</u>
	4.732	5.847
	<u>FY2008</u>	<u>FY2009</u>
	8.187	11.949
	<u>To Compl</u>	<u>Total Cost</u>
	Cont	Cont
(U) Related RDT&E: Not Applicable.		
(U) D. ACQUISITION STRATEGY: Not Required.		
(U) E. MAJOR PERFORMERS:		
FY 02 Battelle Memorial Institute, Columbus, OH. Research and development Consequence Management Interoperability System and CBIRF. M2 Technologies, Inc. West Hyannisport, MA - research nanoparticle technology. Penn State University, PA - research and develop a analyzer for chem-bio agents.		
FY 03 Battelle Memorial Institute, Columbus, OH. Research and development urban search and rescue technology. Penn State University, PA; research and development of MSAD and CB chip detector.		
FY 04 Battelle Memorial Institute, Columbus, OH - research and development urban search and rescue technology.		
FY 05 Battelle Memorial Institute, Columbus, OH - research and development urban search and rescue technology.		
(U) D. SCHEDULE PROFILE: Not Applicable.		

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EXHIBIT R-2a, RDT&E Project Justification					DATE: February 2003					
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME									
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support				C2930 Marine Corps Phase A Activities					
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	0.949	2.451	6.246	8.283	9.371	10.441	10.813	11.155	Cont	Cont
RDT&E Articles Qty										
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>Pre-Phase A Activities fund assessment, survey, and planning activities in support of the requirements generation system to mature, limit, clarify and define requirements before competition for resources in the Program Object Memorandum (POM) process and transition to acquisition management. This effort will complement the currently funded Marine Corps Systems Command Phase A Activities line by providing funds 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 Need 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 Council (MROC)-directed tailoring Authorized Acquisition Objective (AAO). Marine Corps Combat Development Command (MCCDC) averages approximately 62 UNS requests per year addressing new requirements, of which approximately 12% 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,</p> <p>MCSC Phase A Activities, Marine Corps Warfighting Lab (MCWL) warfighting experimentation or Science and Technology (S&T) activities.</p> <p>Pre-phase A Activities would 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 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.</p> <p>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 materiel solutions to validate needs, estimate program costs, support sound business decisions, correct inherent disconnects between the Programming, Planning, Budgeting System (PPBS) cycle, the Combat Development and Acquisition Management 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 with Program 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. Also a recent initiative to have MARCORSYSCOM develop a BCA to help MCCDC frame the requirement in terms of a commercial-off-the-shelf (COTS) solution will increase utilization of the funds.</p>										

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6 Management Support	PROGRAM ELEMENT NUMBER AND NAME 0605873M Marine Corps Program Wide Support	C2930 Marine Corps Phase A Activities																	
<p>The MAGTF Expeditionary Family of Fighting Vehicles (MEFFV) Project will field a successor to the Marine Corps' current M1A1 Common Main Battle Tank (MBT) and the Light Armored Vehicle (LAV) Family of Vehicles (FOV). The MEFFV will provide ground combat elements (GCE) of the Marine Air Ground Task Force (MAGTF) a principle means of operational and tactical maneuver/mobility. The vehicle family will be designed specifically to complement the Advanced Amphibious Assault Vehicle (AAAV) and MV-22 aircraft in providing the capability needs of combat operations ashore within the Navy and Marine Corps capstone operational concepts of Forward From the Sea and Expeditionary Maneuver Warfare. The MEFFV will provide the MAGTF with the capability to execute combat, combat support and select combat service support within the full spectrum of military missions from humanitarian operations to conventional conflict. The project intends to leverage key technologies in combat vehicle development to develop a family of systems, replacing the two current systems as they reach End of Service life in 2015 and 2020 respectively. The MEFFV family of systems will provide the capabilities necessary to provide warfighting Combatant Commanders the early entry forces needed to conduct operations in the 21st Century.</p> <p>program is a high priority ground system acquisition initiative. To satisfy the requirements of the 21st Century Marine Warfighters, the MEFFV Project will include the following:</p> <ul style="list-style-type: none"> • Preparation of life-cycle estimates leading to a Milestone B decision in 2012. 																			
(U) ACCOMPLISHMENTS/PLANNED PROGRAM:																			
<table border="1"> <thead> <tr> <th>COST (\$ in Millions)</th> <th>FY 2002</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> </tr> </thead> <tbody> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td align="center">0.949</td> <td align="center">2.451</td> <td align="center">2.488</td> <td align="center">2.538</td> </tr> <tr> <td>RDT&E Articles Qty</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	Accomplishment/Effort Subtotal Cost	0.949	2.451	2.488	2.538	RDT&E Articles Qty				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005															
Accomplishment/Effort Subtotal Cost	0.949	2.451	2.488	2.538															
RDT&E Articles Qty																			
<p>Initiate and complete high priority Milestone 0/Phase 0 activities for Market Surveys and associated Business Case Analysis for the following programs: Audiovisual Investment Equipment, Portable Integrated System Monitor, M1A1 Munitions Countermeasures,</p>																			
<table border="1"> <thead> <tr> <th>COST (\$ in Millions)</th> <th>FY 2002</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> </tr> </thead> <tbody> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td align="center">0.000</td> <td align="center">0.000</td> <td align="center">1.265</td> <td align="center">0.000</td> </tr> <tr> <td>RDT&E Articles Qty</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	Accomplishment/Effort Subtotal Cost	0.000	0.000	1.265	0.000	RDT&E Articles Qty				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005															
Accomplishment/Effort Subtotal Cost	0.000	0.000	1.265	0.000															
RDT&E Articles Qty																			
<p>Provides for the conduct of high priority Pre-Phase A Activities for Clear Facilities Ground Weapons Locating Radar, PROFILER Meteorological Measuring Set, Thermobaric Weapon, Reconnaissance Surveillance Target Acquisition, Squad Advanced Marksman, Rifle</p>																			

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APPROPRIATION/BUDGET ACTIVITY			February 2003	
RDT&E, N /BA-6 Management Support	PROGRAM ELEMENT NUMBER AND NAME	C2930 Marine Corps Phase A Activities		
	0605873M Marine Corps Program Wide Support			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.250	0.350
RDT&E Articles Qty				
Force Design Trades: Survey and derive roles of MAGTF mounted units in future service and Joint operational concepts. Initiate a Mounted MAGTF Concept Study and Mission Area Analysis for Mounted MAGTF Operations. Begin deriving alternative MEFFV missio				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.300	0.600
RDT&E Articles Qty				
Lethality: Populate baseline capability performance needs and constraints with capability architecture database. Assess lethality system opportunities to identify their salient characteristics. Determine the target set for MEFFV. Assess target acquisit				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.543	0.660
RDT&E Articles Qty				
Propulsion/Tactical Mobility: Work on propulsion/mobility roadmap (emphasis on expeditionary). Assess design architecture with higher component commonalities and assess Future Combat Systems (FCS). Monitor Electric Warship/Reconnaissance, Surveillance,				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.200	0.250
RDT&E Articles Qty				
Survivability (Active): Assess FCS active protection technologies for future exploitation. Correlate DOD technologies to MEFFV concepts, active survivability objective roadmap. Explore active survivability initiatives through Service and joint games an				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.350	0.600
RDT&E Articles Qty				
Survivability (Passive): Conduct assessment of new technology base/appliqué armor materials versus emergent threat munitions. The assessment will also investigate embedded sensor technology development/ballistic protection versus signature management in				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.400	0.750
RDT&E Articles Qty				
System Integration: Establish capability (functional) architecture database. Develop modeling and simulations approach, determine feasibility of Simulation Based Acquisition. Draft Modeling and Simulation (M&S) Roadmap. Identify family of vehicles ar				

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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME			
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support C2930 Marine Corps Phase A Activities			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.050	0.050
RDT&E Articles Qty				
C4ISR: Map C4ISR capability and needs to Naval and joint C4ISR plans. Correlate SPAWAR/DARPA technologies and issues to MEFFV concepts. Explore C4ISR initiatives within MEFFV concepts through Service and joint games experiment.				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.400	0.600
RDT&E Articles Qty				
Office and Analysis Team: Fund analysis team to support technology exploitation and coordinate successive integration of technologies. Administrative support, (Systems Engineering and Technical Assistance (SETA))/contractor support. Project Office travel				
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.000	1.885
RDT&E Articles Qty				
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/				
(U) Total \$	0.949	2.451	6.246	8.283
(U) PROJECT CHANGE SUMMARY:				
	<u>FY2002</u>	<u>FY2003</u>	<u>FY2004</u>	<u>FY2005</u>
(U) FY 2003 President's Budget:	0.962	2.510	2.568	2.622
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions	-0.003	-0.059	-0.201	-0.289
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	0.015		3.879	5.950
(U) SBIR/STTR Transfer	-0.025			
(U) Minor Affordability Adjustment				
(U) FY 2004 President's Budget:	0.949	2.451	6.246	8.283
CHANGE SUMMARY EXPLANATION:				
(U) Funding: Change in FY 04 and FY05 is due to realignment of programs within the Marine Corps.				
(U) Schedule: Not Applicable.				
(U) Technical: Not Applicable.				

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6 Management Support	PROGRAM ELEMENT NUMBER AND NAME 0605873M Marine Corps Program Wide Support	C2930 Marine Corps Phase A Activities
<p>(U) C. OTHER PROGRAM FUNDING SUMMARY: Not Applicable</p> <p>(U) Related RDT&E: Not Applicable.</p> <p>(U) D. ACQUISITION STRATEGY: Not Required</p> <p>(U) E. MAJOR PERFORMERS: FY 04-05 Expeditionary Force Development Center, Quantico, VA - Develop Mission Area Analysis and Supporting Documents - Projected 11/03; 11/04 FY 04-05 Marine Corps Warfighting Lab (MCWL), Quantico, VA - Service and Joint Warfighting Gaming and Experimentation. - Projected 11/03; 11/04 FY 04-05 Others TBD - Candidate agencies include NSWC Dahlgren, VA, NSWC Carderock, MD, Army Research Lab, Tank Automotive Research, Development and Engineering Center. (TARDEC), Warren, MI, University of Texas Institute for Advanced Technology (IAT), Austin, TX ect., - Projected 02/04; 02/05 FY 02 MKI Systems, Incorporated, Woodbridge, VA - Study Analysis, business Case Study, CAIV Analysis and Life Cycle Cost Estimates - Award dates: Various throughout the FY. FY03-05 Major Performers to be determined based on the Phase A activity.</p> <p>(U) D. SCHEDULE PROFILE: Not Applicable.</p>		