

UNCLASSIFIED

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

DATE: February 2003

BUDGET ACTIVITY: 7 PROGRAM ELEMENT: 0205658N
PROGRAM ELEMENT TITLE: NAVAL FLEET/FORCE TECHNOLOGY INNOVATION OFFICE

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
R0834 Laboratory Fleet Support	6,981	4,685	3,708	3,849	3,952	4,777	4,857	4,942
R2371 Lash Hyperspectral	4,131	-	-	-	-	-	-	-
R2701 Lash Study	4,898	1,659	-	-	-	-	-	-
R9111 Littoral/Mine Countermeasures Rapid Response	4,131	6,637	-	-	-	-	-	-
Total	20,141	12,981	3,708	3,849	3,952	4,777	4,857	4,942

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.

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B. PROGRAM CHANGE SUMMARY:

	FY 2002	FY 2003	FY 2004	FY 2005
FY 2003 President's Budget Submission:	18,480	4,801	4,923	4,770
Adjustments from FY 2003 President's Budget:				
Congressional Plus-ups		8,500		
Post-Production R&D Continuation			-578	-690
ACTD offsets			-66	-80
NWCF Rate Adjustments			-11	+6
Cong Recissions/Adjustments/Undist. Reductions	-88	-151		
Efficiencies at NWCF Activities			-71	-74
Non-S&T R&D Offset			-404	
Pay Raise/Inflation Adjustments		-169	-85	-83
Execution Adjustments	2,103			
SBIR Assessment	-354			
FY 2004/2005 President's Budget Submission:	20,141	12,981	3,708	3,849

PROGRAM CHANGE SUMMARY EXPLANATION:

Schedule: Not applicable
Technical: Not applicable

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PROGRAM ELEMENT TITLE: NAVAL FLEET/FORCE TECHNOLOGY
INNOVATION OFFICE

Project Number: R0834
Project Title: Laboratory Fleet
Support

COST: (Dollars in Thousands)

PROJECT NUMBER/ TITLE	FY 2002 ACTUAL	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	FY 2008 ESTIMATE	FY 2009 ESTIMATE
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R0834 Naval Fleet/Force Technology Innovation Office	6,981	4,685	3,708	3,849	3,952	4,777	4,857	4,942
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A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The purpose of the Naval Fleet/Force Technology Innovation Office (NFFTIO) is to ensure that the Fleet/Force (F/F) helps shape the Department of the Navy (DoN) investment in Science and Technology (S&T), develop teaming relationships to rapidly demonstrate and transition technology, support development of technology-based capability options for naval forces, and enable 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 on-the-spot Science Advisors to Joint, Navy, and Marine Corps operational and strategic planning commands worldwide. 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 Science & Technology (S&T) programs. The program also develops a cadre of civilian scientists and engineers who, upon completion of their NFFTIO Science Advisor tours, return to the Naval technical community with first hand knowledge of the F/F and warfighting issues. NFFTIO enables a continuous collaboration between the warfighters, the technical community, and strategic development commands.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2002	FY 2003	FY 2004	FY 2005
Naval Fleet/Force Technology Innovation Office	6,981	4,685	3,708	3,849

FY 2002 ACCOMPLISHMENTS:

- Facilitated and disseminated the CCIs provided by the F/F Commanders.
- Leveraged investments to provide a total of twenty-five Science Advisors to Joint, Navy, and Marine Corps operational and strategic planning commands worldwide.

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INNOVATION OFFICE

Project Number: R0834

Project Title: Laboratory Fleet
Support

- Assisted Science Advisors in obtaining working experience with high-level decision-makers and operators in an effort to develop technologies for transition to the F/F.
- Collaborated with the F/F to identify specific solutions to known operational capability needs and provided the means to develop and demonstrate prototype systems.
- Helped move S&T to the operational F/F rapidly, leveraged long-term S&T investments to meet operational F/F capability needs, and provided a method for the Research, Development, Testing and Evaluation (RDT&E) community to surge in response to real world crises. In FY 2002 this surge capability was formalized through the stand-up of the Naval Research Science & Technology Action Team (NR-STAT).
- Transitioned the technology insertions that were initiated in prior years to operational use and acquisition programs.

FY 2003 PLANS:

- Continue to leverage the investment to provide and support Science Advisors to Joint, Navy, and Marine Corps operational and strategic planning commands worldwide for the remainder of FY03.
- Continue to assist these Science Advisors to obtain experience working with high-level decision-makers and operators to develop technologies for transition to the F/F.
- Continue to collaborate with the F/F to identify specific solutions to known operational capability needs and provide the means to develop and demonstrate prototype systems.
- Continue to help move S&T to the operational F/F rapidly, leverage long-term S&T investments to meet operational F/F capability needs, and provide a method for the RDT&E community to surge in response to real world crises.
- Continue to transition the technology insertions that were initiated in prior years to operational use and acquisition programs.

FY 2004 PLANS:

- Continue to facilitate and disseminate the CCIs provided by the F/F commanders.
- Continue to leverage the investment to provide and support Science Advisors to Joint, Navy, and Marine Corps operational and strategic planning commands worldwide.
- Continue to assist Science Advisors to obtain experience working with high-level decision-makers and operators to develop technologies for transition to the F/F.
- Continue to collaborate with the F/F to identify specific solutions to known operational capability needs and provide the means to develop and demonstrate prototype systems.
- Continue to help move S&T to the operational F/F rapidly, leverage long-term S&T investments to meet operational F/F capability needs, and provide a method for the RDT&E community to surge in response to real world crises.

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PROGRAM ELEMENT TITLE: NAVAL FLEET/FORCE TECHNOLOGY
INNOVATION OFFICE

Project Number: R0834

Project Title: Laboratory Fleet
Support

- Continue to transition the technology insertions that were initiated in prior years to operational use and acquisition programs.

FY 2005 PLANS:

- Continue to leverage the investment to provide and support Science Advisors to Joint, Navy, and Marine Corps operational and strategic planning commands worldwide.
- Continue to assist Science Advisors to obtain experience working with high-level decision-makers and operators to develop technologies for transition to the F/F.
- Continue to collaborate with the F/F to identify specific solutions to known operational capability needs and provide the means to develop and demonstrate prototype systems.
- Continue to help move S&T to the operational F/F rapidly, leverage long-term S&T investments to meet operational F/F capability needs, and provide a method for the RDT&E community to surge in response to real world crises.
- Continue to transition the technology insertions that were initiated in prior years to operational use and acquisition programs.

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 Force Tech
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 & Expeditionary Warfare Applied Research
PE 0603114N Power Projection Advanced Tech
PE 0603123N Force Protection Advance Tech
PE 0603235N Common Picture Advanced Technology
PE 0603236N Warfighter Sustainment Advanced Tech

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PE 0603271N RF Systems Advanced Tech
PE 0603640M MC Advance Tech Demo
PE 0603727N Joint Experimentation
PE 0603729N Warfighter Protection Advanced Tech
PE 0603747N Undersea Warfare Advanced Technology
PE 0603758N Navy Warfighting Experiments & Demo
PE 0603782N Mine & Expeditionary Warfare Advanced Tech

D. ACQUISITION STRATEGY: Not applicable.

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CONGRESSIONAL PLUS-UPS:

R2371	FY 2002	FY 2003
LASH Hyperspectral	4,131	N/A

Funds provided developed the LASH hyperspectral sensor to improve Anti Submarine Warfare metrics by reducing false alarms due to environmental clutter. Improvements to detection algorithms were made through a systematic addressing of the most prevalent false alarm signatures. Testing continued during SEVENTH Fleet exercises, and COMPACFLT was consulted to update the capability metrics. A new hardware processor was designed and installed in LASH units. Overland testing was carried out to determine the value of the sensor for land targets and to discriminate against land clutter.

R2701	FY 2002	FY 2003
LASH Study	4,898	1,659

Funds provided were used to develop a demonstration program using a subcontracted, commercial airship. The airship is being deployed from Elizabeth City, NC, and St. Augustine, FL. The project is collecting 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. The airship was deployed for force protection during the Marine Corps Marathon in Washington, DC.

R9111	FY 2002	FY 2003
Littoral/Mine Countermeasures Rapid Response	4,131	6,637

Funds provided augmented the development of a hyperspectral based, airborne sensor for near shore minefield classification. Funds incorporated improved Navigation/Stabilization system capabilities into the Pod/Sensor system. Automatic detection algorithm development was continued and supported by flight data. The sensor participated in Exercise Millennium Challenge with the Navy's Very Shallow Water (VSW) Detachment to detect mines in the VSW and Surf Zone. This work continues to be guided by metrics determined in concert with OPNAV, Navy acquisition, and Marine Corps Systems Command. During the Spring of CY03, a feasibility test is planned to determine the new airborne sensor's effectiveness in detecting mines in the surf zone.

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BUDGET ACTIVITY: 7

PROGRAM ELEMENT: 0205658N

PROGRAM ELEMENT TITLE: NAVAL FLEET/FORCE TECHNOLOGY
INNOVATION OFFICE

Project Number: R0834

Project Title: Laboratory Fleet
Support

Cost Categories	Contract Method & Type	Performing Activity & Location		FY02 Cost	FY-02 Award Date	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
Product Development	Various	Various		6,981	TBD	4,685	TBD	3,708	TBD	3,849	TBD	Cont.	Cont.	Cont.
Subtotal Product Development				6,981		4,685		3,708		3,849		Cont.	Cont.	Cont.
Total Cost				6,981		4,685		3,708		3,849		Cont.	Cont.	Cont.

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EXHIBIT R4, Schedule Profile																								DATE: February 2003								
APPROPRIATION/BUDGET ACTIVITY												PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME								
BA7												0205658N Navy Science Assistance Program												R0834 Lab Flt Support								
Fiscal Year	2002				2003				2004				2005				2006				2007				2008				2009			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
																			</													

R-1 SHOPPING LIST - Item No. 184

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

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EXHIBIT R4, Schedule Profile																								DATE:				February 2003				
APPROPRIATION/BUDGET ACTIVITY									PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME											
BA7									0205658N Navy Science Assistance Program												R2371 Lash Hyperspectral											
Fiscal Year	2002				2003				2004				2005				2006				2007				2008				2009			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

R-1 SHOPPING LIST - Item No. 184

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

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R-4a Schedule Profile - Item No. 184

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Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 4 of 8)

EXHIBIT R4, Schedule Profile																								DATE:								
Not Applicable																								February 20003								
APPROPRIATION/BUDGET ACTIVITY									PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME											
BA7									0205658N Navy Science Assistance Program												R2701 LASH Study											
Fiscal Year	2002				2003				2004				2005				2006				2007				2008				2009			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
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* Not required for Budget Activities 1, 2, 3, and 6

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R-4a Schedule Profile - Item No. 18

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Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 6 of 8)

EXHIBIT R4, Schedule Profile																									DATE:				February 2003							
APPROPRIATION/BUDGET ACTIVITY										PROGRAM ELEMENT NUMBER AND NAME										PROJECT NUMBER AND NAME																
BA7										0205658N Navy Science Assistance Program										R9111 Littoral/MCM Rapid Response																
Fiscal Year	2002				2003				2004				2005				2006				2007				2008				2009							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				

R-1 SHOPPING LIST - Item No. 184

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

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R-4a Schedule Profile - Item No. 184

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Exhibit R-4a, Schedule Detail
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