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

JUSTIFICATION OF ESTIMATES
FEBRUARY 2004

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

DEPARTMENT OF THE NAVY
FY 2005 RDT&E PROGRAM

EXHIBIT R-1

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

Date: February 2004

Line No	Program Element Number	Item	Act	Thousands of Dollars FY 2003	FY 2004	FY 2005	SEC
140	0604256N	Threat Simulator Development	6	25,725	27,692	23,866	U
141	0604258N	Target Systems Development	6	45,856	37,219	35,677	U
142	0604759N	Major T&E Investment	6	39,851	44,178	39,787	U
143	0605152N	Studies and Analysis Support - Navy	6	6,042	7,570	2,183	U
144	0605154N	Center for Naval Analyses	6	43,720	37,918	43,982	U
145	0605155N	Fleet Tactical Development	6	2,639	1,984	2,338	U
146	0605502N	Small Business Innovative Research	6	226,342			U
147	0605804N	Technical Information Services	6	18,116	27,270	696	U
148	0605853N	Management, Technical & International Support	6	50,482	30,901	31,407	U
149	0605856N	Strategic Technical Support	6	2,247	3,837	3,493	U
150	0605861N	RDT&E Science and Technology Management	6	59,940	64,162	66,117	U
151	0605862N	RDT&E Instrumentation Modernization	6	12,910	13,402	19,370	U
152	0605863N	RDT&E Ship and Aircraft Support	6	74,262	77,772	81,308	U
153	0605864N	Test and Evaluation Support	6	270,550	256,582	255,926	U
154	0605865N	Operational Test and Evaluation Capability	6	11,355	11,959	13,044	U
155	0605866N	Navy Space and Electronic Warfare (SEW) Support	6	3,082	3,140	2,941	U
156	0605867N	SEW Surveillance/Reconnaissance Support	6	11,836	11,956	12,160	U
157	0605873M	Marine Corps Program Wide Support	6	26,441	29,297	19,701	U

DEPARTMENT OF THE NAVY
FY 2005 RDT&E PROGRAM

EXHIBIT R-1

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

Date: February 2004

Line No	Program Element Number	Item	Act	Thousands of Dollars FY 2003	FY 2004	FY 2005	SEC
158	0909999N	Financing for Cancelled Account Adjustments	6	7,978			U
	Total RDT&E Management Support			939,374	686,839	653,996	

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

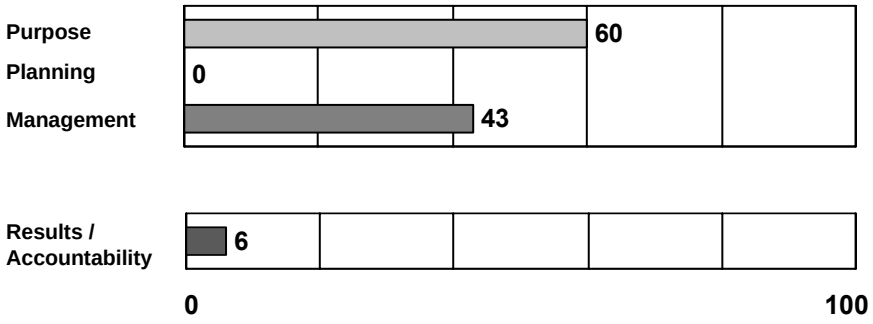
For expenses necessary for basic and applied scientific research, development, test and evaluation, including maintenance, rehabilitation, lease, and operation of facilities and equipment, **[**$15,146,383,000**]** *$16,346,391,000*, to remain available for obligation until September 30, **[**2005**]** *2006*: *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, 2004.)*

[For an additional amount for ‘‘Research, Development, Test and Evaluation, Navy’’, $34,000,000, to remain available until September 30, 2005.**]** *(Emergency Supplemental Appropriations Act for Defense and for the Reconstruction of Iraq and Afghanistan, 2004.)*

Program: *DoD Small Business Innovation Research / Technology Transfer*

Agency: *Department of Defense--Military*

Bureau: *Research & Development*



Key Performance Measures	Year	Target	Actual
Long-term Measure: Revise the Commercialization Achievement Index (CAI) to eliminate counting of investments as commercialization no later than three years after receiving the first Phase II support. After that, count competitive sales receipts only.	2004	All	
Long-term Measure: Stop funding companies with more than 5 current or past Phase II awards in the last 5 years if the company is in the bottom quartile in the CAI.	2005	All	
Long-term Efficiency Measure: Emphasize commercialization so overall competitively awarded sales to the government (direct or indirect) from resulting products is at least equal to new R&D investment (Phases I-III), as a portfolio of prior 3-8 year investments (rolling average).	2004	0.15	
	2005	0.2	
	2006	0.3	
	2007	0.5	

Rating: *Results Not Demonstrated*

Program Type: *Research and Development*

Program Summary:

The Department of Defense's (DoD's) Small Business Innovation Research and Small Business Technology Transfer programs supply funds to small businesses (in the latter case, in conjunction with non-profit research institutions) to develop products that help DoD defend the country.

The assessment found that the program:

- Provides funds to small businesses but has poor controls on unproductive spending
- Continues to provide funding to companies with track records of poor performance;
- Overestimates commercial successes resulting from Federal support by treating additional investment in the same way as product sales.

In response to these findings, the Administration will:

1. Tighten eligibility requirements for accepting proposals from companies and individuals that repeatedly fail to sell resulting products in the marketplace.
2. Change the way companies' past performance is assessed to ensure that it more closely matches the intent of the law.
3. Look for ways to budget explicitly for the program's administrative costs.
4. Seek to get highly successful awardees to enter the mainstream of Defense contracting.

Program Funding Level (in millions of dollars)

2003 Actual	2004 Estimate	2005 Estimate
963	1,100	1,133

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY **RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6**					R-1 ITEM NOMENCLATURE 0604256N, Threat Simulator Development			
COST ($ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost		**25.725**	**27.692**	**23.866**	**24.190**	**24.585**	**24.981**	**25.587**
W0602 Electronic Warfare Environment SIM (ECHO)		**13.321**	**13.998**	**11.379**	**11.530**	**11.697**	**11.936**	**12.171**
R0672 Effectiveness of Navy E.W. Systems (ENEWS)		**12.404**	**13.694**	**12.487**	**12.660**	**12.888**	**13.045**	**13.416**

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.

W0602 Project (formally E0602) 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.

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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**	PROGRAM ELEMENT NUMBER AND NAME 0604256N Threat Simulator Development				PROJECT NUMBER AND NAME W0602 ECHO			
COST ($ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		**13.321**	**13.998**	**11.379**	**11.530**	**11.697**	**11.936**	**12.171**
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.

NOTE: Beginning October 1, 2003 (FY04) - PROGRAM ELEMENT 0604256N Threat Simulator Development - PROJECT UNIT E0602 - ELEX W/F ENVIR SIMULATION (ECHO) was transferred from NAVAIRSYSCOM PMA-272 TO NAVAIRSYSCOM AIR 5.0C under PROJECT UNIT W0602 - ELEX W/F ENVIR SIM (ECHO).

R-1 SHOPPING LIST - Item No. 140

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604256N Threat Simulator Development	W0602 ECHO

B. Accomplishments/Planned Program

Ground Based IR Stimulator		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.715	1.175	
RDT&E Articles Quantity				

Complete Ground Based IR Stimulator. Complete fabrication. Integrate into the Range and perform initial operational capabilities (IOC) testing.

Advanced Man Portable Air Defense Systems		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.533	0.750	0.750
RDT&E Articles Quantity				

Continue Advanced Man Portable Air Defense Systems. Procure additional manpad seekers, install and test at the Navy open air range.

1V2 IR Alert/Response System		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		2.371	0.450	
RDT&E Articles Quantity				

Complete 1V2 IR Alert/Response System. Complete installation of hardware and software. Conduct initial operational capabilities testing at the Navy open air range.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604256N Threat Simulator Development	W0602 ECHO

B. Accomplishments/Planned Program

SIMVAL		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.100	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 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.484	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 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.779	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.

R-1 SHOPPING LIST - Item No. 140

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604256N Threat Simulator Development	W0602 ECHO

B. Accomplishments/Planned Program

Reprogrammable Early Warning Acquisition Radar		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.290	0.525	
RDT&E Articles Quantity				

Complete Reprogrammable Early Warning (EW) Acquisition (ACQ) Radar. Complete fabrication and perform IOC testing of laboratory EW/ACQ Threat Radar System.

Advanced Threat Simulator		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost			0.800	1.285
RDT&E Articles Quantity				

FY2004 - Initiate Advanced Threat Simulator. Conduct design trade-off analysis and begin hardware and software development.
FY2005 - Continue Advanced Threat Simulator. Continue hardware and sofware development.

1VM RF Alert/Response		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.543	2.535	2.229
RDT&E Articles Quantity				

FY2003 - 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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604256N Threat Simulator Development	W0602 ECHO

B. Accomplishments/Planned Program

Validation		FY 03	FY 04	FY 05
Accomplishments/Efforts/Subtotal Cost		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 03	FY 04	FY 05
Accomplishments/Efforts/Subtotal Cost		3.119	2.765	2.642
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 Modulation		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.

R-1 SHOPPING LIST - Item No. 140

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604256N Threat Simulator Development	W0602 ECHO

B. Accomplishments/Planned Program

MVM RF Alert/Response		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.

InfraRed/Ultra Violet (IR/UV) Mobile Stimulator		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.800		
RDT&E Articles Quantity				

Completed Infrared/Ultraviolet (IR/UV) Mobile Stimulator. Procured additional hardware, install and test.

IR Target Array		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		2.752		
RDT&E Articles Quantity				

Completed IR Target Array. Completed fabrication. Integrated into the Range and perform IOC testing.

R-1 SHOPPING LIST - Item No. 140

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604256N Threat Simulator Development	W0602 ECHO

B. Accomplishments/Planned Program

1V1 IR Alert/Response System		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.235		
RDT&E Articles Quantity				

Completed 1V1 IR Alert/Response System. Complete development efforts, integrate and test at Navy open air range.

Real/Time Electronic Combat Range		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.200		
RDT&E Articles Quantity				

Initiated and completed Real/Time Electronic Combat Range - Electronic Combat Simulation and Evaluation Laboratory (R/T ECR-ECSEL) Link. Designed, installed and tested realtime link between Navy hardware-in-the-loop (HITL) and open-air-range (OAR).

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0604256N Threat Simulator Development	W0602 ECHO	

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	15.993	14.155	14.637
Current BES/President's Budget	13.321	13.998	11.379
Total Adjustments	-2.672	-0.157	-3.258

Summary of Adjustments			
SBIR Assessment	-0.477		
Rate Adjustments/Efficiencies/Undist Reductions		-0.157	0.033
Execution Adjustments	-2.195		
Inflation Adjustment			-0.036
Manpower Rate Adjustment			-0.022
Technical Adjustment			-3.233
Subtotal	-2.672	-0.157	-3.258

Schedule: Not Applicable

Technical: Not Applicable.

R-1 SHOPPING LIST - Item No. 140

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0604256N Threat Simulator Development	W0602 ECHO	

D. OTHER PROGRAM FUNDING SUMMARY: Not Applicable

E. ACQUISITION STRATEGY: Not Applicable

R-1 SHOPPING LIST - Item No. 140

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification					DATE: **February 2004**			
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)		
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Project Cost	**12,404**	**13,694**	**12,487**	**12,660**	**12,888**	**13,045**	**13,416**	
RDT&E Articles Qty								

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

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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604256N, Threat Simulator Development	R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05
Simulator Hardware Upgrades	0.846	0.896	0.844
RDT&E Articles Quantity			

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

	FY 03	FY 04	FY 05
Simulator Software Upgrades	0.563	0.705	0.700
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 03	FY 04	FY 05
Simulator Characterization	0.111	0.145	0.123
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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604256N, Threat Simulator Development	R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05
Simulator Maintenance	1.137	1.009	1.000
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 03	FY 04	FY 05
Simulator Control Panels	0.206	0.295	0.202
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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604256N, Threat Simulator Development	R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05
Laboratory Facilities	1.110	1.000	1.000
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 03	FY 04	FY 05
Simulation Threat Repository	0.029	0.010	0.010
RDT&E Articles Quantity			

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

	FY 03	FY 04	FY 05
Simulation Instrumentation	0.225	0.455	0.233
RDT&E Articles Quantity			

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

R-1 SHOPPING LIST - Item No. 140

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604256N, Threat Simulator Development	R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05
Simulation Validation	0.575	0.475	0.430
RDT&E Articles Quantity			

Provides for the validation of hardware and software simulators and digital models. Develop 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 03	FY 04	FY 05
Electronic Attack/Electronic Support Simulations	0.457	0.523	0.545
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 03	FY 04	FY 05
Program Management	0.445	0.481	0.400
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).

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604256N, Threat Simulator Development	R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05
Classified Program	6.700	7.700	7.000
RDT&E Articles Quantity			

Classified Program

R-1 SHOPPING LIST - Item No. 140

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0604256N, Threat Simulator Development	R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)	

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	13.898	13.849	14.548
Current BES/President's Budget	12.404	13.694	12.487
Total Adjustments	-1.494	-0.155	-2.061
Summary of Adjustments			
SBIR Assessment	-0.157		
Rate Adjustments			-0.021
Execution Adjustmetn	-1.337		
Inflation Adjustments			-0.040
Manpower Rate Adjustment			-0.022
Technical Adjustment			-1.978
Cong. Rescission/Adjustments/Undist Reductions		-0.155	
Subtotal	-1.494	-0.155	-2.061

(U) Schedule: Not Applicable

(U) Technical: Not Applicable

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0604256N, Threat Simulator Development	R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)	

(U) D. OTHER PROGRAM FUNDING SUMMARY: None

(U) E. ACQUISITION STRATEGY: Not Applicable

R-1 SHOPPING LIST - Item No. 140

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2004	
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		**45.856**	**37.219**	**35.677**	**41.564**	**42.979**	**43.830**	**44.695**
A0609 Aerial Target Systems Development		**35.225**	**21.942**	**23.660**	**31.336**	**31.428**	**29.863**	**32.326**
A0610 Wpn Systs T&E Development/Procurement		**9.494**	**11.547**	**11.049**	**9.238**	**10.361**	**12.753**	**11.130**
20612 Surface Targets Development		**1.109**	**0.855**	**0.968**	**0.990**	**1.190**	**1.214**	**1.239**
K3045 Terrier/SSST		**0.028**	**2.875**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**

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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: **February 2004**	
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		**35.225**	**21.942**	**23.660**	**31.336**	**31.428**	**29.863**	**32.326**
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 acquistion 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 valide target simulations. Continued Target Threat Characterization (TTC).

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
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.		18.848	16.802	11.334
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)				
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		3.008	4.203	4.720
RDT&E Articles Quantity				

Continued Target Augmentation and Auxillary Systems (TA/AS) development.

R-1 SHOPPING LIST - Item No. 141

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0604258N/Target Systems Development	A0609/Aerial Target Systems Development	

(U) B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Supersonic Sea Skimming Target (SSST)		13.367	0.937	7.606
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				

R-1 SHOPPING LIST - Item No. 141

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:
		38018	**February 2004**
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 2003	FY 2004	FY 2005
Previous President's Budget:	29.772	22.189	23.417
Current BES/President's Budget	35.225	21.942	23.660
Total Adjustments	5.453	-0.247	0.243
Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions		-0.247	
Congressional rescissions			
SBIR/STTR Transfer	-0.600		
Economic Assumptions			-0.043
Reprogrammings	5.131		
Other Navy/OSD Adjustments	0.922		
Reprioritization			0.286
Subtotal	5.453	-0.247	0.243

(U) Schedule:
Not applicable.

(U) Technical:
Not applicable.

(U) D. OTHER PROGRAM FUNDING SUMMARY:

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
228000 Aerial Target System	66.605	77.718	72.686	127.064	88.126	89.933	91.773	Continuing	

Related RDT& E: Not applicable.

R-1 SHOPPING LIST - Item No. 141

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**	PROGRAM ELEMENT NUMBER AND NAME **0604258N/Target Systems Development**				PROJECT NUMBER AND NAME A-0610/Weapns 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		**9.494**	**11.547**	**11.049**	**9.238**	**10.361**	**12.753**	**11.130**
RDT&E Articles Qty		**3**	**5**	**3**	**2**	**2**	**2**	**2**

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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604258N/Target Systems Development	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		8.442	9.407	7.504
RDT&E Articles Quantity		3	5	3

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.

	FY 02	FY 03	FY 04	FY 05
Continued T&E TAAS Vector Scorer		1.007	2.140	3.145
RDT&E Articles Quantity				

Target Augmentation and Auxillary Systems items allows each target to be uniquely configured for specific mission profiles. TAAS configured targets are used for radar acquistion 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.

	FY 02	FY 03	FY 04	FY 05
Continued VANDAL support		0.045		
RDT&E Articles Quantity				

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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604258N/Target Systems Development	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				0.400
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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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:
		38018	February 2004
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 2003	FY 2004	FY 2005
Previous President's Budget:	11.820	11.677	15.186
Current BES/President's Budget	9.494	11.547	11.049
Total Adjustments	-2.326	-0.130	-4.137
Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions		-0.130	
Congressional rescissions			
SBIR/STTR Transfer	-0.058		
Economic Assumptions			-0.020
Reprogrammings	-1.257		
Other Navy/OSD Adjustments	-1.011		
Reprioritization			-4.117
Subtotal	-2.326	-0.130	-4.137

(U) Schedule:

Not applicable.

(U) Technical:

Not applicable.

(U) D. OTHER PROGRAM FUNDING SUMMARY:

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
228000 Aerial Target System	66.605	77.718	72.686	127.064	88.126	89.933	91.773	Continuing	

R-1 SHOPPING LIST - Item No. 141

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**	PROGRAM ELEMENT NUMBER AND NAME 0604258N/Target Systems Development				PROJECT NUMBER AND NAME 0612/Surface Targets Development			
COST ($ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		**1.109**	**0.855**	**0.968**	**0.990**	**1.190**	**1.214**	**1.239**
RDT&E Articles Qty		**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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604258N/Target Systems Development	0612/Surface Targets Development

B. Accomplishments/Planned Program

		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.642	0.192	0.202
RDT&E Articles Quantity				

-Continued requirements StudyAnalysis 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 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.467	0.663	0.766
RDT&E Articles Quantity				

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

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0604258N/Target Systems Development	0612/Surface Targets Development	

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2003	FY 2004	FY2005
Previous BES/President's Budget: (FY 04/05 Pres Controls)	1.112	0.864	0.968
Current President's Budget: (FY05 Pres Controls)	1.109	0.855	0.968
Total Adjustments	-0.003	-0.009	0.000
Summary of Adjustments			
Misc. Adjustments	-0.003	-0.009	
Subtotal	-0.003	-0.009	0

Schedule:
Not applicable

Technical:
Not applicable

R-1 SHOPPING LIST - Item No. 141

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**	PROGRAM ELEMENT NUMBER AND NAME 0604258N/Target Systems Development	PROJECT NUMBER AND NAME 0612/Surface Targets Development	

D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
OPN Line 545500 ASW Range Spt Equipment	7.123	7.221	7.175	7.381	7.467	7.69	7.858		51.915

E. ACQUISITION STRATEGY:

Not applicable

R-1 SHOPPING LIST - Item No. 141

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: **FEBRUARY 2004**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**	PROGRAM ELEMENT NUMBER AND NAME 0604258N TARGET SYSTEMS DEVELOPMENT (TSD)				PROJECT NUMBER AND NAME 3045 Terrier/SSST			
COST ($ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		**0.028**	**2.875**					
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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **FEBRUARY 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604258N TARGET SYSTEMS DEVELOPMENT (TSD)	3045 Terrier/SSST

B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.028	2.875	
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				
RDT&E Articles Quantity				

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

R-1 SHOPPING LIST - Item No. 141

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: FEBRUARY 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604258N TARGET SYSTEMS DEVELOPMENT (TSD)	3045 Terrier/SSST

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget (PB04 Controls):	2.914	2.908	0.000
Current BES/President's Budget (PB05 Controls):	0.028	2.875	0.000
Total Adjustments	-2.886	-0.033	0.000
Summary of Adjustments			
Congressional program reductions			
FY03 Update	-2.808		
Congressional rescissions			
SBIR/STTR Transfer	-0.070		
Economic Assumptions		-0.033	
Reprogrammings			
BSO Adjustments	-0.008		
Congressional increases			
Subtotal:	-2.886	-0.033	0.000

Schedule:

Not Applicable

Technical:

Not Applicable.

R-1 SHOPPING LIST - Item No. 141

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **FEBRUARY 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0604258N TARGET SYSTEMS DEVELOPMENT (TSD)	3045 Terrier/SSST	

D. OTHER PROGRAM FUNDING SUMMARY: Not Applicable

E. ACQUISITION STRATEGY:

Not applicable

R-1 SHOPPING LIST - Item No. 141

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)

DATE: **FEBRUARY 2004**

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604258N TARGET SYSTEMS DEVELOPMENT (TSD)	3045 Terrier/SSST

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	WR	NSWC/IHD			10/02	0.075	10/03				0.075	
Component Development											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering	WR	JHU/APL			10/02	0.204	10/03				0.204	
Systems Engineering	SS/CPAF	Ratheon Missile Sytems Tucson, AZ			10/02	2.100	10/03				2.100	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees		Ratheon Missile Sytems Tucson, AZ			10/02	0.175	10/03				0.175	
Subtotal Product Development			0.000	0.000		2.554		0.000		0.000	2.554	0.000

Remarks:

Development Support											0.000	
Software Development											0.000	
Training Development											0.000	
Integrated Logistics Support	WR	NSWC/PHD			10/02	0.100	10/03				0.100	
Configuration Management	WR	VARIOUS			10/02	0.025	10/03				0.025	
Technical Data											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			0.000	0.000		0.125		0.000		0.000	0.125	

Remarks:

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)

DATE: **FEBRUARY 2004**

APPROPRIATION/BUDGET ACTIVITY: **RDT&E, N / BA-6**

PROGRAM ELEMENT: 0604258N TARGET SYSTEMS DEVELOPMENT (TSD)

PROJECT NUMBER AND NAME: 3045 Terrier/SSST

Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	PMRF, Pacific Missile Range Facility, HI			10/02	0.075	10/03				0.075	
	WR	VAR		0.028	10/02	0.025	10/03				0.053	
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	0.028		0.100		0.000		0.000	0.128	

Remarks:

Contractor Engineering Support	VAR	VAR			10/02	0.050	10/03				0.050	
Government Engineering Support											0.000	
Program Management Support	VAR	VAR			10/02	0.021	10/03				0.021	
Travel	PD	NAVSEA HQ			10/02	0.025	10/03				0.025	
Labor (Research Personnel)											0.000	
SBIR Assessment											0.000	
Subtotal Management			0.000	0.000		0.096		0.000		0.000	0.096	

Remarks:

Total Cost			0.000	0.028		2.875		0.000		0.000	2.903	0.000

Remarks:

R-1 SHOPPING LIST - Item No. 141

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY **RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6**					R-1 ITEM NOMENCLATURE 0604759N Major T&E Investment			
COST ($ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost		**39.851**	**44.178**	**39.787**	**39.457**	**39.021**	**40.159**	**41.817**
W2195 T&E Investment		**39.851**	**44.178**	**39.787**	**39.457**	**39.021**	**40.159**	**41.817**

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 2004**
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 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		**39.851**	**44.178**	**39.787**	**39.457**	**39.021**	**40.159**	**41.817**
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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0604759N Major T&E Investment	W2195 T&E Investment	

(U) B. Accomplishments/Planned Program

		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		7.847	4.331	5.150
RDT&E Articles Quantity				

FY03 -NAVUNSEAWARCEN DET AUTEC. Continue Instrumentation Component Replacement (ICR) efforts. Complete Radar Systems Improvement efforts. Continue the Off-Board Advanced Systems Stimulator Project. Continue the Underwater Range Data Communications Project. Continue Range Ware Improvement Project.

FY04 -NAVUNSEAWARCEN DET AUTEC. Continue Instrumentation Component Replacement (ICR) efforts. Complete the Underwater Range Data Communications Project. Continue Range Ware Improvement Project. Continue the Off-Board Advanced Systems Stimulator Project. Initiate AUTEC Lightning Protection project.

FY05 -NAVUNSEAWARCEN DET AUTEC. Continue Instrumentation Component Replacement (ICR) efforts. Continue Range Ware Improvement Project. Continue AUTEC Lightning Protection project. Complete Off-Board Advanced Systems Stimulator project.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604759N Major T&E Investment	W2195 T&E Investment

(U) B. Accomplishments/Planned Program

		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		16.680	22.975	21.838
RDT&E Articles Quantity				

FY03 - 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 to gather, distribute, record/store and perform post test data analysis with Digital Video.

FY04 - 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 pedestels. Initiate modernization of Land range communication infrastructure.

FY05 -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 pedestels. Continue modernization of Land range communication infrastructure. Initiate Service Life Extension Program of fifth FPS-16 radar system. Initiate replacement of VHF, UHF, and HF radio transmitters at the ECR, Land, and Sea Ranges. Initiate the replacement of the mobile radio communications system in compliance with current FAA mandates.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604759N Major T&E Investment	W2195 T&E Investment

(U) B. Accomplishments/Planned Program

		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		14.924	16.872	12.799
RDT&E Articles Quantity				

FY03 - 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.

FY04 - 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 pedestels.

FY05 -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 pedestels. Initiate procurement of fibre channel bus monitoring and stimulation capability. Initiate encryption/modernization of down range video capability. Initiate and complete voice communications system for Atlantic Test Range.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604759N Major T&E Investment	W2195 T&E Investment

(U) B. Accomplishments/Planned Program

		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.400		
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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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0604759N Major T&E Investment	W2195 T&E Investment	

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	41.473	43.908	45.737
Current BES/President's Budget	39.851	44.178	39.787
Total Adjustments	-1.622	0.270	-5.950
Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions		-0.498	
Congressional rescissions			
SBIR/STTR Transfer	-0.011		
Economic Assumptions			0.089
Reprogrammings	-1.611	0.768	
Reprioritization			-6.039
Other Adjustments			
Congressional increases			
Subtotal	-1.622	0.270	-5.950

(U) Schedule:

Not Applicable.

(U) Technical:

Not Applicable.

R-1 SHOPPING LIST - Item No. 142

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0604759N Major T&E Investment	W2195 T&E Investment	

D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost

Related RDT&E:
(U) PE 0605759F: Test and Evaluation (Air Force)
(U) PE 0605864N: Test and Evaluation (Navy)

E. ACQUISITION STRATEGY:

Not Applicable.

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

BA: 06 PROGRAM ELEMENT: 0605152N
PROGRAM ELEMENT TITLE: Studies and Analysis Support - Navy

COST: (Dollars in Thousands)

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
Total PE	6,042	7,570	2,183	2,184	2,233	2,281	2,331
9411 FUTURE SIGINT REQUIREMENTS/JOINT ACS PROGRAM	0	3,955	0	0	0	0	0
2097 MANPOWER PERSONNEL & TRAINING	289	294	292	293	295	298	302
0133 NATL ACAD SCI/STUD BRD	1,474	2,043	1,891	1,891	1,938	1,983	2,029
9410 FIRE RETARDANT FIBERS	0	989	0	0	0	0	0
9260 Technology Obsolescence Reduction Facility	1,902	0	0	0	0	0	0
2092 NAVAL AVIATION STUDIES	2,377	289	0	0	0	0	0

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.

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

BA: 06 PROGRAM ELEMENT: 0605152N
PROGRAM ELEMENT TITLE: Studies and Analysis Support - Navy

PROGRAM CHANGE SUMMARY:

	FY 2003	FY 2004	FY 2005
FY 2004-2005 President's Budget Submission	5,930	4,431	4,166
Cong. Rescissions/Adjustments/Undist.Reductions	-97	-97	0
Congressional Actions	0	5,000	0
Execution Adjustments	209	0	0
Program Adjustments	0	-1,764	-1,983
FY 2005 President's Budget Submission	6,042	7,570	2,183

PROGRAM CHANGE SUMMARY EXPLANATION:
Technical: Not applicable.
Schedule: Not applicable.

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

BA: 06 PROGRAM ELEMENT: 0605152N PROGRAM ELEMENT TITLE: Studies and Analysis Support - Navy
PROJECT NUMBER: 2097 PROJECT TITLE: MANPOWER PERSONNEL & TRAINING

COST: (Dollars in Thousands)

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
2097 MANPOWER PERSONNEL & TRAINING	289	294	292	293	295	298	302

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 2003	FY 2004	FY 2005
Manpower Personnel & Training	289	294	292

FY 2003 Accomplishments:

• Completed the second of two phases of the Retention Goaling by Rating and Pay-grade study, which began in FY-02. The final written report detailed a standard methodology for developing a force modeling system, including designs for an automated system, and a prototype of the Objective Force Model (OFM) for selected enlisted communities was developed.

• Completed Officer Retention/Continuation Metrics study that provides an adequate means/metrics for assessing the health of the Navy's Officer corps and specific communities. Initial study focus was on the Staff Corps Communities and then the Un-Restricted Line (URL) Communities after Minimum Service Requirements were met. Conducted interviews and conducted surveys and analysis of variables affecting/impacting community health and retention behavior. The final report of findings and recommendations was sent to the sponsor, Center for Career Development (CCD), CNPC (PERS-00R), which completed the study.

• Completed Objective Force Modeling Concept study that determined what methodology should be used for developing a Force Transition Modeling (FTM) System. The FTM will be an integrated system to 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). The final report detailed a standard methodology for developing the FTM, including designs for an automated system.
• Completed 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 was developed. A final report of findings/recommendations completed the study.
• Completed Ship Officer Staffing Guide (SOSG) study that developed a standardized methodology for determining officer manpower requirements displayed in Ship and Fleet Manpower Documents (SMDs/FMDs).
• Completed Navy Officer Retention Study. Developed standardized Navy officer retention reports and developed the capability to access additional officer retention information to support officer strength planners and community managers.

FY 2004 Plans:
• Conduct a study of the Non-Prior Service Accessions Trend/Impact on the Naval Reserve Force.
• Study Civilian Turnover within the DON and develop a Retirement Projection Model/Tool.
• Conduct an analysis of Separation Pay Options.
• Conduct a study of the Delayed Entry Program (DEP) Management.
• Develop an Automated Tracking System (database) of Navy Junior Reserve Officer Training Corp (NJROTC) Programs Participants.

FY 2005 Plans:
• Conduct a study to update Fleet Manpower Requirements Pay-grade Distribution Table.
• Conduct a study to determine Shipboard Habitability factors that adversely impact retention.
• Conduct a study to determine the opportunities of combining Navy Enlisted Classification (NEC) Codes across warfare platforms.

C. OTHER PROGRAM FUNDING SUMMARY:
Not applicable.

D. ACQUISITION STRATEGY:
Not applicable.

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

BA: 06 PROGRAM ELEMENT: 0605152N PROGRAM ELEMENT TITLE: Studies and Analysis Support - Navy
PROJECT NUMBER: 0133 PROJECT TITLE: NATL ACAD SCI/STUD BRD

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
0133 NATL ACAD SCI/STUD BRD	1,474	2,043	1,891	1,891	1,938	1,983	2,029

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 2003	FY 2004	FY 2005
National Academy of Science/Naval Studies Board	1,474	2,043	1,891

FY 2003 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.
• Continued performance on the two studies that were initiated in FY02. Began 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.

FY 2004 Plans:
• 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 initiated in FY03.
• New studies (1-3) to be selected by the CNO during FY04.

BA: 06 PROGRAM ELEMENT: 0605152N PROGRAM ELEMENT TITLE: Studies and Analysis Support - Navy
PROJECT NUMBER: 0133 PROJECT TITLE: NATL ACAD SCI/STUD BRD

FY 2005 Plans:

• 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.

FY 2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE: Feb 2004
Exhibit R-2a
BA: 06 PROGRAM ELEMENT: 0605152N PROGRAM ELEMENT TITLE: Studies and Analysis Support - Navy
PROJECT NUMBER: 2092 PROJECT TITLE: NAVAL AVIATION STUDIES

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
2092 NAVAL AVIATION STUDIES	2,377	289	0	0	0	0	0

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 2003	FY 2004	FY 2005
Naval Aviation Studies	2,377	289	0

FY 2003 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 current and follow on cycle.
- Continued to evaluate the integration of advanced technology into the Carrier Battle Group (CVBG).
- 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 2004 Plans:
- 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 Plans:
Not applicable.

C. OTHER PROGRAM FUNDING SUMMARY:
Not applicable.

D. ACQUISITION STRATEGY:
Not applicable.

CONGRESSIONAL PLUS-UPS:

9410	FY 2003	FY 2004
FIRE RETARDANT FIBERS	0	989

The Fire Retardant Fibers project is a Navy initiative designed to determine whether new fire-resistant jerseys should become standard issue for carrier topside crewmembers. These funds will be used to conduct a wear trial throughout the Navy's carrier fleet of an upgraded flame resistant topside crew jersey to determine the upgraded jerseys' increased flame protection, durability, comfort, and cost as compared to the existing carrier topside crew jerseys. Program development and timing will be critical to the success of the project.

9411	FY 2003	FY 2004
FUTURE SIGINT REQUIREMENTS/JOINT ACS PROGRAM	0	3,955

Provides funding for analysis of requirements for the Navy's involvement in a joint Army/Navy Aerial Common Sensor (ACS) program. Provides funds for the development of the Navy's unique requirements to the Army's ACS platform. The ACS is the Navy's recapitalization of the EP-3E and offers a transformational platform to fulfill the Navy and OSD requirements for migration to the Joint Airborne SIGINT Architecture (JASA). The initial Research and Development funds studies and analyses that evaluate the cost, feasibility and preliminary integrations of the Navy requirements.

9260	FY 2003	FY 2004
TECHNOLOGY OBSOLESCENCE REDUCTION	1,902	0

The Technology Obsolescence Reduction project is a Navy initiative 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. Many ships, aircraft, rolling stock and other weapons systems become useless due to the lack of spare parts and an effective configuration management process necessary to ensure that weapons systems are fully mission capable. To address this, existing intellectual capital of Subject Matter Experts (SMEs) in the disciplines of logistics and configuration management will be leveraged in evaluating the acquisition of spare parts for DOD weapons systems. The Technology Obsolescence Reduction effort will make changes to existing circuitry by insertion of new and improved components as well as collaborating with other defense related companies to replicate microcircuits that are no longer available through industry. These funds will be used to ensure the testing and proofing of this initiative.

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

BA: 06 PROGRAM ELEMENT: 0605154N
PROGRAM ELEMENT TITLE: Center for Naval Analyses

COST: (Dollars in Thousands)

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
Total PE	43,720	37,918	43,982	36,104	37,807	38,691	39,555
0031 Marine Corp Operations and Analysis Group (MCOAG)	4,192	3,941	4,293	2,491	3,430	3,545	3,619
0148 CENTER FOR NAVAL ANAL/NAVY	39,528	33,977	39,689	33,613	34,377	35,146	35,936

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.

BA: 06 PROGRAM ELEMENT: 0605154N
PROGRAM ELEMENT TITLE: Center for Naval Analyses

PROGRAM CHANGE SUMMARY:

	FY 2003	FY 2004	FY 2005
FY 2004-2005 President's Budget Submission	42,170	40,726	42,175
Cong. Rescissions/Adjustments/Undist.Reductions	0	-2,808	0
Execution Adjustments	1,600	0	0
Technical Adjustments	-50	0	1,807
FY 2005 President's Budget Submission	43,720	37,918	43,982

PROGRAM CHANGE SUMMARY EXPLANATION:
Technical: Not applicable.
Schedule: Not applicable.

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

BA: 06 PROGRAM ELEMENT: 0605154N PROGRAM ELEMENT TITLE: Center for Naval Analyses
PROJECT NUMBER: 0031 PROJECT TITLE: Marine Corp Operations and Analysis Group (MCOAG)

COST: (Dollars in Thousands)

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
0031 MCOAG	4,192	3,941	4,293	2,491	3,430	3,545	3,619

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports the Marine Corps portion of the Department of the Navy's (DON) 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 maintains a number of field representatives for the Operational Forces Commanders and five specific areas of expertise for CNA to establish and maintain. The areas of expertise are linked to the Marine Corps Advocacy (proponency), which are (1) Command Element, (2) Operations, (3) Aviation, (4) Integration and Logistics, and (5) Manpower. Scientific analyst support provides five scientific analysts, one for each of the five focus areas. The program continues analytical support for field exercises, ad hoc, and quick response requirements.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2003	FY 2004	FY 2005
MCOAG	4,192	3,941	4,293

FY 2003 Accomplishments:

• Provided formal study and analysis support to the operating forces and headquarters elements included in the annual Marine Corps Studies Master Plan. Completed the following studies: Impact of Encroachment on Training and Operational Readiness, Cumulative Impact of Aviation Transition Programs, Maritime Prepositioning Force Marine Expeditionary Brigade (MEB) Force Closure/Throughput, Sea-Basing Implications to the Combat Service Support (CSS), Cost Benefit Analysis of Lump Sum Zone B and Zone C, Feasibility of Conducting a Marine Expeditionary Brigade (MEB) Level Combined Artillery Exercise (CAX), and the Safety Study.

• Provided scientific analyst support, within the focus areas to Marine Corps Headquarters staff elements.

• Provided five 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), and Commanding General III, Marine Expeditionary Forces (CG III MEF).
• Provided analysis support to operating forces exercises, ad hoc support for immediate analytical requirements, and other support functions including: General Concept Development, Quick Response Studies, CNA Self-Initiated Analysis Efforts, administrative support, liaison, travel and award fee.

FY 2004 Plans:
• Continue to provide formal study and analysis support to the operating forces and headquarters elements included in the annual Marine Corps Studies Master Plan. The following efforts will commence: Forecasting Losses, Total Cost for Non-Aviator Joint Terminal Attack Controller (JTAC) Policy, 2010 USMC Asia Pacific Force/Presence/Basing Analysis, Marine Corps Prepositioning in 2025, and the Armed Services Vocational Aptitude Battery (ASVAB) Validation studies.
• Continue to provide scientific analyst support within the focus areas to Marine Corps Headquarters staff elements.
• Continue to provide five Field Representatives at COMMARFORPAC, COMMARFORLANT, CG I MEF, CG II MEF, and CG III MEF.
• Continue to provide analysis support to operating forces exercises, ad hoc support for the immediate analytical requirements, and other support functions including: General Concept Development, Quick Response, CNA Self-Initiated Analysis Efforts, administrative support, liaison, travel and award fee.

FY 2005 Plans:
• Continue to provide formal study and analysis support to the operating forces and headquarters elements included in the annual Marine Corps Studies Master Plan. The following efforts will commence: Forecasting Losses, Total Cost for Non-Aviator Joint Terminal Attack Controller (JTAC) Policy, 2010 USMC Asia Pacific Force/Presence/Basing Analysis, Marine Corps Prepositioning in 2025, and the Armed Services Vocational Aptitude Battery (ASVAB) Validation studies.
• Continue to provide scientific analyst support within the focus areas to Marine Corps Headquarters staff elements.
• Continue to provide five Field Representatives at COMMARFORPAC, COMMARFORLANT, CG I MEF, CG II MEF, and CG III MEF.
• Continue to provide analysis support to operating forces exercises, ad hoc support for immediate analytical requirements, and other support functions including: General Concept Development, Quick Response studies, CNA Self-Initiated Analysis Efforts, administrative support, liaison, travel, and contract award fee.

BA: 06 PROGRAM ELEMENT: 0605154N PROGRAM ELEMENT TITLE: Center for Naval Analyses
PROJECT NUMBER: 0031 PROJECT TITLE: Marine Corp Operations and Analysis Group (MCOAG)

C. OTHER PROGRAM FUNDING SUMMARY:

Navy Related RDT&E:
PE 0605873M (Marine Corps Program Wide Support)

D. ACQUISITION STRATEGY:

Not applicable.

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

BA: 06 PROGRAM ELEMENT: 0605154N PROGRAM ELEMENT TITLE: Center for Naval Analyses
PROJECT NUMBER: 0148 PROJECT TITLE: CENTER FOR NAVAL ANAL/NAVY

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
0148 CENTER FOR NAVAL ANAL/NAVY	39,528	33,977	39,689	33,613	34,377	35,146	35,936

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 2003	FY 2004	FY 2005
Center for Naval Analyses, Navy	39,528	33,977	39,689

FY 2003 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 assigned analysts to 34 locations around the world, including at sea, continued to comprise approximately 20% of the funding.

FY 2004 Plans:
• Continue 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, including at sea, will continue to comprise approximately 20% of the funding.

BA: 06 PROGRAM ELEMENT: 0605154N PROGRAM ELEMENT TITLE: Center for Naval Analyses
PROJECT NUMBER: 0148 PROJECT TITLE: CENTER FOR NAVAL ANAL/NAVY

FY 2005 Plans:

• Continue 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, including at sea, will continue to comprise approximately 20% of the funding.

C. OTHER PROGRAM FUNDING SUMMARY:

Navy Related RDT&E:
PE 0605152N (Studies and Analysis Support-Navy)

D. ACQUISITION STRATEGY:

Not Applicable.

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

BA: 06 PROGRAM ELEMENT: 0605155N
PROGRAM ELEMENT TITLE: Fleet Tactical Development

COST: (Dollars in Thousands)

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
0151 INTERTYPE TAC D&E	2,639	1,984	2,338	2,390	2,883	2,934	2,990
Totals	2,639	1,984	2,338	2,390	2,883	2,934	2,990

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.

PROGRAM CHANGE SUMMARY:

	FY 2003	FY 2004	FY 2005
FY 2004-2005 President's Budget Submission	2,707	2,006	2,348
Cong. Rescissions/Adjustments/Undist.Reductions	0	-22	0
Execution Adjustments	-26	0	0
Inflation Savings	0	0	-7
Rate Adjustments	0	0	-3
SBIR Assessment	-42	0	0
FY 2005 President's Budget Submission	2,639	1,984	2,338

PROGRAM CHANGE SUMMARY EXPLANATION:
Technical: Not applicable.
Schedule: Not applicable.

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

BA: 06 PROGRAM ELEMENT: 0605155N PROGRAM ELEMENT TITLE: Fleet Tactical Development
PROJECT NUMBER: 0151 PROJECT TITLE: INTERTYPE TAC D&E

COST: (Dollars in Thousands)

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
0151 INTERTYPE TAC D&E	2,639	1,984	2,338	2,390	2,883	2,934	2,990

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 2003	FY 2004	FY 2005
Changing Threat Scenarios to Improve and Measure Force Readiness	1,100	567	321

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 2003 Accomplishments:

- Developed Tactics, Techniques and Procedures (TTP) to formalize procedures for AEGIS surface combatants performing High Value Airborne Asset Protection (HVAAP).
- Developed TTP for the use of Thermal Imaging Sensor Systems (TISS) in counter drug operations.
- Developed TTP for Submarine Mine Vulnerability.
- Initiate development of TTP for Mine Counter Measures (MCM) in Homeland Defense.
- Developed TTP for Amphibious Ready Groups (ARGs) to conduct long range raids for inserting Marines ahead of the main landing force.
- Developed TTP for evaluating the validity of the assault lane width for Amphibious Assault Craft working in a mined environment.

• Developed 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.
• Continue to develop TTP for MCM Operations in Homeland Defense.
• Develop TTP for Ballistic Missile Submarine Nuclear (SSBN) Minefield Penetration Tactics.
• Develop TTP for Amphibious Assault Ship (General Purpose)/Amphibious Assault Ship (Multipurpose),(LHA/LHD) Air Control Tactics.
• Develop TTP for Amphibious Landing Craft Control.

FY 2005 Plans:
• Develop TTP for EOD and VSW Diver Susceptibility.
• Develop TTP for Organic Mine Counter-Measures (OMCM) helicopters assigned to ARGs.
• Develop TTP for utilization of Mine Warfare and Environmental Decision Aid Library (Medal) to the Advance Force Commander.

	FY 2003	FY 2004	FY 2005
Newly Evolving Force Structures	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 2003 Accomplishments:
• Developed TTP to retrograde Marine forces in a Chemical/Biological (CHEM/BIO) Environment.
• Developed TTP for Multi Aircraft Carrier Nuclear/(CVN) Battlegroup Operations.

FY 2004 Plans:
• Develop TTP for Suspended Sediment Layer Mine Counter Measures Acoustic Tactics.
• Develop TTP for minefield navigation systems for VSW operations while operating in a hostile environment in support of MCM operations that underpin amphibious operations.
• Develop TTP for Surface Chokepoint Transit Guidance.

BA: 06 PROGRAM ELEMENT: 0605155N PROGRAM ELEMENT TITLE: Fleet Tactical Development
PROJECT NUMBER: 0151 PROJECT TITLE: INTERTYPE TAC D&E

- Develop TTP for Operational Tactics for Airborne Detection of NBC Weapons.
- Develop TTP for MHC51/MCM1 Damage Curves.

FY 2005 Plans:
- Develop TTP for Threat VSW 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.

	FY 2003	FY 2004	FY 2005
New and Existing Weapon Systems Employment	1,240	652	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 (TACMEMOs), i.e. TTP, that are developed maximize the Navy's Sea Strike capability through Network Centric Warfare and Navy Fires Networks.

FY 2003 Accomplishments:
- Developed TTP for effectiveness of heliborne machine guns against small craft.
- Developed TTP for Laser Guided Bombing through the weather tactics.
- Developed TTP for S-3B (Viking) SLAM-ER missile (AGM-84F) launch tactics.
- Developed TTP to more effectively utilize submarine launched torpedoes in specific geographic areas.
- Developed TTP for the utilization of High Frequency (HF) passive engagement.
- Developed TTP to employ all multi-static (or bi-static) active acoustic sonar systems within the fleet.
- Developed a matrix of SMCM systems capabilities versus exploited foreign mines.
- Developed TTP for the employment of the F-14B's ALR-67 radar warning receiver (RWR) with ASPJ antennas and improved sensors.

BA: 06 PROGRAM ELEMENT: 0605155N PROGRAM ELEMENT TITLE: Fleet Tactical Development
PROJECT NUMBER: 0151 PROJECT TITLE: INTERTYPE TAC D&E

FY 2004 Plans:
- Develop TTP for SSBN MK48 ADCAP Torpedo Employment.
- Develop TTP to determine EA-6B effectiveness using ALE-43 Bulk Chaff and Chaff Illumination verses Side Lobe Suppression (SLS).
- Develop TTP for Air ASW Torpedo Selection and Employment.
- Develop TTP for Multi Carrier Battle Group Specific Emitter Identification (SEI).
- Develop TTP for the employment of Joint Direct Attack Munitions (JDAM) in a Friendly Environment.
- Develop TTP for measuring Information Warfare (IW) effectiveness.
- Develop TTP for ASW Screen Planners 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 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.

C. OTHER PROGRAM FUNDING SUMMARY:
Not Applicable.

D. ACQUISITION STRATEGY:
Not Applicable.

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

BA: 06 PROGRAM ELEMENT: 0605804N
PROGRAM ELEMENT TITLE: Technical Information Services

COST: (Dollars in Thousands)

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
Total PE	18,116	27,270	696	714	682	700	718
0835 TECH INFO SVCS	802	718	696	714	682	700	718
2296 Federal Lab Consortium	324	0	0	0	0	0	0
2969 Supply Chain Management	0	1,483	0	0	0	0	0
2970 Commercialization of Adv Tech Prog	6,680	8,406	0	0	0	0	0
9093 LEAN PATHWAYS PROJ EXPANSION & DISTANCE LEARNING	3,641	2,521	0	0	0	0	0
9261 Navy Advanced Education Demo	951	0	0	0	0	0	0
9262 Joint Info Technology Center	5,718	6,923	0	0	0	0	0
9412 HTDV / RCUH Engineering Design Center	0	7,219	0	0	0	0	0

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. Warfighting effectiveness is enhanced through strategic relationships with industry to commercialize the science and technology developed by the Naval Research Enterprise and to gain access to concepts, technologies and business practices of the civil sector.

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

BA: 06 PROGRAM ELEMENT: 0605804N
PROGRAM ELEMENT TITLE: Technical Information Services

PROGRAM CHANGE SUMMARY:

	FY 2003	FY 2004	FY 2005
FY 2004-2005 President's Budget Submission	18,320	726	799
Cong. Rescissions/Adjustments/Undist.Reductions	0	-306	0
Congressional Actions	0	26,850	0
Miscellaneous Adjustments	-204	0	-103
FY 2005 President's Budget Submission	18,116	27,270	696

PROGRAM CHANGE SUMMARY EXPLANATION:
Technical: Not applicable.
Schedule: Not applicable.

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

BA: 06 PROGRAM ELEMENT: 0605804N PROGRAM ELEMENT TITLE: Technical Information Services
PROJECT NUMBER: 0835 PROJECT TITLE: TECH INFO SVCS

COST: (Dollars in Thousands)

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
0835 TECH INFO SVCS	802	718	696	714	682	700	718

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The goals for this project to enhance warfighter effectiveness 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), strategic partnerships with industry to transition private sector technology, 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 project also provides the Department of the Navy (DON) interface to the Office of the Deputy Under Secretary of Defense for Science and Technology, Office of Technology Transition and to the Assistant Secretary of Commerce for Technology Policy for matters relating to policy and reporting requirements for technology transfer.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2003	FY 2004	FY 2005
Leverage of Industry R&D	382	513	467

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 2003 Accomplishments:

- Held workshop to determine potential interest in a commercial night vision system and pursued technology evaluations in promising areas.
- Identified an early insertion of commercial wide band gap materials into a naval program (Link 16 aircraft communications system) by working with a material manufacturer, a defense prime, and a Navy program office.
- Conducted a pilot project with commercial organizations and one naval laboratory to assess merits of applying commercial practices to improve the rate of technology transfer, increase revenues, and address fleet problems.
- Initiated naval/industry collaboration for industrialized "Cymbal" technology to support improved mine identification.

FY 2004 Plans:

- Explore and pursue opportunities to leverage commercial wide band gap technologies for applications in naval low frequency communications.
- Continue naval/industry collaboration for industrialized "Cymbal" technology to support improved mine identification.

FY 2005 Plans:

- Conduct studies, workshops, conferences, and other activities that facilitate advanced technology associations between U.S. industry and the Navy.
- Continue naval/industry collaboration for industrialized "Cymbal" technology to support improved mine identification.

	FY 2003	FY 2004	FY 2005
Technical Information Services	180	112	120

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 2003 Accomplishments:

- Supported the 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 small companies to participate in the Naval Potential Contractor Program.
- Completed development of an on-line job performance support tool for DON technology transfer professionals.
- Completed development of an on-line training program for DON technology transfer professionals.
- Supported and maintained the networked tracking of technology transfer efforts required for Congressional reporting.

FY 2004 Plans:

- Continue FY03 efforts and maintain on-line tools developed in FY03.

FY 2005 Plans:

- Continue FY04 efforts and maintain on-line tools developed in FY03.

	FY 2003	FY 2004	FY 2005
Commercialization of Navy-Developed Technologies	240	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 2003 Accomplishments:

- Supported commercialization of a Navy-developed, automated scheduling tool developed to optimize maintenance and deployment schedules for the submarine community.
- Supported commercialization of Navy-developed micro-optics switch and shock sensor.

FY 2004 Plans:

- Conduct pilot program to assess commercial practices in technology innovation.

FY 2005 Plans:

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

C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. ACQUISITION STRATEGY: Not applicable.

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

BA: 06 PROGRAM ELEMENT: 0605804N PROGRAM ELEMENT TITLE: Technical Information Services
PROJECT NUMBER: 2296 PROJECT TITLE: Federal Lab Consortium

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
2296 Federal Lab Consortium	324	0	0	0	0	0	0

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFCATION:
The Federal Laboratory Consortium operates in accordance with P.L. 104-113, the National Technology Transfer and Advancement Act of 1995.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2003	FY 2004	FY 2005
Federal Lab Consortium	324	0	0

The Federal Laboratory Consortium for Technology Transfer (FLC) was established by Congress under the Federal Technology Transfer Act of 1986 (P.L. 99-502, 20 October 1986, as amended). The FLC, in cooperation with Federal laboratories and the private sector, provides services to enhance the transfer of federally-developed technology to include activities such as: Developing and administering technology transfer training courses and materials, assisting Federal agencies and laboratories in their technology transfer programs, and providing a clearinghouse for technology transfer requests.

FY 2003 Accomplishments:
- Funded the Federal Laboratory Consortium for Technology Transfer in compliance with the Federal Technology Transfer Act of 1986 (P.L. 99-502, 20 October 1986, as amended).

C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. ACQUISITION STRATEGY: Not applicable.

CONGRESSIONAL PLUS-UPS:

2969	FY 2003	FY 2004
SUPPLY CHAIN MANAGEMENT	0	1,483

Improves 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.

2970	FY 2003	FY 2004
COMMERCIALIZATION OF ADV TECH PROG	6,680	8,406

Supports 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.

9093	FY 2003	FY 2004
LEAN PATHWAYS PROJ EXPANSION & DISTANCE LEARNING	3,641	2,521

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

9261	FY 2003	FY 2004
NAVY ADVANCED EDUCATION DEMONSTRATION	951	0

Supports 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.

9262	FY 2003	FY 2004
JOINT INFORMATION TECHNOLOGY CENTER	5,718	6,923

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.

9412	FY 2003	FY 2004
HTDV	0	6,724

Supports the development of a regional center for the commercialization of defense and homeland security technologies, and provide an opportunity for small companies in Hawaii to develop advanced technologies for national defense.

9412	FY 2003	FY 2004
RCUH ENGINEERING DESIGN CENTER	0	495

Establishes a partnership between the Research Corporation of the University of Hawaii (RCUH) and the Navy to establish a center that would support the federal government in the development of technologies in areas such as aircraft systems, sensors, radars, and optics, environmental engineering and ordnance studies and communications and information systems.

EXHIBIT R-2, RDT&E Budget Item Justification								DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY **RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6**					R-1 ITEM NOMENCLATURE 0605853N/Management, Technical and International Support			
COST ($ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost		**50.482**	**30.901**	**31.407**	**32.544**	**32.833**	**34.070**	**33.736**
3039 CHENG		**32.130**	**12.242**	**11.563**	**14.230**	**14.689**	**15.475**	**14.886**
0149 International Cooperative RDT&E		**1.808**	**1.864**	**1.669**	**1.714**	**1.756**	**1.797**	**1.838**
9263 Combating Terrorism Wargaming Research		**1.157**	**1.236**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
1767 Naval War College/Center for Naval Warfare Studies		**2.896**	**2.98**	**2.376**	**2.539**	**2.495**	**2.658**	**2.622**
3025 Capital Asset Management System		**0**	**0**	**4.055**	**2.038**	**1.598**	**1.598**	**1.598**
2221 Assessment Program		**12.491**	**12.579**	**11.744**	**12.023**	**12.295**	**12.542**	**12.792**
Quantity of RDT&E Articles		**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:

Project 3039 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. This project provides the mission-oriented technical basis for implementing capability-based acquisition management within the Department of Navy to engineer and field Navy and Marine Corps 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) acquisition programs and systems. The focus of this project is on identifying the functions, relationships, and connections between systems at both the force and unit level and across warfare mission areas and components and encompasses four key elements: System and Technical Architectures and Interoperability Assessments to provide the framework for making engineering decisions by warfighting capability at the FoS/SoS level and to establish acquisition portfolios that deliver that capability based on the integration and interoperability requirements. Large-Scale Systems Engineering processes and system engineering integrated product teams to support consistent engineering and investment decision-making across Navy and Marine Corps programs within capability-based acquisition portfolios. Naval Collaborative Engineering Environment development and implementation as a DoN enterprise resource where all ASN (RDA) CHENG integration and interoperability information will be managed electronically to enable collaboration and decision support among Fleet organizations, Program Executive Offices, Program Managers, Systems Commands, prime contractors, Resource/Warfare Sponsors and Comptroller organizations. DoN Standards, Policies and Guidelines and core ASN (RDA) engineering and technical staff to recommend investment decisions and program priorities to ASN (RDA) including leadership in the implementation of Anti-Tamper, software engineering and technical data standards. Navy Single Integrated Air Picture funding was transferred to PE 0603879N starting in FY 2004, CHENG was transferred to AAUSN starting in FY 2004.

Project 0149 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.

Project 1767 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.

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification		DATE: **February 2004**
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 0149, 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 2221, 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.

Project 3025, Increase begining in FY 2005 for ASN(FM&C) Capital Asset Management system in support of DON's "Mid-Range Plan", which was designed to realize OSD's goal of achieving a clean audit of Defense Department financial statements.

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

E Project Justification								DATE: **February 2004**
TION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME			
RDT&E, N /	**BA-6**	0605853N/Management, Technical and International Support			3039 CHENG			
COST ($ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		**32.130**	**12.242**	**11.563**	**14.230**	**14.689**	**15.475**	**14.886**
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Project 3039 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. This project provides the mission-oriented technical basis for implementing capability-based acquisition management within the Department of Navy to engineer and field Navy and Marine Corps 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) acquisition programs and systems. The focus of this project is on identifying the functions, relationships, and connections between systems at both the force and unit level and across warfare mission areas and components and encompasses four key elements: System and Technical Architectures and Interoperability Assessments to provide the framework for making engineering decisions by warfighting capability at the FoS/SoS level and to establish acquisition portfolios that deliver that capability based on the integration and interoperability requirements. Large-Scale Systems Engineering processes and system engineering integrated product teams to support consistent engineering and investment decision-making across Navy and Marine Corps programs within capability-based acquisition portfolios. Naval Collaborative Engineering Environment development and implementation as a DoN enterprise resource where all ASN (RDA) CHENG integration and interoperability information will be managed electronically to enable collaboration and decision support among Fleet organizations, Program Executive Offices, Program Managers, Systems Commands, prime contractors, Resource/Warfare Sponsors and Comptroller organizations. DoN Standards, Policies and Guidelines and core ASN (RDA) engineering and technical staff to recommend investment decisions and program priorities to ASN (RDA) including leadership in the implementation of Anti-Tamper, software engineering and technical data standards. Navy Single Integrated Air Picture funding was transferred to PE 0603879N starting in FY 2004, CHENG was transferred to AAUSN starting in FY 2004.

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	3039 CHENG

B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
System/Tech Architectures and Interoperability Asses	7.200	4.400	4.100	

FY 2003 ACCOMPLISHMENTS:
Completed initial architectures for six PR05 Mission Capability Packages (Strike, Theater Air Missile Defense, Undersea Warfare, Battleforce Command and Control, Information, Surveillance and Reconnaissance and Expeditionary Warfare). Completed 27 mission level Capability Evolution Descriptions for PR05: Sea Strike (11), Sea Shield (6), Sea Basing (2), FORCEnet (8). Completed the pilot interoperability assessment (Strike) and methodology (Link 16). Initiated guidelines to develop the DoN Integrated Architecture and Family of System (FOS) architectures.

FY 2004 PLAN:
Establish FOS architecture framework for System Engineering Integrated Product Teams (SE IPTs) and ASN (RDA) directed acquisition programs. Assess architectures for consistency within and across pillar architectures and joint integrated architecture guidelines. Establish and manage configuration of the Naval Common System Functions List. Develop Coalition Integrated Air Picture architectural drawings.

FY 2005 PLAN:
Continue FOS architecture products for System Engineering Integrated Product Teams (SE IPTs) and ASN (RDA) directed acquisition programs. Continue architectures assessments for consistency within and across pillar architectures and joint integrated architecture guidelines. Manage configuration updates to the Naval Common System Functions List. Update Coalition Integrated Air Picture architectural drawings.

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	3039 CHENG

B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Naval Collaborative Engineering Environment	3.569	1.518	1.522	

FY 2003 ACCOMPLISHMENTS:
Expanded the Decision Support System to support OPNAV for PR05, Systems Command Sea Power 21 Leads, Commander Fleet Forces Command, NETWARCOM. Developed Integrated Engineering Environment analysis tools, integrated databases and network support. Developed a pilot Interoperability Data Management and Analysis capability. Established authoritative database for initial executable architecture models.

FY 2004 PLAN:
Extend and evolve Descision Support System interface design. Develop and implement technological enhancements to Integrated Engineering Environment networks, systems engineering tools and databases. Implement Interoperability Data Management and Analysis on selected acquisition programs. Provide data resources for acquisition portfolio executable architecture models.

FY 2005 PLAN:
Implement Decision Support Systems interface designs. Promote system-of-system design and integrtion with accessible Integrated Engineering Enviornment networks, systems engineering tools and databases. Assess and expand implementation of Interoperability Data Management and Analysis on selected acquisition programs. Extend and enhance data resources for acquisition portfolio architcture models.

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	3039 CHENG

B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Large Scale Systems Engineering Processes	5.561	3.300	3.100	

FY 2003 ACCOMPLISHMENTS:
Completed systems analyses anf performance assessment for PR05 Mission Capability Packages. Initiated implementation plans for system-of-system (SoS) and family-of-system (FoS) acquistiion portolio analysis beginning with Surface Combatant Land Attack programs and systems and Human Systems Integration functions. Established methods and tools for SoS/FoS System Performance Document development. Conducted risk assessments for system performance compliance to support acquisition milestone review decisions.

FY 2004 PLAN:
Continue two SoS/FoS acquisition portfolio reviews and initiate two additional acquistiion porfolio reviews. Complete pilot SoS/FoS System Performance Document development for Surface Combatant Land Attack. Conduct integration and interoperability assessments for system performance compliance on selected programs with acquisition milestone review decisions. Establish methods and tools to insure consistent application of DoN design instructions and guidelines with Fleet requirements and Joint policy.

FY 2005 PLAN:
Continue four SoS/FoS acquisition portfolio reviews and initiate two additional acquistiion porfolio reviews. Continue SoS/FoS System Performance Document development. Conduct integration and interoperability assessments for system performance compliance on selected programs with acquisition milestone review decisions. Assemble lessons learned and apply to DoN iintegration and interoperability instructions and guidelines with Fleet requirements and Joint policy.

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	3039 CHENG

B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Standards, Policy, Guidelines, Core Staff	4.800	3.024	2.841	

FY 2003 ACCOMPLISHMENTS:
Provided engineering and technical staff to lead and manage integration and interoperability acquisition priorities and processes across the Department of Navy. Developed and implemented DoN integration and interoperability policy and standards. Recommended investment decisions and program priorities to the Assistant Secretary of the Navy for Research, Development and Acquisition. Provided DoN guidance to the Chief of Naval Operations, Secretary of Navy, Office of the Secretary of Defense and Joint Chief staffs.

FY 2004 PLAN:
Provide engineering and technical staff to lead and manage integration and interoperability acquisition priorities and processes across the Department of Navy. Develop and implement DoN integration and interoperability policy and standards. Recommend investment decisions and program priorities to the Assistant Secretary of the Navy for Research, Development and Acquisition. Provide DoN guidance to the Chief of Naval Operations, Secretary of Navy, Office of the Secretary of Defense and Joint Chief staffs.

FY 2005 PLAN:
Provide engineering and technical staff to lead and manage integration and interoperability acquisition priorities and processes across the Department of Navy. Develop and implement DoN integration and interoperability policy and standards. Recommend investment decisions and program priorities to the Assistant Secretary of the Navy for Research, Development and Acquisition. Provide DoN guidance to the Chief of Naval Operations, Secretary of Navy, Office of the Secretary of Defense and Joint Chief staffs.

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	3039 CHENG

B. Accomplishments/Planned Program

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

FY 2003 Accomplishment:
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.

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	3039 CHENG	

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget: (FY 04 Pres Controls)	33.063	12.432	11.549
Current BES/President's Budget (FY04/05 Controls)	32.130	12.242	11.563
Total Adjustments	-0.933	-0.190	0.014
Summary of Adjustments			
FY 03 BTR	-0.322		
FY 03 SBIR adjustment	-0.105	-0.182	
Congressional Undistributed Adjustments	-0.409		
Other program adjustments	-0.097	-0.008	0.014
Subtotal	-0.933	-0.190	0.014

Schedule: "Not Applicable."

Technical: "Not Applicable."

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	3039 CHENG	

D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name
PE0603582N Combat Systems Integration
PE0603879N Single Integration Air Picture Systems Engineering
PE0604231N Tactical Command System

E. ACQUISITION STRATEGY: * Not Applicable

F. MAJOR PERFORMERS: **

No performer in this PE received more than 15% of the program or $10 million.

R-1 SHOPPING LIST - Item No.148

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**				PROJECT NUMBER AND NAME 0149 International Cooperative RDT&E			
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	**1.808**	**1.864**	**1.669**	**1.714**	**1.756**	**1.797**	**1.838**
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 50 International RDT&E Agreements annually with allied and friendly nations.
2. Execution of over 300 information exchange annexes.
3. Participation in armaments cooperation fora including the Conference of NATO Armaments Directors groups (e.g., the NATO Naval Armaments Group), Senior National Representative (SNR) meetings and the Technical Cooperative Program (TCP).
4. Participation in the Engineering and Scientist Exchange Program (ESEP).

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	0149 International Cooperative RDT&E

B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05
DoN Participation	1.808	1.864	1.669

Brief Description of DoN Participation.

FY 2003 ACCOMPLISHMENTS:
Continued to support Department of Defense (DoN) participation at 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 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 ESEP was two engineers. Continued to conduct post-assignment analysis of scientists/engineers to better target assignments with emerging technologies and programs at foreign research establishments.

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 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.

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	0149 International Cooperative RDT&E

B. Accomplishments/Planned Program (Cont.)

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.

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	0149 International Cooperative RDT&E	

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget: (FY 04 Pres Controls)	1.859	1.889	1.975
Current BES/President's Budget (FY05 Pres Controls)	1.808	1.864	1.669
Total Adjustments	-0.051	-0.025	-0.306
Summary of Adjustments			
Misc. Adjustments	-0.051	-0.025	-0.306
Subtotal	-0.051	-0.025	-0.306

Schedule:

Not Applicable.

Technical:

Not Applicable.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	0149 International Cooperative RDT&E	

D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name
Navy Related RDT&E:
PE 0603790N (NATO Cooperative Research and Development)

NON-Navy Related RDT&E
PE 0605130D (Foreign Comparative Testing)

E. ACQUISITION STRATEGY: *

Not Applicable.

F. MAJOR PERFORMERS:

No performer in the PE received more than 15% of the program or $10 million.

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

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Support				PROJECT NUMBER AND NAME 1767 Naval War College/Strategic Studies Support		
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	**2.896**	**2.980**	**2.376**	**2.539**	**2.495**	**2.658**	**2.622**
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.

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	1767 Naval War College/Strategic Studies Support

B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05
Strategic Studies	1.675	1.700	1.464

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 2003 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 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.

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	1767 Naval War College/Strategic Studies Support

B. Accomplishments/Planned Program (Cont.)

	FY 03	FY 04	FY 05
Naval Wargaming Support	1.101	1.158	0.788

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 2003 ACCOMPLISHMENTS:
Conducted 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 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	1767 Naval War College/Strategic Studies Support

B. Accomplishments/Planned Program (Cont.)

	FY 03	FY 04	FY 05
NWC Student Research Projects	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 2003 ACCOMPLISHMENTS:
Provided 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.

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	1767 Naval War College/Strategic Studies Support

C. PROGRAM CHANGE SUMMARY: Not Applicable

Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget: (FY04 Pres Controls)	2.951	3.014	3.062
Current BES/President's Budget (FY05 Pres Controls)	2.896	2.980	2.376
Total Adjustments	-0.055	-0.034	-0.686
Summary of Adjustments			
Misc. adjustments	-0.055	-0.034	-0.686
Subtotal	-0.055	-0.034	-0.686

Schedule:

Not Applicable.

Technical:

Not Applicable.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	1767 Naval War College/Strategic Studies Support	

D. OTHER PROGRAM FUNDING SUMMARY:

Navy Related RDT&E: Not Applicable
Non-Navy Related RDT&E: Not Applicable

E. ACQUISITION STRATEGY:

Not Applicable

F. MAJOR PERFORMERS:

Not Applicable

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: **February 2004**	
APPROPRIATION/BUDGET ACTIVITY **RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6**					R-1 ITEM NOMENCLATURE 9263 Combatting Terrorism Wargamin		0605853N/Mgmt, Tech. and Intl. Spt.	
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Total PE Cost								
Project Unit A Number/Title 9263/Combatting Terrorism Wargaming Research	**1.157**	**1.236**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	

Defense Emergency Response Funds (DERF) Funds: Indentify DERF funds for the program/project by either inserting a resource line or by using a footnote immediately below the resource summary.

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.

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: **February 2004**	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt				PROJECT NUMBER AND NAME 2221 Assessment Program			
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Project Cost	**12.491**	**12.579**	**11.744**	**12.023**	**12.295**	**12.542**	**12.792**	
RDT&E Articles Qty	**4**	**4**	**4**					

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Project 2221, Assessment Program, provides analytically based assessment of Capability Sponsors' Products, campaign analysis support for OPNAV, and overarching Planning, Programming and Budgeting Execution (PPBE) analysis and guidance. The program provides analytically based decision recommendation to the Chief of Naval Operations (CNO) and assists in structuring follow-on OPNAV analyses. The assessment Program also provides capability-based analyses of the complex naval warfare and support requirements and the need to integrate them fully with efficient application of scare resources and the warfighting Mission Capability Packages (MCP) of the N6/7 Naval Capability Development Plans (NDCP). This project supports the independent analysis of annual MCP, Concept of Operations (CONOPS) analysis, and Chief of Naval Operations Investment Strategy assessments, all of which prove analytical underpinnings/basis for programmatic decisions of the Navy's top leadership regarding the integration of all Navy warfare and support requirements. This program 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). The Assessment Program develops tools and analytical methodologies that assist in evaluating Navy programs and provides technical leadership for the analysis functional area of Naval Modeling and Simulation.

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	2221 Assessment Program

B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Navy Standard Scenarios	1.225	1.230	1.232	

FY 2003 PLANS:
Developed, updated and maintained 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 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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	2221 Assessment Program	

B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Assessment of Capability Sponsors' Products	2.188	2.254	2.321	

FY 2003 PLANS:
Capability Sponsors' Products. Collaborative assessment with capability sponsors . Proactively participated in Capability Sponsors' Integrated Processing Teams (IPTs). Presented opposing, analytically-based points of view . Performed analytically-based decision recommendations to CNO for both warfighting and support areas. Developed CNO Investment Strategy recommendations and performed assessments and developed the Chief of Naval Operations Program Analysis Memoranda (CPAM). Assessed capability sponsor products for senior leadership decision forums. Verification, Validation & Accreditation (VV&A) of warfare/performance/pricing models. Assessed all results relating to Sea Enterprise initiatives and led where appropriate (Skunkworks, LOE review, etc).

FY 2004 PLANS:
Continue Capability Sponsors' Products. Collaborative assessment with capability sponsors . Proactively participate in Capability Sponsors' Integrated Processing Teams (IPTs). Present opposing, analytically-based points of view . Perform analytically-based decision recommendations to CNO for both warfighting and support areas. Develop CNO Investment Strategy recommendations and perform assessments and develop the Chief of Naval Operations Program Analysis Memoranda (CPAM). Assess capability sponsor products for senior leadership decision forums. Verification, Validation & Accreditation (VV&A) of warfare/performance/pricing models. Assess all results relating to Sea Enterprise initiatives and lead where appropriate (Skunkworks, LOE review, etc).

FY 2005 PLANS:
Contine Capability Sponsors' Products. Collaborative assessment with capability sponsors . Proactively participate in Capability Sponsors' Integrated Processing Teams (IPTs). Present opposing, analytically-based points of view . Perform analytically-based decision recommendations to CNO for both warfighting and support areas. Develop CNO Investment Strategy recommendations and perform assessments and develop the Chief of Naval Operations Program Analysis Memoranda (CPAM). Assess capability sponsor products for senior leadership decision forums. Verification, Validation & Accreditation (VV&A) of warfare/performance/pricing models. Assess all results relating to Sea Enterprise initiatives and lead where appropriate (Skunkworks, LOE review, etc).

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	2221 Assessment Program	

B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Campaign Analysis and Modeling	6.032	5.957	4.960	
Database Architecture - Modeling and Simulation	1.623	1.672	1.722	

FY 2003 PLANS:
Developed and maintained common baselines from which campaign excursions and mission-level analyses are executed. Identified, developed, and improved data and modeling . Led Navy's participation in OSD/Joint Staff analytic Agenda, baseline development, and collection of data . Provided path and structure for coordination across the Navy. Brokered agreed-upon assumptions, CONOPS, scenarios and data.

FY 2004 PLANS:
Continue to develop and maintain common baselines from which campaign excursions and mission-level analyses are executed. Identify, develop, and improve data and modeling . Lead Navy's participation in OSD/Joint Staff analytic Agenda, baseline development, and collection of data . Provide path and structure for coordination across the Navy. Broker agreed-upon assumptions, CONOPS, scenarios and data.

FY 2005 PLANS:
Continue to develop and maintain common baselines from which campaign excursions and mission-level analyses are executed. Identify, develop, and improve data and modeling . Lead Navy's participation in OSD/Joint Staff analytic Agenda, baseline development, and collection of data . Provide path and structure for coordination across the Navy. Broker agreed-upon assumptions, CONOPS, scenarios and data.

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	2221 Assessment Program

B. Accomplishments/Planned Program (Cont.)

	FY 03	FY 04	FY 05	
OSD/Joint Staff Study Analysis & Assessment	1.423	1.466	1.509	

FY 2003 PLANS
Led Joint requirements Oversight Council (JROC), Joint Capabilities Board (JCB), Functional Capabilities Board (FCB), and Joint Warfighting Capabilities Assessment (JWCA) participation. Led Requirements and Acquisition for OPNAV . Coordinated/led Navy role in DPG, PDM, JWCA, QDR, and DSB studies. Promoted and defended Navy POM. Provided participation in OSD and Joint Staff analysis assessment and provide structure for coordination across the Navy.

FY2004 PLANS
Continue to lead Joint requirements Oversight Council (JROC), Joint Capabilities Board (JCB), Functional Capabilities Board (FCB), and Joint Warfighting Capabilities Assessment (JWCA) participation. Lead Requirements and Acquisition for OPNAV . Coordinate/lead Navy role in DPG, PDM, JWCA, QDR, and DSB studies. Promote and defend Navy POM. Provide participation in OSD and Joint Staff analysis assessment and provide structure for coordination across the Navy.

FY2005 PLANS
Continue to lead Joint requirements Oversight Council (JROC), Joint Capabilities Board (JCB), Functional Capabilities Board (FCB), and Joint Warfighting Capabilities Assessment (JWCA) participation. Lead Requirements and Acquisition for OPNAV . Coordinate/lead Navy role in DPG, PDM, JWCA, QDR, and DSB studies. Promote and defend Navy POM. Provide participation in OSD and Joint Staff analysis assessment and provide structure for coordination across the Navy. 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).

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	2221 Assessment Program

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2003	FY 2004	FY 2005
FY04 President's Budget	12.446	12.901	13.126
FY05 President's Budget	12.491	12.579	11.744
Total Adjustments	0.045	-0.322	-1.382
Summary of Adjustments			
FY 03 BTR	1.000		
FY03 SBIR Assessment	-0.290		
Sec 8094: Management Improvements		-0.034	
Sec 8029: FFRDC Reduction		-0.178	
Sec 8126: Efficiencies/Revised Economic Assumptions		-0.110	
Misc. Adjustments	-0.665	0.000	-1.382
Subtotal	0.045	-0.322	-1.382

Schedule: Not Applicable

Technical: Not Applicable

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	2221 Assessment Program	

D. OTHER PROGRAM FUNDING SUMMARY:

Not Applicable

E. ACQUISITION STRATEGY: *

Not Applicable

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

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt				PROJECT NUMBER AND NAME Capital Asset Management System			
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Project Cost			**4.055**	**2.038**	**1.598**	**1.598**	**1.598**	
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Capital Asset Management System
Funding is provided for ASN(FM&C) Capital Asset Management system in support of DON's "Mid-Range Plan", which was designed to realize OSD's goal of achieving a clean audit of Defense Department financial statements.

R-1 SHOPPING LIST - Item No.148

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605853N/Management, Technical and International Spt	3025 Capital Asset Management System

B. Accomplishments/Planned Program (Cont.)

	FY 03	FY 04	FY 05	
Capital Asset Management System			4.055	

FY2005 PLANS
Begin efforts to achieve by 2007 an unqualified opinion on the Department of the Navy (DON) financial statements. To achieve this objective, the plan: addresses all “known” major financial statement line item deficiencies; combines manual and system leveraged corrective actions including performing internal assessments to resolve the deficiencies; assumes timely completion of DoD wide efforts such as Military Equipment, Defense Travel System, Defense Cash Accountability System, etc…; and estimates costs based on a rough order of magnitude of incremental costs for corrective actions and program support.

R-1 SHOPPING LIST - Item No.148

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

BA: 06 PROGRAM ELEMENT: 0605856N
PROGRAM ELEMENT TITLE: Strategic Technical Support

COST: (Dollars in Thousands)

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
0128 MGMT/TECH SPT STRATEGIC	1,378	1,419	1,260	1,292	1,322	1,351	1,382
1038 ACOUS&NON-ACOUS ANAL SPT	869	2,418	2,233	2,159	2,279	2,299	2,420
Totals	2,247	3,837	3,493	3,451	3,601	3,650	3,802

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.

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

BA: 06 PROGRAM ELEMENT: 0605856N
PROGRAM ELEMENT TITLE: Strategic Technical Support

PROGRAM CHANGE SUMMARY:

	FY 2003	FY 2004	FY 2005
FY 2004-2005 President's Budget Submission	2,285	3,883	3,904
Cong. Rescissions/Adjustments/Undist.Reductions	0	-46	0
Misc. Adjustments	-38	0	-11
Technical Adjustments	0	0	-400
FY 2005 President's Budget Submission	2,247	3,837	3,493

PROGRAM CHANGE SUMMARY EXPLANATION:
Technical: Not applicable.

Schedule: Not applicable.

BA: 06 PROGRAM ELEMENT: 0605856N PROGRAM ELEMENT TITLE: Strategic Technical Support
PROJECT NUMBER: 0128 PROJECT TITLE: MGMT/TECH SPT STRATEGIC

COST: (Dollars in Thousands)

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
0128 MGMT/TECH SPT STRATEGIC	1,378	1,419	1,260	1,292	1,322	1,351	1,382

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 2003	FY 2004	FY 2005
Management and Technical Support, Strategic	1,378	1,419	1,260

FY 2003 Accomplishments:

• Continued to assess the strategic deterrence (conventional and nuclear) force structure, security, and capability in the Navy.
• Performed an in-depth review of undersea warfare research and development requirements, past and present, and proposed an investment strategy to maximize future capabilities.
• Assessed 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.
• Assessed the submarine forces capabilities in view of emerging technologies and changes in joint and naval strategies. This was used to develop capability based ideas and concepts to guide research and development and science and technology efforts.

• Continued to examine specific applications for submarine mine countermeasures and develop a strategy for ensuring submarine access to contested areas of the world.
• Continued reviews of various submarine operations to assess the safety and security of the ships and missions assigned to identify the problems that require further analysis and study.

FY 2004 Plans:

• Continue to examine specific applications for submarine mine countermeasures and develop a strategy for ensuring submarine access to contested areas of the world.
• 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.
• 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 submarine forces capabilities in view of emerging technologies and changes in joint and naval strategies. This will be used to develop capability based ideas and concepts to guide research and development and science and technology efforts.
• 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.
• 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 submarine forces capabilities in view of emerging technologies and changes in joint and naval strategies. This will be used to develop capability based ideas and concepts to guide research and development and science and technology efforts.
• 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

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

BA: 06 PROGRAM ELEMENT: 0605856N PROGRAM ELEMENT TITLE: Strategic Technical Support
PROJECT NUMBER: 1038 PROJECT TITLE: ACOUS&NON-ACOUS ANAL SPT

COST: (Dollars in Thousands)

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
1038 ACOUS&NON-ACOUS ANAL SPT	869*	2,418	2,233	2,159	2,279	2,299	2,420

*Funds realigned from Z1038

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFCATION:
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 studies to determine long term impact of IUSS Active Sensors on marine mammals and development of Surveillance Towed Array Sonar Systems (SURTASS) Low Frequency Active (LFA) Supplemental Environmental Impact Statement (EIS).

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2003	FY 2004	FY 2005
Acoustic and Non-Acoustic Analysis Support	869	2,418	2,233

FY 2003 Accomplishments:

• Continued development/documentation of architecture for future undersea surveillance capabilities.
• Continued to work on the calibration and certification of fixed sensors for use in the development of sound measurements.
• Continued to update Acoustic Model Applications Program (AMAP) software and associated documentation.
• Conducted analysis of undersea technology for application for future undersea surveillance capabilities.
• Developed alternative IUSS mission requirements analysis; including detailed performance predictions against the latest threat.

FY 2004 Plans:

• Develop Draft Supplemental EIS for SURTASS LFA.
• Prepare Marine Mammal Stock Estimation Approach Analysis.
• Conduct research to determine the impact of IUSS Active Sensors on fish.
• Conduct studies to determine the long-term effects of IUSS Active Sensors on marine mammals.
• Update guidelines for exposure of divers to underwater sound.
• Conduct analysis of undersea technology for application for future undersea surveillance capabilities.
• Assess the current and future IUSS warfare areas and potential allied Navy contributions.

FY 2005 Plans:

• Analyze and respond to comments on Draft Supplemental EIS for SURTASS LFA.
• Prepare and file Final Supplemental EIS for SURTASS LFA.
• Continue studies to determine the long-term effects of IUSS Active Sensors on marine mammals.
• Continue to conduct analysis of undersea technology for application for future undersea surveillance capabilities.
• Continue to assess the current and future IUSS warfare areas and potential allied Navy contributions.

C. OTHER PROGRAM FUNDING SUMMARY:

Not applicable.

D. ACQUISITION STRATEGY:

Not applicable.

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

BA: 06 PROGRAM ELEMENT: 0605861N
PROGRAM ELEMENT TITLE: RDT&E Science and Technology Management

COST: (Dollars in Thousands)

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
Total PE	59,940	64,162	66,117	62,070	62,588	64,586	66,502
0135 ONR SCIENCE AND TECHNOLOGY MANAGEMENT	56,024	59,667	59,468	57,985	58,416	60,405	62,236
0137 ONR S & T INSTRUMENTATION MODERNIZATION	814	1,044	3,499	982	1,010	956	978
2353 DFAS Billings	3,102	3,451	3,150	3,103	3,162	3,225	3,288

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.

PROGRAM CHANGE SUMMARY:

	FY 2003	FY 2004	FY 2005
FY 2004-2005 President's Budget Submission	55,737	64,885	58,533
Program Realignment	0	0	+4,200
New Facility Requirements	0	0	+4,800
NWCF Rate Adjustments	+150	0	+93
Cong. Rescissions/Adjustments/ Undist. Reductions	0	-723	0
Execution Adjustment	+4,053	0	0
Other program adjustments	0	0	-1,509

FY 2005 President's Budget Submission	59,940	64,162	66,117

PROGRAM CHANGE SUMMARY EXPLANATION:
Technical: Not applicable.

Schedule: Not applicable.

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

BA: 06 PROGRAM ELEMENT: 0605861N PROGRAM ELEMENT TITLE: RDT&E Science and Technology Management
PROJECT NUMBER: 0135 PROJECT TITLE: ONR SCIENCE AND TECHNOLOGY MANAGEMENT

COST: (Dollars in Thousands)

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
0135 ONR SCIENCE AND TECHNOLOGY MANAGEMENT	56,024	59,667	59,468	57,985	58,416	60,405	62,236

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.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2003	FY 2004	FY 2005
S&T Management Support	56,024	59,667	59,468

• The project provides for basic costs and support 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 and communications. 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 and FY05 includes funding for blast mitigation, build-out and outfitting of the new ONR facility. Expected occupancy is May 2005.

C. OTHER PROGRAM FUNDING SUMMARY:
Not applicable.

D. ACQUISITION STRATEGY:
Not applicable.

FY 2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE: Feb 2004
Exhibit R-2a
BA: 06 PROGRAM ELEMENT: 0605861N PROGRAM ELEMENT TITLE: RDT&E Science and Technology Management
PROJECT NUMBER: 0137 PROJECT TITLE: ONR S & T INSTRUMENTATION MODERNIZATION

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
0137 ONR S & T INSTRUMENTATION MODERNIZATION	814	1,044	3,499	982	1,010	956	978

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 2003	FY 2004	FY 2005
IT and General Support Equipment	814	1,044	3,499

• This project purchases IT and general support equipment for ONR headquarters and field offices. FY05 includes funding to outfit the new ONR facility.

C. OTHER PROGRAM FUNDING SUMMARY:
Not applicable.

D. ACQUISITION STRATEGY:
Not applicable.

FY 2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE: Feb 2004
Exhibit R-2a
BA: 06 PROGRAM ELEMENT: 0605861N PROGRAM ELEMENT TITLE: RDT&E Science and Technology Management
PROJECT NUMBER: 2353 PROJECT TITLE: DFAS Billings

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
2353 DFAS Billings	3,102	3,451	3,150	3,103	3,162	3,225	3,288

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 2003	FY 2004	FY 2005
Transactions processed in support of DON R&D	3,102	3,451	3,150

• 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.

FY 2004 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2004

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

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	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									
	12,910	13,402	14,120	14,013	14,052	14,326	14,578	Continue	Continue
M3047 Medical Force Protection									
	1,874	995	1,028	1,072	1,117	1,147	1,177	Continue	Continue
Total	12,910	13,402	14,120	14,013	14,052	14,326	14,578	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.

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

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

PROGRAM CHANGE FOR TOTAL PE:

		FY2003	FY 2004	FY 2005				
(U) FY 2003 President's Budget		13,289	13,554	14,268				
(U) Adjustments from PRESBUDG:								
Force Protection								
Section 8094: Management Improvement			-36					
Business Process Reform		-54						
Economic Assumptions (SEC. 813		-80						
IT Cost Growth (SEC. 8109)		-25						
CSRS and FEHB		-814						
Sec. 8126: Efficiencies/Revised Econ			-116					
FY03 Update								
FY02 Inflation Savings								
Reprogramming actions								
FY03 SBIR		-311						
Inflation Savings		-20		190				
Security Equipment for Med Labs		475						
Site Improvements for Med Labs		450						
Non-pay inflation				-29				
		12,910	13,402	19,370				

FY 2004 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2004

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

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

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

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	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									
	12,910	13,402	14,120	14,013	14,052	14,326	14,578	Continue	Continue

(U) PROGRAM ACCOMPLISHMENT AND PLANS:

1. (U) FY 2003 PLAN:

- (U) 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.

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

3. (U) FY 2004 PLAN:

- (U) 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.

4. (U) FY 2005 PLAN:

- (U) 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.

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

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

PROJECT NUMBER & TITLE	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									
	1,874	995	1,028	1,072	1,117	1,147	1,177	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) Provided funds for the following Force Protection Requirements at BUMED medical research laboratories:

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

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

1. (U) FY 2004 PLAN:

- (U) Continue to provide funds for Force Protection Requirements at BUMED medical research laboratories.

1. (U) FY 2005 PLAN:

- (U) 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.

EXHIBIT R-2, RDT&E Budget Item Justification								DATE: February 2004
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 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost		**74.262**	**77.772**	**81.308**	**74.658**	**76.624**	**78.137**	**79.752**
S0354 - RDT&E Ships Support		**18.803**	**8.694**	**11.118**	**10.753**	**11.308**	**11.475**	**11.676**
W0568 - RDT&E Aircraft Flight Hours		**26.607**	**27.732**	**26.501**	**27.874**	**27.469**	**27.998**	**28.559**
W0569 - RDT&E Aircraft Support		**25.829**	**32.189**	**32.646**	**28.850**	**29.359**	**29.951**	**30.554**
K2924 - RDT&E Self Defense Test Ship		**3.023**	**9.157**	**11.043**	**7.181**	**8.488**	**8.713**	**8.963**

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.

R-1 SHOPPING LIST - Item No. 152

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: **February 2004**	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**	PROGRAM ELEMENT NUMBER AND NAME Program Element (0605863N Ship and Aircraft Support)				PROJECT NUMBER AND NAME 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		**18.803**	**8.694**	**11.118**	**10.753**	**11.308**	**11.475**	**11.676**
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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /BA-6	Program Element (0605863N Ship and Aircraft Support)	S0354 - RDT&E Ship Support

B. Accomplishments/Planned Program

		FY 03	FY 04	FY 05
USS DOLPHIN Ship Support				

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 03	FY 04	FY 05
USS DOLPHIN Ship Support		18.803		

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 suppporting 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 03	FY 04	FY 05
USS DOLPHIN Ship Support			8.694	

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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	Program Element (0605863N Ship and Aircraft Support)	S0354 - RDT&E Ship Support

B. Accomplishments/Planned Program (Cont.)

		FY 03	FY 04	FY 05
USS DOLPHIN SHIP SUPPORT				11.118

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 03	FY 04	FY 05

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

			DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	Program Element (PE 0605863N Ship and Aircraft Support	S0354 - RDT&E Ship Support	

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget: (FY 03 Pres Controls)	10.143	8.792	11.163
Current BES/President's Budget (FY04/05 Pres. Controls)	18.803	8.694	11.118
Total Adjustments	8.660	-0.098	-0.045
Summary of Adjustments			
Congressional program reductions			
USS DOLPHIN Low -execution		-0.098	
NWCF RATES - Naval Shipyards			
Shipyard Rates			
Reduce shipyard Depot overhead			
Fuel Inflation issue			
Non pay Purchase Infl.			
Non pay Infl.			
FY2005/2009 Inflation			
Inflation savings issue			-0.036
Congressional undistributed reductions			
Congressional rescissions			
SBIR/STTR Transfer			
Reprogrammings			-0.026
Other Navy/OSD Adjustments			
Manpower rate Increase Offsets			-0.017
Inflation Issue			
Non purchase inflation issue			
Management improvemnts			
Effic/revised econ. Assumptions Issue			
Bus. Process reform (sec)	-0.042		
Economic Assumptions	-0.058		
IT cost growth (Sec. 8109) issue	-0.019		
Inflation adjustment issue	-0.121		
Reprogrammings/Repriorization	6.7		
FY2003 SBIR	-0.014		
BSO Adjustments Issue			
FY03 Update			
Congressional increases	2.214		
Subtotal	8.660	-0.098	-0.079

Schedule:

Not Applicable

Technical:

Not Applicable

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)

DATE: **February 2004**

APPROPRIATION/BUDGET ACTIVITY: **RDT&E, N / BA-6**

PROGRAM ELEMENT: Program Element (PE 0605863N Ship and Aircraft Support

PROJECT NUMBER AND NAME: S0354 - RDT&E 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		12.620	10/02	5.991	10/03	4.250	10/04	Continuing	Continuing	
Planning Yard Support	WR	Portsmouth Naval Shipyard		3.780	10/02	0.596	10/03	3.500	10/04		7.876	
Ship Operations	WR	COMSUBPAC		0.250	10/02	0.650	10/03	0.650	10/04		1.550	
Maintenance/Homeporting	WR	SPAWAR		1.150	10/02	0.505	10/03	1.700	10/04		3.355	
PMS395				1.003	10/02	0.952	10/03	1.018	10/04		2.973	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Product Development			0.000	18.803		8.694		11.118		0.000	38.615	

Remarks: This program has existed since 1968. The program management responsibliities 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.

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:

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**			PROGRAM ELEMENT 0605863N - RDT&E,N Ship and Aircraft Support			PROJECT NUMBER AND NAME S0354 - RDT&E 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			0.000	18.803		8.694		11.118		0.000	38.615	
Remarks:												

R-1 SHOPPING LIST - Item No. 152

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: **February 2004**
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 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		**26.607**	**27.732**	**26.501**	**27.874**	**27.469**	**27.998**	**28.559**
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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605863N - RDT&E,N Ship and Aircraft Support	W0568 - RDT&E Aircraft Flight Hours

B. Accomplishments/Planned Program

		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		26.607	27.732	26.501
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. FY04 plans are to continue to provide 80% of these requirements. FY05 controls will allow us to meet 73% of the requirement.

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

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

R-1 SHOPPING LIST - Item No. 152

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605863N - RDT&E,N Ship and Aircraft Support	W0568 - RDT&E Aircraft Flight Hours

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	27.741	28.044	28.423
Current BES/President's Budget:	26.607	27.732	26.501
Total Adjustments	-1.134	-0.312	-1.922
Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions		-0.312	
Congressional rescissions			
SBIR/STTR Transfer			
Economic Assumptions			0.075
Reprogrammings	-1.134		
Reprioritization			-1.997
Congressional increases			
Subtotal	-1.134	-0.312	-1.922

Schedule:

Not Applicable.

Technical:

Not Applicable.

R-1 SHOPPING LIST - Item No. 152

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)

DATE: **February 2004**

APPROPRIATION/BUDGET ACTIVITY: **RDT&E, N / BA-6**

PROGRAM ELEMENT: 0605863N - RDT&E,N Ship and Aircraft Support

PROJECT NUMBER AND NAME: 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	16.894	10/02	16.994	10/03	17.226	10/04	Continuing	Continuing	
Flight Hours	WX	NAWC WD, Pt. Mugu CA	78.671	8.119	10/02	8.796	10/03	7.420	10/04	Continuing	Continuing	
Flight Hours	WX	NSWC Panama City FL	12.705	0.310	10/02	0.424	10/03	0.530	10/04	Continuing	Continuing	
Flight Hours	WX	NRL Patuxent River MD	25.724	0.920	10/02	1.518	10/03	1.325	10/04	Continuing	Continuing	
Flying Lab Study/Omega Tanker Proj	PD	Various	3.321								3.321	
Miscellaneous	WX/WR	Various	8.338	0.364	Var		Var		Var	Continuing	Continuing	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Product Development			247.529	26.607		27.732		26.501		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:

R-1 SHOPPING LIST - Item No. 152

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)

DATE: **February 2004**

APPROPRIATION/BUDGET ACTIVITY: **RDT&E, N / BA-6**

PROGRAM ELEMENT: 0605863N - RDT&E,N Ship and Aircraft Support

PROJECT NUMBER AND NAME: 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	26.607		27.732		26.501		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 152

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: **February 2004**
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 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		**25.829**	**32.189**	**32.646**	**28.850**	**29.359**	**29.951**	**30.554**
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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605863N - RDT&E,N Ship and Aircraft Support	W0569 - RDT&E Aircraft Support

B. Accomplishments/Planned Program

		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		16.825	20.607	20.465
RDT&E Articles Quantity				

Continuing the transition from ASPA/SDLM to the IMC/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.

		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		8.436	11.014	11.613
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 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.568	0.568	0.568
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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605863N - RDT&E,N Ship and Aircraft Support	W0569 - RDT&E Aircraft Support	

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	28.858	32.552	38.054
Current BES/President's Budget:	25.829	32.189	32.646
Total Adjustments	-3.029	-0.363	-5.408
Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions		-0.363	
SBIR/STTR Transfer	-0.132		
Economic Assumptions			-0.051
Reprogrammings	-2.897		
Reprioritization			-5.357
Congressional increases			
Subtotal	-3.029	-0.363	-5.408

Schedule:

Not Applicable

Technical:

Not Applicable.

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)

DATE: **February 2004**

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		4.598	10/02	5.691	10/03	5.011	10/04	Continuing	Continuing	
Av Depot Level Repairables	WX	NAWC WD Pt. Mugu CA		2.743	10/02	3.117	10/03	2.500	10/04	Continuing	Continuing	
Av Depot Level Repairables	WX	Various		1.095	Var	2.206	Var	0.985	Var	Continuing	Continuing	
Acft Rework	WX/MP	Various		2.027	Var	9.813	Var	9.694	Var	Continuing	Continuing	
Acft Rework	WX	NADEP North Island CA		2.632	10/02	0.000	10/03	1.325	10/04	Continuing	Continuing	
Acft Rework	C/FFP	LMAC Greenville SC		1.332	10/02	0.000	10/03	3.000	10/04	Continuing	Continuing	
Acft Rework	C/FFP	ARINC Canada		2.020	10/02	2.020	10/03	0.000	10/04	Continuing	Continuing	
Engines	C/FFP	Standard Aero San Antonio		0.000		2.896	01/04	2.923	10/04	Continuing	Continuing	
Engines	WX/MP	Various		2.472	Var	0.903	Var	0.450	Var	Continuing	Continuing	
In-Service Repairs	WX	NADEP Jacksonville FL		0.363	10/02	0.538	10/03	0.570	Var	Continuing	Continuing	
In-Service Repairs	WX	Various		0.536	Var	0.606	Var	0.620	Var	Continuing	Continuing	
Spec Flt Test Inst Pool	WX	NAWC AD Pax Riv MD		0.568	10/02	0.568	10/03	0.568	10/04	Continuing	Continuing	
Miscellaneous	WX/WR	Miscellaneous		0.239	Var	0.350	Var	0.397	Var	Continuing	Continuing	
Miscellaneous PY Costs			500.899								500.899	
											0.000	
Acft Rework	WX	NADEP Jacksonville FL		3.632	10/02	1.652	10/03	2.100	10/04	Continuing	Continuing	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Product Development			500.899	24.257		30.360		30.143		Continuing	Continuing	

Remarks:

R-1 SHOPPING LIST - Item No. 152

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)												DATE: **February 2004**	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**			PROGRAM ELEMENT 0605863N - RDT&E,N Ship and Aircraft Support			PROJECT NUMBER AND NAME 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
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		
											0.000		
											0.000		
											0.000		
											0.000		
											0.000		
											0.000		
											0.000		
											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:

R-1 SHOPPING LIST - Item No. 152

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)

DATE: **February 2004**

APPROPRIATION/BUDGET ACTIVITY: **RDT&E, N / BA-6**

PROGRAM ELEMENT: 0605863N - RDT&E,N Ship and Aircraft Support

PROJECT NUMBER AND NAME: 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		0.437	Var	0.347	Var	0.303	Var	Continuing	Continuing	
Travel	WX	NAWC AD Pax Riv MD		0.285	10/02	0.292	10/03	0.300	10/04	Continuing	Continuing	
Civil Service Labor	WX	NAWC AD Pax Riv MD		0.850	10/02	1.190	10/03	1.900	10/04	Continuing	Continuing	
Transportation											0.000	
SBIR Assessment											0.000	
											0.000	
Subtotal Management			0.000	1.572		1.829		2.503		Continuing	Continuing	
Remarks:												
Total Cost			500.899	25.829		32.189		32.646		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 152

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: **February 2004**
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 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		**3.023**	**9.157**	**11.043**	**7.181**	**8.488**	**8.713**	**8.963**
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 safely 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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605863N - RDT&E,N Ship and Aircraft Support	K2924 - RDT&E Self Defense Test Ship

B. Accomplishments/Planned Program

		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		3.023		
RDT&E Articles Quantity				

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

		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost			9.157	
RDT&E Articles Quantity				

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

		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				11.043
RDT&E Articles Quantity				

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

R-1 SHOPPING LIST - Item No. 152

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2004**				
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	3.023		9.157		11.043		Cont.	23.223	
Remarks:												

R-1 SHOPPING LIST - Item No. 152

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605863N - RDT&E,N Ship and Aircraft Support	K2924 - RDT&E Self Defense Test Ship	

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	3.125	9.260	11.272
Current BES/President's Budget:	3.023	9.157	11.043
Total Adjustments	-0.102	-0.103	-0.229
Summary of Adjustments			
Minor Program Adjustments			-0.039
Repriorization	-0.008		
NSWC Rates			-0.190
Revised Econ. Assumptions		-0.079	
Mgmt Improvement		-0.024	
Reprogrammings	-0.094		
Subtotal	-0.102	-0.103	-0.229

Schedule:

Not Applicable

Technical:

Not Applicable

R-1 SHOPPING LIST - Item No. 152

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605863N - RDT&E,N Ship and Aircraft Support	K2924 - RDT&E Self Defense Test Ship	

D. OTHER PROGRAM FUNDING SUMMARY:

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

R-1 SHOPPING LIST - Item No. 152

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)											DATE: **February 2004**	
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
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		3.023	10/02	9.157	10/03	11.043	10/04	Cont.	Cont.	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			0.000	3.023		9.157		11.043		Cont.	Cont.	
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:												

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification						DATE: **February 2004**	
APPROPRIATION/BUDGET ACTIVITY **RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6**				R-1 ITEM NOMENCLATURE 0605864N Test and Evaluation Support			
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	**270.550**	**256.582**	**255.926**	**257.507**	**262.156**	**267.189**	**272.372**
W0541 Atlantic Undersea Test and Evaluation Center	**46.276**	**47.375**	**46.008**	**46.612**	**47.651**	**48.446**	**49.335**
W0566 NAVAIR Environmental Compliance	**4.222**	**3.952**	**3.970**	**4.030**	**3.526**	**3.596**	**3.670**
W0653 Naval Air Warfare Center Weapons Division	**115.800**	**107.537**	**111.044**	**111.978**	**114.422**	**116.700**	**119.009**
W0654 Naval Air Warfare Center Aircraft Division	**85.619**	**77.971**	**78.696**	**78.424**	**79.828**	**81.271**	**82.783**
W2921 Pacific Missile Range Facility	**2.055**	**2.110**	**2.214**	**2.315**	**2.408**	**2.456**	**2.506**
W2922 Maintenance and Repair	**16.578**	**16.648**	**13.994**	**14.148**	**14.321**	**14.720**	**15.069**
W9414 Omega Data Environment	**0.000**	**0.989**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This program provides institutional maintenance and operations support for: the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center (NAVUNSEAWARCEN DET AUTEC), Andros Island, Bahamas; the 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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: **February 2004**	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**	0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W0541 Atlantic Undersea Test and Evaluation Center			
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	**46.276**	**47.375**	**46.008**	**46.612**	**47.651**	**48.446**	**49.335**
RDT&E Articles Qty							

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

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 eletronic, 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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W0541 Atlantic Undersea Test and Evaluation Center

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	24.528	25.732	24.009	
RDT&E Articles Quantity				

Maintain and operate core test support resources, instrumentation systems, and marine craft required to perform AUTEC'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 AUTEC maintenance and operations support contract.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	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 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	10.898	10.793	11.149	
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 AUTEC resources and capabilities.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W0541 Atlantic Undersea Test and Evaluation Center

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	47.021	47.908	46.330
Current BES/President's Budget	46.276	47.375	46.008
Total Adjustments	-0.745	-0.533	-0.322
Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions		-0.533	
Congressional rescissions			
SBIR/STTR Transfer	-0.253		
Economic Assumptions			-0.287
Reprogrammings	-0.492		
Reprioritization			-0.035
Congressional increases			
Subtotal	-0.745	-0.533	-0.322

Schedule: Not Applicable

Technical: Not Applicable

D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Not Applicable							

(U) P. E. 0604759, Major Test and Evaluation Investment

E. ACQUISITION STRATEGY: Not Applicable

F. MAJOR PERFORMERS: Not Applicable

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: **February 2004**	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**	0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W0566 NAVAIR Environmental Compliance			
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	**4.222**	**3.952**	**3.970**	**4.030**	**3.526**	**3.596**	**3.670**
RDT&E Articles Qty							

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

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 (AUTEC), Bahamas. The Navy MRTFB environmental projects include ongoing efforts to comply with Federal, State, and local environmental requirements.

R-1 SHOPPING LIST - Item No. 153

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W0566 NAVAIR Environmental Compliance

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	4.222	0.000	0.000	
RDT&E Articles Quantity				

Continued UST remediations at Patuxent River. Continue the removal and disposal of PCB contaminated items at China Lake and Patuxent River. Continued upgrade of an oily waste/waste oil (OW/WO) management/recycle facility at Patuxent River. Continued refrigeration system replacement at China Lake's SKYTOP test area. Continued comprehensive air pollution meterology studies at Point Mugu.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.000	3.952	3.970	
RDT&E Articles Quantity				

Continue UST remediations at Patuxent River. Conduct a UST closure/change in service at Patuxent River. Continue the removal and disposal 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 comprehensive air pollution meterology studies at Point Mugu.

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

R-1 SHOPPING LIST - Item No. 153

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
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 2003	FY 2004	FY 2005
Previous President's Budget:	4.260	3.997	4.360
Current BES/President's Budget	4.222	3.952	3.970
Total Adjustments	-0.038	-0.045	-0.390

Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions		-0.045	
Congressional rescissions			
SBIR/STTR Transfer			
Economic Assumptions			-0.006
Reprogrammings	-0.038		
Reprioritization			-0.384
Congressional increases			
Subtotal	-0.038	-0.045	-0.390

Schedule: Not Applicable

Technical: Not Applicable

D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Not Applicable							

(U) P. E. 0604759, Major Test and Evaluation Investment

E. ACQUISITION STRATEGY: Not Applicable

F. MAJOR PERFORMERS: Not Applicable

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: **February 2004**	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**	0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W0653 Naval Air Warfare Center Weapons Division			
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	**115.800**	**107.537**	**111.044**	**111.978**	**114.422**	**116.700**	**119.009**
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 instumented 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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W0653 Naval Air Warfare Center Weapons Division

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	48.688	47.948	47.979	
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 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	6.814	6.129	6.614	
RDT&E Articles Quantity				

Provide travel, transportation, collateral equipment, and supplies required to support continued operations of the MRTFB.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	26.290	25.319	28.451	
RDT&E Articles Quantity				

Provide communications, purchased equipment maintenance, printing and reproduction, and purchased service contracts necessary to manage and sustain MRTFB operations.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W0653 Naval Air Warfare Center Weapons Division

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	30.792	25.013	24.879	
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 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	3.216	3.128	3.121	
RDT&E Articles Quantity				

Provide mission essential annual utility costs, equipment rentals, and land, building and facility leases.

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

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W0653 Naval Air Warfare Center Weapons Division

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	115.473	108.748	111.559
Current BES/President's Budget	115.800	107.537	111.044
Total Adjustments	0.327	-1.211	-0.515
Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions		-1.211	
Congressional rescissions			
SBIR/STTR Transfer			
Economic Assumptions			0.682
Reprogrammings	0.327		
Reprioritization			-1.197
Congressional increases			
Subtotal	0.327	-1.211	-0.515

Schedule: Not Applicable

Technical: Not Applicable

D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
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

F. MAJOR PERFORMERS: Not Applicable

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: **February 2004**	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**	0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W0654 Naval Air Warfare Center Aircraft Division			
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	**85.619**	**77.971**	**78.696**	**78.424**	**79.828**	**81.271**	**82.783**
RDT&E Articles Qty							

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project provides funds for the maintenance and operationsof 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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W0654 Naval Air Warfare Center Aircraft Division

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	28.457	29.165	29.974	
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 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	5.130	4.588	4.048	
RDT&E Articles Quantity				

Provide travel, transportation, collateral equipment, and supplies required to support continued operations of the MRTFB.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	24.733	24.993	25.453	
RDT&E Articles Quantity				

Provide communications, purchased equipment maintenance, printing and reproduction, and purchased service contracts necessary to manage and sustain MRTFB operations.

R-1 SHOPPING LIST - Item No. 153

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W0654 Naval Air Warfare Center Aircraft Division	

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	23.702	15.637	15.642	
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 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	3.597	3.588	3.579	
RDT&E Articles Quantity				

Provide mission essential annual utility costs, equipment rentals, and land, building and facility leases.

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

R-1 SHOPPING LIST - Item No. 153

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W0654 Naval Air Warfare Center Aircraft Division	

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	86.894	78.849	78.593
Current BES/President's Budget	85.619	77.971	78.696
Total Adjustments	-1.275	-0.878	0.103
Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions		-0.878	
Congressional rescissions			
SBIR/STTR Transfer			
Economic Assumptions			0.383
Reprogrammings	-1.275		
Reprioritization			-0.280
Congressional increases			
Subtotal	-1.275	-0.878	0.103

Schedule: Not Applicable

Technical: Not Applicable

D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Not Applicable							

(U) P. E. 0604759, Major Test and Evaluation Investment
(U) P. E. 0604256N, Threat Simulator Development
(U) P. E. 0605863N, RDT&E Ship and Aircraft Support

E. ACQUISITION STRATEGY: Not Applicable

F. MAJOR PERFORMERS: Not Applicable

R-1 SHOPPING LIST - Item No. 153

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: **February 2004**	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**	0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W2921 Pacific Missile Range Facility			
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	**2.055**	**2.110**	**2.214**	**2.315**	**2.408**	**2.456**	**2.506**
RDT&E Articles Qty							

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.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W2921 Pacific Missile Range Facility

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	1.650	1.652	1.747	
RDT&E Articles Quantity				

Operate and maintain mission core MRTFB assets to meet customer test workload.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.376	0.428	0.436	
RDT&E Articles Quantity				

Provide civilian labor required to manage, operate, and maintain PMRF's MRTFB capabilities.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.029	0.030	0.031	
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. 153

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W2921 Pacific Missile Range Facility	

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	2.074	2.134	2.223
Current BES/President's Budget	2.055	2.110	2.214
Total Adjustments	-0.019	-0.024	-0.009
Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions			
Congressional rescissions		-0.024	
SBIR/STTR Transfer			
Economic Assumptions			-0.007
Reprogrammings	-0.019		
Reprioritization			-0.002
Congressional increases			
Subtotal	-0.019	-0.024	-0.009

Schedule: Not Applicable

Technical: Not Applicable

D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Not Applicable							

(U) P. E. 0604759, Major Test and Evaluation Investment

E. ACQUISITION STRATEGY: Not Applicable

F. MAJOR PERFORMERS: Not Applicable

R-1 SHOPPING LIST - Item No. 153

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: **February 2004**	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**	0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W2922 Maintenance and Repair			
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	**16.578**	**16.648**	**13.994**	**14.148**	**14.321**	**14.720**	**15.069**
RDT&E Articles Qty							

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

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.

R-1 SHOPPING LIST - Item No. 153

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W2922 Maintenance and Repair

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	16.578	16.648	13.994	
RDT&E Articles Quantity				

Support mission critical emergency services, recurring maintenance and repair, and major repair efforts at the Naval Air Warfare Center Weapons.

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

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

R-1 SHOPPING LIST - Item No. 153

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W2922 Maintenance and Repair	

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	16.695	16.835	17.017
Current BES/President's Budget	16.578	16.648	13.994
Total Adjustments	-0.117	-0.187	-3.023
Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions		-0.187	
Congressional rescissions			
SBIR/STTR Transfer			
Economic Assumptions			-0.010
Reprogrammings	-0.117		
Reprioritization			-3.013
Congressional increases			
Subtotal	-0.117	-0.187	-3.023

Schedule: Not Applicable

Technical: Not Applicable

D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Not Applicable							

(U) P. E. 0604759, Major Test and Evaluation Investment

E. ACQUISITION STRATEGY: Not Applicable

F. MAJOR PERFORMERS: Not Applicable

R-1 SHOPPING LIST - Item No. 153

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: **February 2004**	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**	0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W9414 Omega Data Environment			
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		**0.989**					
RDT&E Articles Qty							

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project provides funding for a management system that supports data mining capabilities. It will provide an on-line data archival and access capability. The OMEGA Data Environment (ODE) is a prototype system that will allow requirements for an enterprise system to be explored. The ODE system is an interface between data on various servers and a myriad of end users and data publishers, all potentially in different geographic locations. It will allow the tagging of metadata and calculated parameters with significant project information such as test article configuration, instrumentation calibrations, etc., as well as pointers to other related documentation such as test plans and reports. The system will allow search capability for both test analysis and, as tests are archived, the test planning during future tests for risk mitigation and test efficiency.

R-1 SHOPPING LIST - Item No. 153

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND N	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W9414 Omega Data Environment

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.000	0.989	0.000	
RDT&E Articles Quantity				

Supported major milestone for a data management system that supports data mining capabilities. (Congressional Add).

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

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

R-1 SHOPPING LIST - Item No. 153

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W9414 Omega Data Environment	

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	0.000	0.000	0.000
Current BES/President's Budget	0.000	0.989	0.000
Total Adjustments	0.000	0.989	0.000

Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions		-0.011	
Congressional rescissions			
SBIR/STTR Transfer			
Economic Assumptions			
Reprogrammings			
Sponsor/FMB/NAVAIR Adjustments			
Congressional increases		1.000	
Subtotal	0.000	0.989	0.000

Schedule: Not Applicable

Technical: Not Applicable

D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Not Applicable							

E. ACQUISITION STRATEGY: Not Applicable

F. MAJOR PERFORMERS: Not Applicable

R-1 SHOPPING LIST - Item No. 153

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

BA: 06 PROGRAM ELEMENT: 0605865N
PROGRAM ELEMENT TITLE: Operational Test and Evaluation Capability

COST: (Dollars in Thousands)

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
R0831 OPTEVFOR SPT	11,167	11,478	12,557	12,612	11,663	11,876	12,114
R2923 Navy JT&E Support	188	481	487	489	487	497	506
Totals	11,355	11,959	13,044	13,101	12,150	12,373	12,620

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 compliance with U.S. 10 Statute as well as Secretary of Defense and Secretary of the Navy directives to conduct independent operational test and evaluation. This funding is used for planning, conducting, and reporting on the operational effectiveness and operational suitability of new and improved systems and recommending fleet usage to the Chief of Naval Operations (CNO). Funding is also used to support the CNO's Sea Power 21 initiative through support and involvement in Sea Trails and Sea Enterprise, requiring greater technical expertise assessing technology maturity and viability of analysis tools and techniques. The CNO has a continuing need for expeditious and efficient conduct of operational test and evaluation (OT&E) by COMOPTEVFOR in support of training and equipping fleet forces. OT&E issues have direct long-term Navy-wide implications on the Fleet's readiness and war fighting capability. Due to rapid advances in technology, changes in fleet tactics, and increased complexity of weapons, sensors and platforms, reductions in manpower, force structure and budgets, COMOPTEVFOR has a greater need for technical and operational analysis that are both sophisticated and timely to ensure an optimal return on investment of Navy resources. Funding is also provided for Navy support of the Office of the Secretary of Defense (OSD)-sponsored Joint Test and Evaluation (JT&E) program.

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

BA: 06 PROGRAM ELEMENT: 0605865N
PROGRAM ELEMENT TITLE: Operational Test and Evaluation Capability

PROGRAM CHANGE SUMMARY:

	FY 2003	FY 2004	FY 2005
FY 2004-2005 President's Budget Submission	11,555	12,094	13,027
Pay Raise Adjustment	0	0	66
Cong. Rescissions/Adjustments/Undist.Reductions	0	-135	0
Execution Adjustment	-200	0	0
Inflation Savings	0	0	-41
Technical Adjustment	0	0	-10
Rate Adjustments	0	0	2
FY 2005 President's Budget Submission	11,355	11,959	13,044

PROGRAM CHANGE SUMMARY EXPLANATION:
Technical: Not applicable.
Schedule: Not applicable.

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

BA: 06 PROGRAM ELEMENT: 0605865N PROGRAM ELEMENT TITLE: Operational Test and Evaluation Capability
PROJECT NUMBER: R0831 PROJECT TITLE: OPTEVFOR SUPPORT

COST: (Dollars in Thousands)

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
R0831 OPTEVFOR SUPPORT	11,167	11,478	12,557	12,612	11,663	11,876	12,114

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides Commander, Operational Test and Evaluation Force (COMOPTEVFOR) general support funding. This funding ensures COMOPTEVFOR compliance with U.S. 10 Statute as well as Secretary of Defense and Secretary of the Navy directives to conduct independent operational test and evaluation. This funding is used for planning, conducting, and reporting on the operational effectiveness and operational suitability of new and improved systems and recommending fleet usage to the CNO. Funding is also used to support the Chief of Naval Operations (CNO's) Sea Power 21 initiative through support and involvement in Sea Trails and Sea Enterprise, requiring greater technical expertise assessing technology maturity and viability of analysis tools and techniques. The CNO has a continuing need for expeditious and efficient conduct of operational test and evaluation (OT&E) by COMOPTEVFOR in support of training and equipping fleet forces. OT&E issues have direct long-term Navy-wide implications on the Fleet's readiness and war fighting capability. Due to rapid advances in technology, changes in fleet tactics, and increased complexity of weapons, sensors and platforms, reductions in manpower, force structure and budgets, COMOPTEVFOR has a greater need for technical and operational analysis that are both sophisticated and timely to ensure an optimal return on investment of Navy resources.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2003	FY 2004	FY 2005
OPTEVFOR Support	11,167	11,478	12,557

FY 2003 Accomplishments:
- Operationally tested and evaluated CNO projects commensurate with authorized funding level.
- Maintained 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.

BA: 06 PROGRAM ELEMENT: 0605865N PROGRAM ELEMENT TITLE: Operational Test and Evaluation Capability
PROJECT NUMBER: R0831 PROJECT TITLE: OPTEVFOR SUPPORT

FY 2004 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.
• Support the CNO's Sea Power 21 initiatives through continuous participation in Sea Trails and Sea Enterprise efforts.

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.
• Support the CNO's Sea Power 21 initiatives through continuous participation in Sea Trails and Sea Enterprise efforts.

C. OTHER PROGRAM FUNDING SUMMARY:
Not applicable.

D. ACQUISITION STRATEGY:
Not applicable.

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

BA: 06 PROGRAM ELEMENT: 0605865N PROGRAM ELEMENT TITLE: Operational Test and Evaluation Capability
PROJECT NUMBER: R2923 PROJECT TITLE: Navy JT&E Support

Project Number & Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
R2923 Navy JT&E Support	188	481	487	489	487	497	506

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides funding for Navy support of the Office of the Secretary of Defense (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 these critical joint areas.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2003	FY 2004	FY 2005
Joint Test & Evaluation	188	481	487

FY 2003 Accomplishments:
- Supported 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.

FY 2005 Plans:
- Continue to support JT&E projects as directed by the JT&E Senior Advisory Council.

BA: 06 PROGRAM ELEMENT: 0605865N PROGRAM ELEMENT TITLE: Operational Test and Evaluation Capability
PROJECT NUMBER: R2923 PROJECT TITLE: Navy JT&E Support

C. OTHER PROGRAM FUNDING SUMMARY:
Not applicable.

D. ACQUISITION STRATEGY:
Not applicable.

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification										DATE: **FEBRUARY 2004**	
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 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Total PE Cost			**3.082**	**3.140**	**2.941**	**2.975**	**3.150**	**3.124**	**3.198**	**Continuing**	**Continuing**
0739 Navy C4I Top Level Requirements			**1.474**	**1.336**	**1.083**	**1.071**	**1.204**	**1.139**	**1.172**	**Continuing**	**Continuing**
0706 EMI Reduction and Radio Frequency Mgmt.			**1.608**	**1.804**	**1.858**	**1.904**	**1.946**	**1.985**	**2.026**	**Continuing**	**Continuing**
Quantity of RDT&E Articles											

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

Project 0739, 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.

Project 0706, Electromagnetic Interference (EMI) Reduction and Radio Frequency (RF) Management - Develops advanced technology to identify and reduce EMI sources from Navy systems and platforms.

(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.

R-1 SHOPPING LIST - Item No. 155

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification										DATE: **FEBRUARY 2004**	
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 0739 Navy C4I Top Level Requirements					
COST ($ in Millions)	Prior Years Cost		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost			**1.474**	**1.336**	**1.083**	**1.071**	**1.204**	**1.139**	**1.172**	**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 Command, Control, Communications (C3), Computers, Intelligence (C4I), and space systems in the Space and Electronic Warfare mission area.

R-1 SHOPPING LIST - Item No. 155

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **FEBRUARY 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605866N SEW Support	0739 Navy C4I Top Level Requirements

(U) B. Accomplishments/Planned Program

		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		1.474		
RDT&E Articles Quantity				

?Applied previously-developed models and analytic methods to identify areas of highest sensitivity in C3 performance.
?Extended previous architectural work on Naval operational functions and networks to detailed analyses of C3 and network requirements.
?Extended previous system engineering results to newly emerging implementation issues.

		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost			1.336	1.083
RDT&E Articles Quantity				

?Extend previously developed analyses of Command, Control and Communications (C3) and network performance to identify areas of greatest impact on C3 performance and newly emerging capabilities and implementation issues.

R-1 SHOPPING LIST - Item No. 155

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **FEBRUARY 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605866N SEW Support	0739 Navy C4I Top Level Requirements	

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	1.549	1.361	1.411
Current BES/President's Budget	1.474	1.336	1.083
Total Adjustments	-0.075	-0.025	-0.328
Summary of Adjustments			
Economic Assumptions	-0.009		
Sec. 8094: Mgmt Improvement		-0.004	
Sec. 8126: Efficiencies/Revisions		-0.012	
Business Process Reform	-0.006		
IT Cost Growth	-0.003		
FFRDC Reduction	-0.013	-0.009	
SBIR Assessment	-0.026		
Inflation Savings	-0.018		
Inflation			-0.003
Non-purchase inflation			-0.001
Sea Enterprise (LOE II)			-0.200
Manpower			-0.124
Subtotal	-0.075	-0.025	-0.328

(U) Schedule:

Not Applicable

(U) Technical:

Not Applicable.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification 37653			DATE: FEBRUARY 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605866N SEW Support	0739 Navy C4I Top Level Requirements	

(U) D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
Not Applicable.									

(U) E. ACQUISITION STRATEGY: *

Not Applicable.

(U) F. MAJOR PERFORMERS: **

Not Applicable.

*** Not required for Budget Activities 1,2,3, and 6.**
**** Required for DON and OSD submit only.**

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification											DATE: **FEBRUARY 2004**
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 0706 EMI Reduction and Radio Frequency Management					
COST ($ in Millions)	Prior Years Cost		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	**0.000**		**1.608**	**1.804**	**1.858**	**1.904**	**1.946**	**1.985**	**2.026**	**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, processes, and algorithms to identify and reduce EMI sources for Navy systems and platforms. There are several efforts 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. They 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.

R-1 SHOPPING LIST - Item No. 155

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **FEBRUARY 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /BA-6	0605866N SEW Support	0706 EMI Reduction and Radio Frequency Management

(U) B. Accomplishments/Planned Program

		FY 03	FY 04	FY 05
AESOP (Integrated CPM and EMCAP)		0.804	0.902	0.929
RDT&E Articles Quantity				

· (U) Developed applications that reside on the afloat computer infrastructure used by the Navy. The software is used for frequency planning to ensure operational use of any electromagnetic emitting systems are not a source or victim of interference. AESOP is an integration of the CPM for communications planning and EMCAP for radar and weapon systems frequency planning. This integration was done per fleet requirement and to support the FORCEnet concept of dynamic management and use of C4ISR resources. Develop interfaces for AESOP, and other automated tools to interface with evolving network protocols and to ensure currency for web based applications. Develop new algorithms for automated tools for new Navy C4ISR systems for both government and commercial communication systems being used by the Navy.

		FY 03	FY 04	FY 05
Automated Tools		0.129	0.144	0.148
RDT&E Articles Quantity				

· (U) Developed algorithms and conceptual models to support EMI reduction. An engineering concept was developed and evaluated for current probe technology to replace legacy HF antennas and thereby reduce interference effects. Develop a multi band approach for current probe technology for multiple frequencies (HF, VHF, and UHF) that would eliminate many of those legacy antennas and has the potential to drastically reduce shipboard interference effects.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **FEBRUARY 2004**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-6**	PROGRAM ELEMENT NUMBER AND NAME 0605866N SEW Support	PROJECT NUMBER AND NAME 0706 EMI Reduction and Radio Frequency Management

(U) B. Accomplishments/Planned Program

		FY 03	FY 04	FY 05
C4I EMC		0.434	0.487	0.502
RDT&E Articles Quantity				

· (U) Continue development of models to analyze antenna enhancements, and research the interference for below decks emitters such as wireless LANs to the topside and below decks environments. Research new technology efforts related to implementation of advanced capabilities that foster the implementation of cutting edge C4ISR transport capabilities. Due to congested topside environment, develop recommended enhancements to antennas to reduce incidences of interference.

		FY 03	FY 04	FY 05
C4I EMC Criteria		0.241	0.271	0.279
RDT&E Articles Quantity				

· (U) C4I EMC Criteria : Incorporated commercial systems practices and standards into EMC C4I criteria and incorporated into Navy practices. Assist battle group staffs and COCOMs in developing frequency management process improvements. Beginning in FY04, institutionalize frequency management process for operational fleet by developing procedures that can be utilized by all Navy battle groups.

R-1 SHOPPING LIST - Item No. 155

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **FEBRUARY 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605866N SEW Support	0706 EMI Reduction and Radio Frequency Management

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
President's Budget:	1.654	1.826	1.868
Current BES/President's Budget	1.608	1.804	1.858
Total Adjustments	-0.046	-0.022	-0.010

Summary of Adjustments			
FY2003 Update	-0.030		
FY03 SBIR 5 May 03	-0.016		
Section 8094: Management Improvements		-0.005	
Sec. 8126: Efficiencies/Revised Econ. Assumptions		-0.015	
WCF - R&D - SPAWAR			-0.001
Rates - SSC			0.001
Inflation			-0.005
Non Purchase Inflation			-0.001
NWCF Rates - SPAWAR SSC Rates			-0.002
SPAWAR Service Cost Center Adjustments		-0.002	-0.002
Subtotal	-0.046	-0.022	-0.010

(U) Schedule:

Not Applicable

(U) Technical:

Not Applicable.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **FEBRUARY 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605866N SEW Support	0706 EMI Reduction and Radio Frequency Management	

(U) D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
Not Applicable.									

(U) E. ACQUISITION STRATEGY: *

Not Applicable.

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R-1 SHOPPING LIST - Item No. 155

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification	DATE: **February 2004**
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 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Total PE Cost	**26.441**	**29.297**	**19.701**	**25.600**	**30.289**	**34.091**	**32.555**	**Cont**	**Cont**
C0030 Marine Corps Studies and Analyses	**7.516**	**7.042**	**5.881**	**6.098**	**6.225**	**6.432**	**6.569**	**Cont**	**Cont**
C0033 Marine Corps Operational Testing & Evaluation Activity	**2.391**	**2.739**	**2.704**	**2.759**	**2.810**	**2.899**	**2.960**	**Cont**	**Cont**
C2330 Family of Incident Response Systems (FIRS)	**14.633**	**13.347**	**2.860**	**7.398**	**10.836**	**13.957**	**11.865**	**Cont**	**Cont**
C2930 Phase 0 Activities	**1.901**	**6.169**	**8.256**	**9.345**	**10.418**	**10.803**	**11.161**	**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

	FY2003	FY2004	FY2005
(U) FY 2004 President's Budget:	**27.476**	**16.635**	**19.766**
(U) Adjustments from the President's Budget:			
(U) Congressional/OSD Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases		13.000	
(U) Reprogrammings	-0.037		
(U) SBIR/STTR Transfer	-0.593		
(U) Minor Affordability Adjustment	-0.405	-0.338	-0.065
(U) FY 2005 President's Budget:	**26.441**	**29.297**	**19.701**

CHANGE SUMMARY EXPLANATION:

(U) Funding: See Above.

(U) Schedule: Not Applicable.

(U) Technical: Not Applicable.

EXHIBIT R-2a, RDT&E Project Justification					DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-6 Management Support**	PROGRAM ELEMENT NUMBER AND NAME **0605873M Marine Corps Program Wide Support**				PROJECT NUMBER AND NAME **C0030 Marine Corps Studies and Analyses**				
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY2009	Cost to Complete	Total Program
Project Cost	**7.516**	**7.042**	**5.881**	**6.098**	**6.225**	**6.432**	**6.569**	**Cont**	**Cont**
RDT&E Articles Qty									

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

This project funds the general studies and analysis 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.

In FY03 and FY04, funds were provided to the Corrosion Control Program for test and evaluation of corrosion products and materials for military equipment, storage methods, corrosion training and other CPAC tasks, within joint service and OSD/ATL CPAC specifications, standards and policies.

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**5.150**	**4.734**	**4.976**
RDT&E Articles Qty			

In FY-03, completed the following FY02 efforts: Expeditionary Fires Study, Imagery Analysis Support, Remain Behind Equipment (RBE) Management, Depot Future, and the Expeditionary Airfield (EAF) studies. Commenced the following FY03 efforts: Marine Expeditionary Brigade 2015, Advanced Amphibious Assault Vehicle (AAAV) Carry Capacity Key Performance Parameters (KPP) and Analysis of Alternatives, Joint Tactical Radio System (JTRS) Migration Strategy, 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, Establishing Time Criteria for Logistics Tasks and the Light Amored Vehicle (LAV) Expeditionary Fire Support System (EFSS) studies.

In FY04, continue and complete the following efforts: Marine Expeditionary Brigade (MEB) 2015, Joint Tactical Radio System (JTRS) Migration Strategy, Expeditionary Airfield (EAF), Establishing Time Criteria for Logistics Tasks, USMC Manpower Requirements Criteria, Light Armored Vechicle (LAV) Expeditionary Fire Support System (EFSS), and the Remain Behind Equipment (RBE) Management studies. Commence the following FY-04 efforts: Lightweight Prime Mover; Flight Deck Manning for MPF(F) Aviation Capable Ships; Transformation of C4 Training, Manpower, and Structure to Support the 21st Century United States Marine Corps; Evaluation of USMC Operational Linguist Requirements & Resources; Operational Analysis of the Marine Air Ground Task Force (MAGTF) Distribution Center; Ammunition Logistics Chain; Developing an Optimal Strategy for Implementating Future Theater-Level Contractor Logistics Support (CLS); Marine/Future Combat Systems (FCS) Technology Strategy; USMC KC-130 Requirements, Review of Deployment Mobility Growth, and the Bulk Liquids Transportation Option studies.

Initiate the high priority study and analysis projects approved in the FY2005 Marine Corps Studies Master Plan (MCSMP) and initiate new Analysis of Alternatives support as nominated and approved.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-6 Management Support**	PROGRAM ELEMENT NUMBER AND NAME **0605873M Marine Corps Program Wide Support**	PROJECT NUMBER AND NAME **C0030 Marine Corps Studies and Analyses**

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**1.413**	**0.908**	**0.905**
RDT&E Articles Qty			

In FY03, continued and completed the following FY02 efforts: Concept of Link Employment (COLE), Marine Corps Meteorological and Oceanographic Support studies.

In FY04, continue and complete the following FY03 efforts: Anti-Terrorism/Force Protection Phase II, Integration of Diagnostics into Ground Equipment Life Cycle Management, and Enabling Logistics with Portable and Wireless Technology. Commence the FY04 Recruiter Selection and Training study.

Initiate high priority study and analysis projects and studies nominated and approved in the FY2005 Marine Corps Studies Master Plan (MCSMP).

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.953**	**1.400**	**0.000**
RDT&E Articles Qty			

Provide Corrosion Control Program Support.

(U) Total $	0.000	7.516	7.042	5.881

(U) PROJECT CHANGE SUMMARY	**FY2003**	**FY2004**	**FY2005**
(U) FY 2004 President's Budget:	**6.167**	**5.721**	**5.900**
(U) Adjustments from the President's Budget:			
(U) Congressional Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases		1.400	
(U) Reprogrammings	1.504		
(U) SBIR/STTR Transfer	-0.155		
(U) Minor Affordability Adjustment		-0.079	-0.019
(U) FY 2005 President's Budget:	**7.516**	**7.042**	**5.881**

(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.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-6 Management Support**	PROGRAM ELEMENT NUMBER AND NAME **0605873M Marine Corps Program Wide Support**	PROJECT NUMBER AND NAME **C0030 Marine Corps Studies and Analyses**

(U) E. MAJOR PERFORMERS: Indefinite Delivery Indefinite Quantity contracts as follows:

FY 03 - FY04	Decision Engineering Associates LLC, Dumfries, VA for analytical and support services. Mar 02.
FY 03 - FY04	Computing Technologies Inc. (CoTs) Fairfax, VA for analytical and support services. Jan 04
FY 03 - FY04	Marine Corps Research University at Pennsylvania State, State College, PA for analytical and support services. May 02.
FY 03 - FY04	Northrop Grumman Mission Systems (NGMS), Fairfax, VA for Analytical and support services. Nov 01.

(U) SCHEDULE PROFILE: Not Applicable

EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2004					
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME				
RDT&E, N /BA-6 Management Support	**0605873M Marine Corps Program Wide Support**				**C0033 Marine Corps Operational Testing & Evaluation Activity**				
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	**2.391**	**2.739**	**2.704**	**2.759**	**2.810**	**2.899**	**2.960**	**Cont**	**Cont**
RDT&E Articles Qty									

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

The Marine Corps Operational Test and Evaluation Activity (MCOTEA) supports the material acquisition process by managing the Marine Corps Operational Test (OT) programs for Acquisition Categories (ACAT) I through ACAT IV (less OT of manned aircraft) and performs other functions that may be directed by the Commandant of the Marine Corps. The primary purpose of Operational Test and Evaluation (OT&E) is to provide information to the Milestone Decision Authority (MDA) regarding the Operational Effectiveness (OE) and Operational Suitability (OS) of the system addressed at 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.

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.549**	**0.740**	**0.656**
RDT&E Articles Qty			

MCOTEA: Provide for organizational support and utilities.

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**1.631**	**1.520**	**1.848**
RDT&E Articles Qty			

MCOTEA: Provide for organizational salaries.

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.211**	**0.479**	**0.200**
RDT&E Articles Qty			

MCOTEA: Provide organizational support, utilities, and salaries for the New Automation Information Systems (AIS) test branch.

(U) Total $	2.391	2.739	2.704

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /BA-6 Management Support	**0605873M Marine Corps Program Wide Support**	**C0033 Marine Corps Operational Testing & Evaluation Activity**

(U) Project Change Summary	**FY2003**	**FY2004**	**FY2005**
(U) FY 2004 President's Budget:	**2.389**	**2.770**	**2.713**
(U) Adjustments from the President's Budget:			
(U) Congressional Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases			
(U) Reprogrammings	0.034		
(U) SBIR/STTR Transfer	-0.003		
(U) Minor Affordability Adjustment	-0.029	-0.031	-0.009
(U) FY 2005 President's Budget:	**2.391**	**2.739**	**2.704**

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.

EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2004					
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-6 Management Support**	PROGRAM ELEMENT NUMBER AND NAME **0605873M Marine Corps Program Wide Support**				PROJECT NUMBER AND NAME **C2330 Family of Incident Response Systems (FIRS)**				
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	**14.633**	**13.347**	**2.860**	**7.398**	**10.836**	**13.957**	**11.865**	**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 commerical items.

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.417**	**0.300**	**0.550**
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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.250**	**0.200**	**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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**2.669**	**0.000**	**0.000**
RDT&E Articles Qty			

Electro-Chemical Activated Solution (ECASOL): Research and development of environmentally benign, patient-safe chem-bio decontaminant Electro-Chemical Activated Solution.

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.245**	**0.350**	**0.200**
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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.875**	**0.200**	**0.450**
RDT&E Articles Qty			

CBIRF: Research and development of improved respiratory protection.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /BA-6 Management Support	**0605873M Marine Corps Program Wide Support**	**C2330 Family of Incident Response Systems (FIRS)**

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**1.431**	**0.000**	**0.000**
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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**2.029**	**2.100**	**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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.076**	**0.120**	**0.000**
RDT&E Articles Qty			

CBIRF: Research and development of a patient tracking and following system and Mass Casualty Ventilation.

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.250**	**0.353**
RDT&E Articles Qty			

CBIRF: Development of field rugged Gas Chromatograph/Mass Spectrometer (GC/MS).

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.300**	**0.653**
RDT&E Articles Qty			

CBIRF: Development of an improved mass casualty decontamination system.

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**3.339**	**2.500**	**0.000**
RDT&E Articles Qty			

CB Warfare: Development of chem/bio warfare agent chip detector .

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.200**	**0.010**	**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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.610**	**0.150**	**0.100**
RDT&E Articles Qty			

CBIRF: Development of Stand-Off Chemical Agent Detector (SCAD).

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /BA-6 Management Support	**0605873M Marine Corps Program Wide Support**	**C2330 Family of Incident Response Systems (FIRS)**

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.010**	**0.000**	**0.000**
RDT&E Articles Qty			

CBIRF: Development of a Radiation Protective Suit Prototype.

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.694**	**0.125**	**0.100**
RDT&E Articles Qty			

CBIRF: Research and development of a chem/bio wearable detector capable of detetion of chem/bio warfare agents and toxic industrial chemicals.

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**1.788**	**0.550**	**0.254**
RDT&E Articles Qty			

CBIRF: Validation and verification of COTS technologies for improve operational capabilities of incident response forces to meet emerging terrorist threat. Field User Evaluations and Studies

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.200**	**0.000**
RDT&E Articles Qty			

CBIRF: Heat Stress Calculator Development

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.600**	**0.000**
RDT&E Articles Qty			

CBIRF: Improved PPE Testing and Qualification

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.397**	**0.000**
RDT&E Articles Qty			

CBIRF: Testing Support

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**2.995**	**0.000**
RDT&E Articles Qty			

CBIRF: C4I Architecture Development

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**2.000**	**0.000**
RDT&E Articles Qty			

Expeditionary Warfare Logistics Funding to be moved to NAVSEA.

TOTAL	14.633	13.347	2.860

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /BA-6 Management Support	**0605873M Marine Corps Program Wide Support**	**C2330 Family of Incident Response Systems (FIRS)**

(U) PROJECT CHANGE SUMMARY:	**FY2003**	**FY2004**	**FY2005**
(U) FY 2004 President's Budget:	**16.469**	**1.898**	**2.870**
(U) Adjustments from the President's Budget:			
(U) Congressional/OSD Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases		11.6	
(U) Reprogrammings	-1.443		
(U) SBIR/STTR Transfer	-0.371		
(U) Minor Affordability Adjustment	-0.022	-0.151	-0.01
(U) FY 2005 President's Budget:	**14.633**	**13.347**	**2.860**

CHANGE SUMMARY EXPLANATION:
(U) Funding: See Above.
(U) Schedule: Not Applicable.
(U) Technical: Not Applicable.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /BA-6 Management Support	**0605873M Marine Corps Program Wide Support**	**C2330 Family of Incident Response Systems (FIRS)**

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY2008	FY2009	To Compl	Total Cost
(U) PMC Line (BLI# 652100) FIRS Family of Incident Response Systems	0.000	3.422	2.804	3.293	4.409	6.759	10.543	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 analzer 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.

EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2004					
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**				
COST ($ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	**1.901**	**6.169**	**8.256**	**9.345**	**10.418**	**10.803**	**11.161**	**Cont**	**Cont**
RDT&E Articles Qty									

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

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 (M

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, MCSC Phase A Activities, Marine Corps Warfighting Lal

(S&T) activities. Pre-phase A Activites 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.

Phase A Activities consist of a series of interrelated activities in Phase A (previously known as Phase 0) of the acquisition process designed to investigate potential material solutions to validate needs, estimate program costs, support sound business decisions, correct inherent disconnects between the Programming, Planning, Budgeting 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 Phase A activities include but are not limited to Market Surveys, Business Case Analysis (BCA), Cost as an Independent Variable (CAIV) analysis, Life Cycle Cost Estimates, Cost Comparison Analysis, Acquisition Strategies, Trade-off Analysis in lieu of an Analysis of Alternatives.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
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**

MAGTF Family of Fighting Vehicles (MEFV): 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

is critical to the Marine Corps; the program is a high priority ground system acquisition initiative. To satisfy the requirements of the 21st Century Marine Warfighters, the MEFFV Project will establish a pre-systems acquisition framework specifically tailored to co-evolve leap ahead technologies with expeditionary operational concepts. A capability and systems integration architecture will use successful operational concepts from services and joint experimentation to guide technologies funded by Defense Advanced Research Projects Agency (DARPA), Office of Naval Research (ONR), Future Combat Systems (FCS) and other agencies for MEFFV application. Oversight from the Marine Corps' Ground Element Advocate will guide this Pre-Systems Acquisition framework to align institutional needs and resources with technological and operational opportunities. During the timeframe (2004-2012) MEFFV efforts are directed at concept and trade studies, analysis of multiple concepts, market research, Analysis of Alternatives, modeling and simulation, technology transition objectives, continued development of the Operational Requirements Document (ORD), development of draft performance specifications preparation of life-cycle estimates leading to a

(U) ACCOMPLISHMENTS/PLANNED PROGRAM:

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**1.901**	**2.457**	**2.529**
RDT&E Articles Qty			

Initiate and complete high priority Milestone 0/Phase A activities for Market Surveys and associated Business Case Analysis for the following programs: Reproduction System (VIC), MEFFV, Mobile Electirc Power (MEP), Seaway Loggy and Deployable Vurtual Training Envir. Initiated and completed Life Cycle Cost estimates for the following programs: Elec. Maint. Support Tool (EMSST), Fire Support Programmatic Support, Automated Career Retention System and CAIV and completed Analysis of Cost Comparison Analysis for the Multi- Level Security; Completed Trade-off Analyses in lieu of Analysis of Alternatives for the Non-Lethal Payload for the Gladiator. Conduct the high priority Analysis and Life Cycle Cost Estimate projects approved in the current FY Nomination for Phase A Activities and initiate new Businesss Case Analyses/Market surveys and associated Acquisition Strategies.

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**1.250**	**0.000**
RDT&E Articles Qty			

Provides for the conduct of high priority Pre-Phase A Activities for Clear Facilities Ground Weapons Locating Radar, PROFILER Meterological Measuring Set, Thermobaric Weapon, Reconnaissance Surveillance Target Acquisition, Squad Advanced Marksman, Rifle Combat Optic (analysis of Alternatives/Operational Mode Summary/Mission Profile). War Reserve Materiel Requirement Development. Radio Migration Study.

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.608**	**1.300**
RDT&E Articles Qty			

Force Design Trades: Survey and derive roles of MAGTF mounted units in future service and Joint operational concepts. Complete the Mounted MAGTF Concept Study and Functional Area Analysis for Mounted MAGTF Operations. Begin deriving alternative MEFFV mission profiles. Initiate Functional Need Analysis.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
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 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.260**	**0.260**
RDT&E Articles Qty			

Lethality: Initiate Functional Solution Analysis for lethality, specifically: Populate baseline capability performance needs and constraints within capability architecture database. Assess lethality system technology opportunities to assess their maturity and impact on effectiveness. Assess target acquisition systems and targeting methodologies.

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.200**	**0.210**
RDT&E Articles Qty			

Propulsion/Tactical Mobility: Initiate Functional Solution Analysis for propulsion/mobility, specifically: work on propulsion/mobility roadmap (emphasis on expeditionary). Assess design architecture with higher component commonalities and assess Future Combat Systems (FCS). Monitor Electric Warship technical developments for component commonality opportunities (auxiliaries).

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.175**	**0.200**
RDT&E Articles Qty			

Survivability (Active): Initiate Functional Solution Analysis for active survivability, specifically: 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 and experiments. Continue active survivability risks study.

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.100**	**0.120**
RDT&E Articles Qty			

Survivability (Passive): Initiate Functional Solution Analysis for passive survivability, specifically: 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 initiatives.

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.369**	**0.708**
RDT&E Articles Qty			

System Integration: Initiate framework for System Engineering Management Plan, specifically: 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 architecture drivers and begin mission tradespace definition. Populate MEFFV Capability Baseline 1 (first of 3) within capability database, based on Expeditionary Maneuver Warfare (EMW) and draft MEFFV concepts, and technology predictions, vetted through Service and joint experiments and games. Examine risk mitigation methodologies.

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.300**	**0.450**
RDT&E Articles Qty			

Initiate Evaluation Plan, specifically: Build business technology evaluation plan and strategy for progress; Continue return on investment study; initiate Acquisition Strategy Development Plan; initiate logistical analysis.

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.450**	**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, training and office materials.

COST ($ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**1.879**
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/Mission Profile) War Reserve Materiel Requirement Development. MAGTF Expeditionary Family of Fighting Vehicles Concept Development. Radio Migration Study.

(U) Total $	1.901	6.169	8.256

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
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**

(U) PROJECT CHANGE SUMMARY:

	FY2003	FY2004	FY2005
(U) FY 2004 President's Budget:	**2.451**	**6.246**	**8.283**
(U) Adjustments from the President's Budget:			
(U) Congressional/OSD Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases			
(U) Reprogrammings	-0.132		
(U) SBIR/STTR Transfer	-0.064		
(U) Minor Affordability Adjustment	-0.354	-0.077	-0.027
(U) FY 2005 President's Budget:	**1.901**	**6.169**	**8.256**

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:

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

FY03-05 Major Performers to be determined based on the Phase A activity.

(U) D. SCHEDULE PROFILE: Not Applicable.