# 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 MGM	,	T STRATEGIC 1,419	1,260	1,292	1,322	1,351	1,382
1038 ACO	US&NON-AC	OUS ANAL SPT					
	869	2,418	2,233	2,159	2,279	2,299	2,420
Totals	2,247	3 <b>,</b> 837	3,493	3,451	3,601	3 <b>,</b> 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.

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

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#### 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 <b>,</b> 837	3,493

#### PROGRAM CHANGE SUMMARY EXPLANATION:

Technical: Not applicable.

Schedule: Not applicable.

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UNCLASSIFIED

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

DATE: Feb 2004

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

& Title

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.

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# FY 2005 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET Exhibit R-2a

DATE: Feb 2004

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

PROJECT NUMBER: 0128 PROJECT TITLE: MGMT/TECH SPT STRATEGIC

• 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.

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

DATE: Feb 2004

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

PROJECT NUMBER: 0128 PROJECT TITLE: MGMT/TECH SPT STRATEGIC

- 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

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

DATE: Feb 2004

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

1038 ACOUS&NON-ACOUS ANAL SPT

869\* 2,418 2,233 2,159 2,279 2,299 2,420

#### 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.

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<sup>\*</sup>Funds realigned from Z1038

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

#### 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 quidelines 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.

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