FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE: February 2003
Exhibit R-2

BUDGET ACTIVITY: 3 PROGRAM ELEMENT: 0603758N
PROGRAM ELEMENT TITLE: Naval Warfighting Experiments and Demonstrations

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
R2918 Naval Warfighting Experiments and Demonstrations	46,024	42,501	20,584	17,992	42,493	44,542	45,388	46,268

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The mission of this program is to mature select technologies to facilitate advanced operational demonstration and experimentation. The co-evolution of concepts and technologies requires that potentially revolutionary developments be investigated in naval service operational environments: Fleet Battle Experiments (FBE), Advanced Warfighting Experiments (AWE) and Limited Objective Experiments (LOEs). Concept driven operational experimentation has been historically constrained because the technology employed was from currently mature systems, or those about to complete the acquisition process. This program, in collaboration with the concept development activities for the Navy and Marine Corps, identifies high leverage and potentially revolutionary technology/concept pairings and focuses developmental efforts on preparation of Operational Experimentation Articles (OEA). The OEAs (fieldable technology prototypes) tailored for operational demonstration or experimentation will provide the ability to operate/experiment with technologies and concepts that would otherwise be too advanced or high risk to be employed in the operational environment. Initial efforts will distill technologies for unmanned vehicles, high speed vessels, miniaturized, expeditionary sensing elements, rapid target geo-location, combat identification, advanced countermeasures and knowledge management systems, which are tailored for littoral environments and expeditionary operations. These technologies are key enablers for evolving Network Centric access concepts for naval first-on-scene operations in conflict and operations-other-than-war. Through maturation of key enabling technologies, the program will provide surrogate capabilities, which would be otherwise unavailable, and allow leading edge operational demonstration and experimentation. The iterative technology/concept collaboration will enable innovation and dramatically shorten the time to understand and capitalize on the ramifications of new technologies. This project supports the DON Transformation Roadmap and, in particular, the “Sea Trial: Process for Innovation” aspects.

This program also completes the following Advanced Technology Demonstrations (ATDs): Reactive Material Advanced Warhead, Multi-Element Buoyant Cable Antenna, Multi-Platform Broadband Processing, and Forward Air Support Marine (FASM). ATD programs were selected for a match between technological potential and navy requirements, which were derived from operational issues of concern to the fleet. Risk-reducing ATDs covered integrating and assessing technology in a realistic operational environment and were focused on laying the technical foundations for acquiring improvements to future joint warfighting capabilities. Each demonstration was designed to assess the extent to which the technology is feasible, affordable, and compatible with operational concepts and projected force structure.

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BUDGET ACTIVITY: 3 PROGRAM ELEMENT: 0603758N
PROGRAM ELEMENT TITLE: Naval Warfighting Experiments and Demonstrations

Due to the number of efforts in this PE, the programs described herein are representative of the work included in this PE.

B. PROGRAM CHANGE SUMMARY:

	FY 2002	FY 2003	FY 2004	FY 2005
FY 2003 President's Budget Submission:	42,827	43,460	44,275	43,307
Adjustments from FY 2003 President's Budget:				
S&T Reductions			-3,204	-3,227
Cong Recissions/Adjustments/Undist Reductions	-209	-498		
Execution Adjustments	+3,406			
NWCF Rate Adjustments			-71	+29
Efficiencies at NWCF Activities			-415	-417
S&T Program Adjustments			-19,526	-21,312
Pay Raise/Inflation Adjustments		-461	-475	-388
FY 2004/2005 President's Budget Submission:	46,024	42,501	20,584	17,992

PROGRAM CHANGE SUMMARY EXPLANATION:

Schedule: Not applicable
Technical: Not applicable

FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE:February 2003
Exhibit R-2a

BUDGET ACTIVITY: 3 PROGRAM ELEMENT: 0603758N Project Number: R2918
PROGRAM ELEMENT TITLE: Naval Warfighting Experiments and Demonstrations Project Title: Naval Warfighting Exp and Demo

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
R2918 Naval Warfighting Experiments and Demonstrations	46,024	42,501	20,584	17,992	42,493	44,542	45,388	46,268

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FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE:February 2003
Exhibit R-2a

BUDGET ACTIVITY: 3 PROGRAM ELEMENT: 0603758N Project Number: R2918
PROGRAM ELEMENT TITLE: Naval Warfighting Experiments and Demonstrations Project Title: Naval Warfighting Exp and Demo

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 02	FY 03	FY 04	FY 05
High Speed Vessel (HSV) Experimentation and Demo	5,700	2,934	0	0

The Navy Warfare Development Command (NWDC), U.S. Army Combined Arms Support Command, Office of Naval Research (ONR), the Marine Corps Plans, Policies, and Operations Department, Navy Special Warfare Command and the U.S. Coast Guard Deep Water Project Program, agreed to cooperate in a joint experimentation effort to explore and develop advanced watercraft technologies. Members of the experimentation team expect to conclude this joint experimentation effort with an understanding of where these technologies can best be applied across their respective mission spectrums. This is to enable each partner to much more accurately define and articulate the capabilities they need to include in the future ships that will optimize the advantages of these technologies.

FY 2002 ACCOMPLISHMENTS:
The project developed the experimentation plan that incorporates all the research objectives from each of the services to include joint experimentation in Millennium Challenge 02 and consolidated the analytical talent to both build the experiments and analyze results among the Services. The experimentation phase was initiated using HSV-X1 as the test vessel under coordination by NWDC and in close partnership with other elements of the U.S. Navy, the U.S. Marine Corps, U.S. Army and U.S. Coast Guard. As a result of NSWC-Carderock's interim report on the seakeeping and structural assessment of HSV-X1, the need for additional dedicated sea trials was identified.

FY 2003 PLANS:
The project will continue the experimentation phase under coordination by NWDC with a refined test plan that adds NSWC-Carderock's recommended sea trials under test conditions that include: high sea state, low speed test runs to assess global structural loads, and moderate sea state, high speed test runs in longer period seaways to assess motion and slamming limits. The program will then complete the data base of test runs needed to fully quantify the operational profile of HSV-X1.

FY 2004 PLANS: Not applicable

FY 2005 PLANS: Not applicable

FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE:February 2003
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BUDGET ACTIVITY: 3 PROGRAM ELEMENT: 0603758N PROGRAM ELEMENT TITLE: Naval Warfighting Experiments and Demonstrations

Project Number: R2918
Project Title: Naval Warfighting Exp and Demo

	FY 02	FY 03	FY 04	FY 05
FORCEnet - Expeditionary Sensor Grid (ESG) / Enabling Experimentation (EEE) / Knowledge Superiority and Assurance (KSA) Future Naval Capability (FNC)	7,783	16,625	*	*

* Effort transferred to Program Element 0603235N, Project R2919

This project takes the products of EEE and merges them with KSA FNC efforts to develop an integrated approach for FORCEnet experimentation. The objective of the EEE is to deliver software to operational experiments that allows for easy connection of heterogeneous elements that comprise an ESG, that allow for dynamic configuration and reconfiguration of an ESG, and that deliver the power of the next generation Internet (Semantic Web) to provide the necessary information for dynamic command and control. Development efforts are based on the hypothesis that an ESG will improve the ease and availability of data and information to the warfighter, make available data that is not available today, improve the ability to fuse data and information from disparate sources, and decrease the decision makers' workload by providing actionable information. Contributions from the KSA FNC efforts will include enabling capabilities for Common Picture, Time Sensitive Decision Making and Distributive Collaborative Planning and execution. Planned demonstrations include support for dynamic strike and fires management as well as replanning and rehearsal of operational and tactical forces. A common methodology and connectivity will be established to facilitate a capability for Distributed Laboratory Experimentation allowing scoping analysis using each laboratory's contributions in their areas of excellence. Deliverables from this program will provide the ability to conduct operational experiments to co-evolve network-centric warfare concepts and technologies that will feed into FORCEnet.

FY 2002 ACCOMPLISHMENTS:
The EEE project was initiated as provider of the underlying foundation that will enable concept-based operational, limited objective, and virtual experimentation to be conducted. A strategic Information Operations (IO) team was established consisting of N641 and elements of the DARPA IO Command and Control (IOC2) Dynamic Network Defense (DND) initiative. Development of a common methodology for sensor connectivity was initiated to facilitate a capability for Distributed Laboratory Experimentation and scoping analysis using each participating laboratories' contributions in their areas of excellence. Initial software items were delivered to operational experiments that permitted easy connection of heterogeneous elements that comprise an ESG, that allow for dynamic configuration and reconfiguration of an ESG and which provide the necessary information for dynamic command and control. ESG report generation and software delivery were accomplished successfully by using existing DARPA program technologies for agents such as Cooperating Agents for Specific Tasks (CAST), Control of Agent Based Systems (CoABS), and DARPA Agent Markup Language (DAML). Documentation and software were delivered that demonstrates how agent-based-computing (ABC) can provide dynamic and surgical defense of Fleet operational networks in response to information degradation, including cyber attacks. The results of Navy participation in the Joint Battle Center (JBC) Multi-Service Jini Experimentation were documented and demonstrated how the Jini network technology can discover information sources of other Services and integrate them

into a situational awareness Command and Control (C2) context for Fleet operational users over a widely distributed network. Software was further implemented during the FBE-J Coalition that demonstrated how agent environments, specifically CoABS can provide revolutionary advancements in Fleet operator situational awareness at the tactical level as well as revolutionary improvements in the warfighter's ability to conduct Command and Control in forward littoral regions that may be heavily contested.

FY 2003 PLANS:
Products of the FY02 EEE efforts will be combined with ongoing KSA FNC efforts to develop an integrated approach for FORCEnet experimentation. Demonstrations for dynamic strike and fires management will be planned based on contributions from KSA FNC efforts including enabling capabilities for Common Picture, Time Sensitive Decision Making, and Distributive Collaborative Planning and execution. EEE will complete the common methodology/connectivity technologies that facilitate a capability for Distributed Laboratory Experimentation, will increase the number of sensor types on the grid and will complete developmental work on an end-to-end capability enabled by the DARPA developed CoABS grid and agent based computing technologies. To assist information retrieval, sensor processing and data fusion will be initiated using technologies from KSA FNC efforts and Air Force Rome Laboratory's publish-and-subscribe developments. Design of the next iteration of operational experiments that co-evolve network-centric warfare concepts, technologies, and tactics, techniques and procedures will be completed and testing of new capabilities continued in distributed laboratory experiments and during Fleet Battle Experiments. With evaluation by Fleet operational personnel, and a clear connection to FORCEnet, software implementations will be completed that demonstrate how agent-based-computing (ABC) can facilitate the control and management of vast numbers of sensors in the future operational Naval environment leading to decision-quality information for the warfighter without regard for the specific source sensors. KSA demonstrations will be initiated and completed specifically in the areas of: Time-Sensitive Decision Making Air Operations Decision Support; Time-Sensitive Decision Making Joint Mission Planning System for Expeditionary Forces Surface Assault Planning; and Common Consistent Knowledge Integrated Marine Multi-Agent Command and Control System. These completed demonstrations are expected to establish new capabilities that include: Improved interoperability and enhanced situation awareness to individual warfighters; Enhanced E-2C ability to reduce the probability of blue-on-blue engagements; and significant reduction in planning time for expeditionary maneuver warfare and tactical surface assault. In addition, new KSA demonstrations will be initiated for time-sensitive decision making in the areas of: Course of Action Analysis Tool for Identifying Mobile Time-Sensitive Targets; Image Processing and Exploitation Architecture; Real-Time Execution Decision System, Tomahawk Land Attack Naval Fire Support Workstation Decision Support Capability; and Comprehensive Analytic Real-Time Execution in Joint Air Operations.

FY 2004 PLANS:
Program continues in PE 0603235N, Project R2919

FY 2005 PLANS: Not Applicable

FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE:February 2003
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BUDGET ACTIVITY: 3 PROGRAM ELEMENT: 0603758N Project Number: R2918
PROGRAM ELEMENT TITLE: Naval Warfighting Experiments and Demonstrations Project Title: Naval Warfighting Exp and Demo

	FY 02	FY 03	FY 04	FY 05
Naval Warfare Experimentation Articles - Expeditionary Sensing Elements	9,597	17,564	15,584	12,992

This project matures technology and produces Operational Experimentation Articles (OEA) which enable investigation of the feasibility and contribution of distributed sensors and affectors in littoral operations. The United States has some of the most sophisticated sensor systems in the world that have the ability to provide standoff sensing of militarily significant targets. However, potential adversaries have developed capabilities to cover, conceal, and deny information from these sensors. The Expeditionary Sensor Grid (ESG) concept envisions thousands of additional sensors that can be distributed across the battlespace and placed in close proximity to the targets of interest. Congruently, Network-Centric Operations envisions bringing the data and information from all sensor sources into one common picture that can be tailored to meet the specific requirements of each warfighter. This is in stark contrast to current sensor systems which are not integrated thus making it extremely difficult to provide timely quality information to each decision-maker. The traditional technique of standardization among systems cannot achieve the Network-Centric Operations vision in the dynamic information environment of the future. The ESG concept offers a solution with a "plug and play" of new sensors as well as legacy sensors, databases, and processes. The new sensors provide for exploitation of previously unexploited phenomenology associated with targets of interest and can be widely distributed across the domains of space, air, sea, land, and information and carried by unmanned vehicles or traditional manned platforms. ESG provides sensing, data archiving, processing, fusion, course of action assessment, and information presentation and thus the means to transform data to decision quality information having high utility to the appropriate tactical and operational warfighter. ESG provides "plug and play" interoperability between heterogeneous elements, the capability to dynamically reconfigure the grid as systems enter and leave, and information assurance. Such highly distributed simple sensors and affectors have not been fully investigated previously in the context of platform centric acquisition programs.

FY 2002 ACCOMPLISHMENTS:
Investigations were initiated on ESG concepts that envision thousands of additional sensors distributed across the battlespace of interest and placed in close proximity to the targets of interest as well as on previously unexploited phenomenology associated with targets distributed across the domains of space, air, sea, land, and information. Investigations of simple sensors and affectors were initiated in the context of platform centric acquisition programs. Efforts to develop Operational Experimentation Articles (OEA) which enable investigation of the feasibility and contribution of distributed sensors and affectors in littoral operations were initiated. Specific efforts that were initiated include: UAV-Borne Distributed Electro-Optical/Infrared Sensors which provide situational awareness of enemy firing positions and damage assessment from a low cost tactical UAV during clear and under the weather conditions; SWARM Distributed Micro-Affectors which defeat sophisticated enemy missile guidance radar sites; Distributed Undersea Warfare Pyramid Electromagnetic Sensors; and Unattended Sea-Based Cruise Missile Sensors. The Distributed Specific

Emitter Identifier (SEI) effort was initiated and completed in FY02 and culminated in a series of highly successful demonstrations during FBE-J as well as an immediate transition to operational usage aboard a deployed Navy vessel.

FY 2003 PLANS:
The project will continue to mature technologies and produce Operational Experimentation Articles (OEA) which enable investigation of the feasibility and contribution of distributed sensors and affectors in littoral operations. Exploration will continue on new sensors that use previously unexploited phenomenology associated with targets of interest and which are distributed across the domains of space, air, sea, land, and information. Examination will include innovative and advanced technologies to reduce cost and risk and enable new operational concepts. Efforts will be completed that include: UAV-Borne Distributed Electro-Optical/Infrared Sensors; and SWARM Distributed Micro-Affectors. These completed efforts will demonstrate the capability to geo-locate mortar fire and the capability to defeat mobile ASM targeting radars in a distributed fashion with ESG-ready OEAs. Efforts that will be continued include: Distributed Undersea Warfare Pyramid Electromagnetic Sensors; and Unattended Sea-Based Cruise Missile Sensors. New OEA development efforts that will be initiated include: Deployable Remote Sensor; Tactical Specific Emitter Identification (SEI) Algorithms, Tactical Coherent Stand-in Jammer; and Distributed Mine Countermeasures.

FY 2004 PLANS:
The project will continue to mature technologies and produce Operational Experimentation Articles (OEA) which enable investigation of the feasibility and contribution of distributed sensors and affectors in littoral operations, including continued investigations of new sensors that take advantage of previously unexploited target signature phenomenology. Examination will continue on innovative and advanced technologies to reduce cost and risk, while enabling new operational concepts. Efforts that will be completed include: Distributed Undersea Warfare Pyramid Electromagnetic Sensors and its demonstration; and Unattended Sea-Based Cruise Missile Sensors effort and its demonstration. Efforts that will be continued include: Deployable Remote Sensor; Tactical SEI Algorithms; Tactical Coherent Stand-in Jammer; and Distributed Mine Countermeasures. Other new OEA efforts will be initiated as opportunities are identified to support future fleet battle experimentation.

FY 2005 PLANS:
The project will continue to mature technologies and produce Operational Experimentation Articles (OEA) which enable investigation of the feasibility and contribution of distributed sensors and affectors in littoral operations, with continued exploitation of new sensor phenomenology and examinations of innovative and advanced technologies to reduce cost and risk, while expanding mission capabilities. Efforts that will be completed include: Deployable Remote Sensor; Tactical SEI Algorithms; Tactical Coherent Stand-in Jammer; and Distributed Mine Countermeasures. These completed efforts will demonstrate new capabilities to: Extend the sensor reach of netted platforms; Distribute fused SEI information across the Fleet; Defeat sophisticated enemy air suppression radars; and Counter the effectiveness of sea mines or reduce the probability of damage to surface ships or submarines. Other new OEA efforts will be initiated as opportunities are identified to support future fleet battle experimentation.

FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE:February 2003
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BUDGET ACTIVITY: 3 PROGRAM ELEMENT: 0603758N Project Number: R2918
PROGRAM ELEMENT TITLE: Naval Warfighting Experiments and Demonstrations Project Title: Naval Warfighting Exp and Demo

	FY 02	FY 03	FY 04	FY 05
U.S. Marine Corps Experimentation	2,000	3,911	3,500	3,500

This project provides support to experimental pathway events including Marine Corps service contribution to JFCOM's federated modeling and simulation efforts in support of experimentation.

FY 2002 ACCOMPLISHMENTS:
The project provided support to Millennium Challenge 02 experimental pathway events including Marine Corps service contribution to JFCOM's federated modeling and simulation efforts in support of experimentation. Support was also provided to JFCOM's spiral concept to develop an experimental Marine Expeditionary Brigade (MEB) command element capable of collaborating in near-real time using the modeling and simulation federation with the JFCOM experimental Standing Joint Force Headquarters (SJFHQ) during the Marine Corps role as Joint Land Component Commander.

FY 2003 PLANS:
The project will continue support to JFCOM's spiral concept development and distributed modeling and simulation experimentation. Support will be provided to expand the Marine Corps involvement in JFCOM's experimental pathways Olympic Vision and Pinnacle Impact to include developing courses of action and procedures for Service component interaction with the SJFHQ that is the centerpiece of JFCOM JCDE exploration. Development of Service-specific modeling and simulation support to JFCOM's developing Joint Global War Game concept and expansion of the Marine Corps JCDE collaboration with JFCOM through JCDE coordination and implementation offices will be supported.

FY 2004 PLANS:
The project will continue supporting JFCOM's experimental pathways to include Pinnacle Vision and experimentation with the SJFHQ during both spiral development leading to Olympic Challenge-04 and in support of the modeling and simulation federation in preparation for the Pinnacle Challenge-05 integrating experiment in FY05. The program will support Marine Corps spiral development of Naval seabasing operational capabilities for modeling and simulation as part of the JFCOM Joint Global War Game and continue support to the Marine Corps JCDE coordination and implementation effort.
FY 2005 PLANS:
The project will continue supporting JFCOM's experimental pathways and spiral development leading to JFCOM's Pinnacle Challenge-05 experiment into the emerging Joint Warfighting Concept. The program will continue to support the Marine Corps contribution to the Joint Modeling and Simulation federation and an expanded Marine Corps involvement in the Joint Global War Game effort. Support will be provided to Marine Corps component collaborative planning tools required to adequately conduct distributed, seabased staff planning and execution in support of the nascent Joint Warfighting
Concept from an integrated, network centric naval seabase. Support will continue for Marine Corps JCDE coordination and implementation effort and future joint combat development capability assessments.

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Project Number: R2918
Project Title: Naval Warfighting Exp and Demo

	FY 02	FY 03	FY 04	FY 05
Reactive Material Advanced Warhead Advanced Technology Demonstration (ATD)	5,200	0	0	0

This ATD is to utilize energetic fragments to enhance warhead effectiveness against missiles, aircraft and radar sites.

FY 2002 ACCOMPLISHMENTS:
The ATD was completed. Completed cylindrical full-scale explosive launch test series for Reactive Fragmentation Material and inclusion of results in lethality estimation programs. Conducted full-scale live explosive static testing of the Reactive Materials Enhanced Warhead against a number of targets, both real and simulated. This ATD completed the Reactive Warhead Critical Design review and submission of design package to transition agent, including systems design interface considerations. The ATD also completed Lethality Analysis and Toolset for Anti-Air Warfare (AAW) target set and transitioned to Engineering Manufacturing Development (EMD) Production program.

FY 2003 PLANS: Not Applicable

FY 2004 PLANS: Not Applicable

FY 2005 PLANS: Not Applicable

	FY 02	FY 03	FY 04	FY 05
Multi-Function Buoyant Cable Antenna ATD	4,500	0	0	0

This ATD is to develop and demonstrate an advanced Buoyant Cable Antenna (BCA) System to provide a submerged submarine with two-way, high- data rate Ultra High Frequency (UHF) fleet satellite communications, line-of-site (LOS) L-band, K-band communications as well as accessory sensor functions such as Global Positioning System, Video, and Radar Warning.

FY 2002 ACCOMPLISHMENTS:
The ATD was completed. This included completion of system fabrication and component testing, conducting surface based system tests using cable depressor and conducting a submarine demonstration.

FY 2003 PLANS: Not Applicable

FY 2004 PLANS: Not Applicable

FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE:February 2003
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FY 2005 PLANS: Not Applicable

	FY 02	FY 03	FY 04	FY 05
Multi-Platform Broad Band Processing ATD	4,600	0	0	0

This ATD is to develop and demonstrate common, broadband acoustic signal processing algorithms for submarine, surface ship, and weapons sonar systems.

FY 2002 ACCOMPLISHMENTS:
The ATD was completed. The performance of coherent broadband signal processing for submarine, surface ship and undersea weapon applications was demonstrated.

FY 2003 PLANS: Not Applicable

FY 2004 PLANS: Not Applicable

FY 2005 PLANS: Not Applicable

	FY 02	FY 03	FY 04	FY 05
Forward Air Support Marine ATD	6,644	0	0	0

This ATD is to demonstrate a gun launched observation vehicle with a 3 hour/240 nmi flight endurance and capabilities for surveillance, battle damage assessment, targeting and ordnance dispensing.

FY 2002 ACCOMPLISHMENTS:
The ATD was completed. This entailed completion of full-scale wind tunnel testing of the cruise vehicle, autonomous flights of the cruise vehicle and gun launch of a full-scale test vehicle.

FY 2003 PLANS: Not Applicable

FY 2004 PLANS: Not Applicable

FY 2005 PLANS: Not Applicable

FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE:February 2003
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BUDGET ACTIVITY: 3 PROGRAM ELEMENT: 0603758N Project Number: R2918
PROGRAM ELEMENT TITLE: Naval Warfighting Experiments and Demonstrations Project Title: Naval Warfighting Exp and Demo

	FY 02	FY 03	FY 04	FY 05
Science and Technology Analysis and Assessments	0	1,467	1,500	1,500

Independent S&T reviews will be conducted to assure that experimentation is executed and operational analyses performed which address relevant issues and allow the iterative improvement of concepts and technologies (in the form of OEAs). Specific year-to-year efforts will focus on net-centric concepts under development by the Naval Warfare Development Command in the areas of Littoral Warfare. Analyses and assessments will be directed toward ensuring that S&T resources are focused in a context of relevance centered on unique naval needs, transformational concepts and opportunities.

FY 2002 ACCOMPLISHMENTS: Not Applicable

FY 2003 PLANS:
Independent S&T reviews will be conducted to ensure that experimentation is executed and operational analyses performed that address relevant issues and allow the iterative improvement of concepts and technologies in the form of Operational Experimentation Articles. Efforts will be focused on anti-access concepts under development by the Naval Warfare Development Command in the areas of Antisubmarine Warfare and Mine Warfare. Analyses and assessments will be directed toward ensuring that S&T resources are focused in a context of relevance centered on unique naval needs, transformational concepts and opportunities.

FY 2004 PLANS:
Independent S&T reviews will be continued to ensure that experimentation is executed and operational analyses conducted that address relevant issues and allow the iterative improvement of concepts and technologies in the form of Operational Experimentation Articles as well as to ensure that S&T resources are focused in a context of relevance centered on unique naval needs, transformational concepts and opportunities.

FY 2005 PLANS:
Independent S&T reviews will be continued to ensure that experimentation is executed and operational analyses conducted that address relevant issues and allow the iterative improvement of concepts and technologies in the form of Operational Experimentation Articles as well as to ensure that S&T resources are focused in a context of relevance centered on unique naval needs, transformational concepts and opportunities.

FY 2004/2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE:February 2003
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BUDGET ACTIVITY: 3 PROGRAM ELEMENT: 0603758N Project Number: R2918
PROGRAM ELEMENT TITLE: Naval Warfighting Experiments and Demonstrations Project Title: Naval Warfighting Exp and Demo

C. OTHER PROGRAM FUNDING SUMMARY:

NAVY RELATED RDT&E:
- PE 0601152N (In-house Lab Independent Research)
- PE 0601153N (Defense Research Sciences)
- PE 0602114N (Power Projection Applied Research)
- PE 0602123N (Force Protection Applied Research)
- PE 0602131M (Marine Corps Landing Forces Technology)
- PE 0602235N (Common Picture Applied Research)
- PE 0602236N (Warfighter Sustainment Applied Research)
- PE 0602271N (RF Systems Applied Research)
- PE 0602435N (Ocean Warfighting Environment Applied Research)
- PE 0602747N (Undersea Warfare Applied Research)
- PE 0602782N (Mine and Expeditionary Warfare Applied Research)
- PE 0603114N (Power Projection Advanced Technology)
- PE 0603123N (Force Protection Advanced Technology)
- PE 0603235N (Common Picture Advanced Technology)
- PE 0603236N (Warfighter Sustainment Advanced Technology)
- PE 0603271N (RF Systems Advanced Technology)
- PE 0603640M (Marine Corps Advanced Technology Demonstrations)
- PE 0603729N (Warfighter Protection Advanced Technology)
- PE 0603747N (Undersea Warfare Advanced Technology)
- PE 0603727N (Joint Experimentation)
- PE 0603782N (Mine & Expeditionary Warfare Advanced Technology)

NON-NAVY RELATED RDT&E:
- PE 0603750D (Advanced Concept Technology Demonstration)

D. ACQUISITION STRATEGY: Not Applicable