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

BUDGET ACTIVITY: 2 PROGRAM ELEMENT: 0602805N
PROGRAM ELEMENT Title: Dual Use Science and Technology Program

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
Dual Use Science and Technology Program	9,003							

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The mission of the Dual Use Science and Technology (DUS&T) Program is to prototype and demonstrate new approaches for leveraging commercial research, technology, products, and processes for military benefit. These new approaches to working with industry, many of which were prototyped at DARPA, must become common throughout the Navy in order to take full advantage of the technological dynamism of the commercial sector. While acquisition reform has helped clear the path, and experience has shown leveraging can work; it has also shown that leveraging is still unfamiliar and not widely adopted. The challenge is to spread leveraging of the commercial sector into the Navy and make it a normal way of doing business throughout the entire acquisition spectrum. Specifically, DUS&T encourages the Navy to leverage commercial research and development to improve the performance, cost and/or readiness of military systems. Under this effort, the Navy solicits, evaluates, ranks, and nominates dual use S&T projects for Dual Use S&T funds. Each project is 50% cost shared with industry. 25% is cost shared with the Navy project funds and Dual Use S&T provides the remaining 25%. All projects are awarded using either Cooperative Agreements or Other Transactions. This is essentially learning by doing approach to Dual Use S&T in the Navy, with Dual Use S&T funds providing an incentive.

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

B. PROGRAM CHANGE SUMMARY:

	FY 2002	FY 2003	FY 2004	FY 2005
FY 2003 President’s Budget Submission:	12,489	0	0	0
SBIR	-2,927			
Execution Adjustment	-506			
Cong. Rescissions/Adjustments/Undist Reductions	-53			
FY 2004/2005 President’s Budget Submission	9,003	0	0	0

PROGRAM CHANGE SUMMARY EXPLANATION:

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

BUDGET ACTIVITY: 2 PROGRAM ELEMENT: 0602805N
PROGRAM ELEMENT Title: Dual Use Science and Technology Program

Schedule: Not applicable
Technical: Not applicable

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

BUDGET ACTIVITY: 2 PROGRAM ELEMENT: 0602805N
PROGRAM ELEMENT: Dual Use Science and Technology Program
Project Title: Dual Use Science and Technology Program

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
Dual Use Science and Technology Program	9,003							

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The mission of the Dual Use Science and Technology (DUS&T) project was to prototype and demonstrate new approaches for leveraging commercial research, technology, products, and processes for military benefit. These new approaches to working with industry, many of which were prototyped at DARPA, must become common throughout the Navy in order to take full advantage of the technological dynamism of the commercial sector. The challenge was to spread leveraging of the commercial sector into the Navy and make it a normal way of doing business throughout the entire acquisition spectrum. Specifically, DUS&T encouraged the Navy to leverage commercial research and development to improve the performance, cost and/or readiness of military systems. Under this effort, the Navy solicited, evaluated, ranked, and nominated dual use S&T projects for Dual Use S&T funds. Each project was 50% cost shared with industry. 25% was cost shared with the Navy project funds and Dual Use S&T provided the remaining 25%. All efforts were awarded using either Cooperative Agreements or Other Transactions. This was essentially a learning by doing approach to Dual Use S&T in the Navy, with Dual Use S&T funds providing an incentive.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 02	FY 03	FY 04	FY 05
Dual Use Science and Technology	6,504	-	-	-

FY 2002 ACCOMPLISHMENTS: This project investigated technological advances with possible applications toward solution of specific Naval problems, short of a major development effort.

Continued: The following efforts were supported:

- Advanced Dual Use Propulsion technologies development for manned and unmanned vehicles
- Turbine Blade technologies development
- 500kW Integrated Fuel Processor development
- Qualification of Ausform Finishing Process for the Manufacturing of Aerospace Gearing
- A System for Distributed Registration for Mobile Augmented Reality in Urban Environment
- Linear Wide-Band Vacuum Electronic Power Amplifier Multi-Frequency Design Codes for Linear High Power Amplifiers
- High Power Silicon Carbide Transmitter

- Dynamically Reconfigurable and Scalable Distributed Shipboard Automation System for Improved Sustainability and Survivability
- High Power Density Integrated Motor-Propulsors and Electric Machines
- Reconfigurable Control and Fault Identification System

Completed:

- Intelligent Inference Systems Bio-Bots

FY 2003 PLANS: Not Applicable

FY 2004 PLANS: Not Applicable

FY 2005 PLANS: Not Applicable

Congressional Plus-Ups:

	FY 02	FY 03
Energy and Environmental Technology	2,499	0

Tested to examine engineering associated with optimal performance and durability. Focused on making advances in durability performance and cost reduction and moving rapidly toward commercialization

C. OTHER PROGRAM FUNDING SUMMARY:

NAVY RELATED RDT&E:
Various S&T PE's supporting the 25% level dual use requirement
NON NAVY RELATED RDT&E:
0602805A Dual Use Science and Technology
0602802F Dual Use Science and Technology

NAVY RELATED RDT&E:

NON-NAVY RELATED RDT&E:

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

BUDGET ACTIVITY: 2 PROGRAM ELEMENT: 0602805N Project Title: Dual Use Science and Technology Program
PROGRAM ELEMENT: Dual Use Science and Technology Program

D. ACQUISITION STRATEGY: Not applicable