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

BA: 07 PROGRAM ELEMENT: 0205658N PROGRAM ELEMENT TITLE: Navy Science Assistance Program

PROJECT NUMBER: R0834 PROJECT TITLE: NAVY SCIENCE ASSISTANCE PROGRAM

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
R0834 NA	VY SCIENCE	ASSISTANCE	PROGRAM				
	7,365	3,703	3,821	3 , 915	3,370	3,407	3 , 552
R2701 LA	SH Airship	Test Platfo	rm Support				
	1,621	0	0	0	0	0	0
R9111 LA	SH MCM/ISR						
	6,473	6,923	0	0	0	0	0
Totals	15,459	10,626	3,821	3,915	3 , 370	3,407	3 , 552

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Naval Fleet/Force Technology Innovation Office (NFFTIO) ensures that the Fleet/Force (F/F) helps shape the Department of the Navy (DoN) investment in Science and Technology (S&T), develops teaming relationships to rapidly demonstrate and transition technology, supports development of technology-based capability options for naval forces, and enables warfighting innovations based on technical and conceptual possibilities. This is accomplished through proactive connectivity and collaboration between DoN S&T and Joint, Navy, and Marine Corps commands worldwide. The program accomplishes this through several methods. It provides Science Advisors to Joint, Navy, and Marine Corps operational and strategic planning commands. In addition, NFFTIO facilitates and disseminates the Command Capability Issues (CCIs) provided by the F/F Commanders to the Director of Navy Test and Evaluation and Technology Requirements (OPNAV N091). NFFTIO also collaborates with the F/F to identify specific solutions to known operational capability needs and provides the means to develop and demonstrate prototype systems. The result is that NFFTIO provides insight into issues associated with Naval Warfighting Capabilities, thereby influencing long term S&T programs. The program also develops leaders among the civilian scientists and engineers in the Naval Research Enterprise (NRE). Upon completion of their Science Advisor tours, the scientists and engineers return to the NRE with first hand knowledge of the F/F, warfighting issues, and strategic decision making. NFFTIO is unique in that it enables a continuous communication and collaboration between the warfighters, the technical community, and strategic development commands.

> R1 Line Item 180 Page 1 of 7

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

Exhibit R-2a

BA: 07 PROGRAM ELEMENT: 0205658N PROGRAM ELEMENT TITLE: Navy Science Assistance Program

PROJECT NUMBER: R0834 PROJECT TITLE: NAVY SCIENCE ASSISTANCE PROGRAM

PROGRAM CHANGE SUMMARY:

	FY 2003	FY 2004	FY 2005
FY 2004-2005 President's Budget Submission	12,981	3,708	3,849
Cong. Rescissions/Adjustments/Undist.Reductions	0	-79	0
Congressional Actions	0	7,000	0
Execution Adjustments	2,695	0	0
Inflation Savings	0	0	-12
Manpower Adjustments	0	0	-6
Rate Adjustments	0	-3	-10
SBIR Assessment	-217	0	0
FY 2005 President's Budget Submission	15,459	10,626	3,821

PROGRAM CHANGE SUMMARY EXPLANATION:

Technical: Not applicable

Schedule: Not applicable

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COST: (Dollars in Thousands)

Project FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 Number Actual Estimate Estimate Estimate Estimate Estimate

& Title

R0834 NAVY SCIENCE ASSISTANCE PROGRAM

7,365 3,703 3,821 3,915 3,370 3,407 3,552

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Naval Fleet/Force Technology Innovation Office (NFFTIO) ensures that the Fleet/Force (F/F) helps shape the Department of the Navy (DoN) investment in Science and Technology (S&T), develops teaming relationships to rapidly demonstrate and transition technology, supports development of technology-based capability options for naval forces, and enables warfighting innovations based on technical and conceptual possibilities. This is accomplished through proactive connectivity and collaboration between DoN S&T and Joint, Navy, and Marine Corps commands worldwide. The program accomplishes this through several methods. It provides Science Advisors to Joint, Navy, and Marine Corps operational and strategic planning commands. In addition, NFFTIO facilitates and disseminates Command Capability Issues (CCIs) provided by the F/F Commanders to the Director of Navy Test and Evaluation and Technology Requirements (OPNAV N091). NFFTIO also collaborates with the F/F to identify specific solutions to known operational capability needs and provides the means to develop and demonstrate prototype systems. The result is that NFFTIO provides insight into issues associated with Naval Warfighting Capabilities, thereby influencing long term S&T programs. The program also develops leaders among the civilian scientists and engineers in the Naval Research Enterprise (NRE) who, upon completion of their Science Advisor tours, return to the NRE with first hand knowledge of the F/F, warfighting issues, and strategic decision making. NFFTIO is unique in that it enables a continuous communication and collaboration between the warfighters, the technical community, and strategic development commands.

> R1 Line Item 180 Page 3 of 7

FY 2005 RDT&E, N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2004

Exhibit R-2a

BA: 07 PROGRAM ELEMENT: 0205658N PROGRAM ELEMENT TITLE: Navy Science Assistance Program

PROJECT NUMBER: R0834 PROJECT TITLE: NAVY SCIENCE ASSISTANCE PROGRAM

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2003	FY 2004	FY 2005
Naval Fleet/Force Technology Innovation Office	4,670	3,703	3,821

FY 2003 Accomplishments:

- Ensured that the Fleet/Force (F/F) helps shape the Department of the Navy (DoN) investment in Science and Technology (S&T).
- Developed teaming relationships to rapidly demonstrate and transition technology, supports development of technology-based capability options for naval forces.
- · Enabled warfighting innovations based on technical and conceptual possibilities.
- Accomplished proactive connectivity and collaboration between DoN S&T and Joint, Navy, and Marine Corps commands worldwide.
- · Provided Science Advisors to Joint, Navy, and Marine Corps operational and strategic planning commands.
- Collaborated with the F/F to identify specific solutions to known operational capability needs and provides the means to develop and demonstrate prototype systems.
- Provided insight into issues associated with Naval Warfighting capabilities, thereby influencing long term S&T programs.
- Developed leaders among the civilian scientists and engineers in the Naval Research Enterprise (NRE)-they return to the NRE with first hand knowledge of the F/F, warfighting issues, and strategic decision making.
- Enabled a continuous communication and collaboration between the warfighters, the technical community, and strategic development commands.

R1 Line Item 180 Page 4 of 7

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

BA: 07 PROGRAM ELEMENT: 0205658N PROGRAM ELEMENT TITLE: Navy Science Assistance Program

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FY 2004 Plans:

Continue FY 03 efforts.

FY 2005 Plans:

Continue FY 04 efforts.

C. OTHER PROGRAM FUNDING SUMMARY:

RELATED RDT&E:

PE 0601152N In-House Laboratory Independent Research

PE 0601153N Defense Research Sciences

PE 0602114N Power Projection Applied Research

PE 0602123N Force Protection Applied Research

PE 0602131M Marine Corps Landing Force 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 Advance Technology

PE 0603235N Common Picture Advanced Technology

PE 0603236N Warfighter Sustainment Advanced Technology

PE 0603271N RF Systems Advanced Technology

PE 0603640M USMC Advance Technology Demonstration (ATD)

PE 0603727N Joint Experimentation

PE 0603729N Warfighter Protection Advanced Technology

PE 0603747N Undersea Warfare Advanced Technology

PE 0603758N Navy Warfighting Experiments and Demonstrations

PE 0603782N Mine and Expeditionary Warfare Advanced Technology

D. ACOUISITION STRATEGY:

Not applicable.

R1 Line Item 180 Page 5 of 7

FY 2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: Feb 2004

Exhibit R-2a

BA: 07 PROGRAM ELEMENT: 0205658N PROGRAM ELEMENT TITLE: Navy Science Assistance Program

PROJECT NUMBER: Various PROJECT TITLE: Congressional Plus-Ups

CONGRESSIONAL PLUS-UPS:

R2701	FY 2003	FY 2004
LASH Airship Test Platform Support	1,621	0

- Developed a demonstration program using a subcontracted, commercial airship. The airship deployed from Elizabeth City, NC and St. Augustine, FL.
- Collected data to determine the value of an airship for Electro-Optical and Infrared(EO/IR) sensing. The LASH sensor has been used onboard the airship for whale monitoring, coral reef oceanography, and for deer surveys on government land.
- · Deployed the airship for force protection during the Marine Corps Marathon in Washington, DC.

R9111	FY 2003	FY 2004
LASH MCM/ISR	6 , 473	6 , 923

FY 03 Accomplishments:

Augmented the development of a hyperspectral based, airborne sensor for near shore minefield classification.

- · Incorporated improved Navigation/Stablilization system capabilities into the Pod/Sensor system.
- · Developed automatic detection algorithm supported by flight data.
- Participated in Exercise Millennium Challenge with the Navy's Very Shallow Water (VSW) Detachment to detect mines in the VSW and Surf Zone.
- Continued to be guided by metrics determined in concert with OPNAV, Navy acquisition, and Marine Corps Systems Command.
- Tested the new airborne sensor's effectiveness in detecting mines in the surf zone.

R1 Line Item 180 Page 6 of 7

FY 2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE: Feb 2004

Exhibit R-2a

BA: 07 PROGRAM ELEMENT: 0205658N PROGRAM ELEMENT TITLE: Navy Science Assistance Program

PROJECT NUMBER: Various PROJECT TITLE: Congressional Plus-Ups

FY 04 Plan:

• Expand multispectral data collection in the surf zone to include adverse environments and continue to refine mine detection algorithms.

• Construct and deliver to the government a multispectral sensor for the detection of mines and obstacles in the surf zone.

R1 Line Item 180 Page 7 of 7