FY 2006/2007 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE: Feb 2005 Exhibit R-2

BUDGET ACTIVITY: 04

PROGRAM ELEMENT: 0603790N

PROGRAM ELEMENT TITLE: NATO RESEARCH AND DEVELOPMENT

COST: (Dollars in Thousands)

| Project Number & Title | FY 2004 Actual | FY 2005 Estimate | FY 2006 Estimate | FY 2007 Estimate | FY 2008 Estimate | FY 2009 Estimate | FY 2010 Estimate | FY 2011 Estimate |
|------------------------------|-------------------|------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Total PE | 9,333 | 10,053 | 10,335 | 10,563 | 10,949 | 11,101 | 11,359 | 11,620 |
| R2293 | NATO C 9,333 | 00PERATIVE F 10,053 | R & D 10,335 | 10,563 | 10,949 | 11,101 | 11,359 | 11,620 |

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: In accordance with Title 10 U.S. Code Section 2350a, this Program Element provides funding for research and development projects with approved Allies under international agreements. These funds can only be applied to work efforts in the U.S., and the Under Secretary of Defense, Acquisition and Technology (USD,A&T) must approve each international agreement. The program provides funds for multiple projects under separately approved international agreements as well as funds that support the establishment of such agreements. Each international agreement is summarized in a separate Summary Statement of Intent (SSOI) which also states why the project serves to increase the conventional defense capabilities of the U.S.

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FY 2006/2007 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE: Feb 2005 Exhibit R-2

BUDGET ACTIVITY: 04

PROGRAM ELEMENT: 0603790N

PROGRAM ELEMENT TITLE: NATO RESEARCH AND DEVELOPMENT

PROGRAM CHANGE SUMMARY:

| | FY 2004 | FY 2005 | FY 2006 | FY 2007 |
|---|-----------------|---------|---------|---------|
| FY 2005 President's Budget Submission | 11,338 | 10,151 | 10,345 | 10,533 |
| Cong Rescissions/Adjustments/Undist. Reductions | 0 | -96 | 0 | 0 |
| Execution Adjustments | 1,523 | 0 | 0 | 0 |
| Non-Pay Inflation Adjustments | 0 | 0 | 3 | 4 |
| Program Adjustments | 0 | -2 | -10 | -9 |
| Rate Adjustments | 0 | 0 | -3 | 35 |
| Technical Adjustments | -3 , 528 | 0 | 0 | 0 |
| FY 2006/2007 President's Budget Submission | 9,333 | 10,053 | 10,335 | 10,563 |

PROGRAM CHANGE SUMMARY EXPLANATION:

Technical: Not applicable.

Schedule: Not applicable.

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DATE: Feb 2005

FY 2006/2007 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET Exhibit R-2a

BUDGET ACTIVITY: 04

PROGRAM ELEMENT: 0603790N PROGRAM ELEMENT TITLE: NATO RESEARCH AND DEVELOPMENT

PROJECT NUMBER: R2293 PROJECT TITLE: NATO COOPERATIVE R & D

COST: (Dollars in Thousands)

Project FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 FY 2011 Number Actual Estimate Estimate Estimate Estimate Estimate Estimate

& Title

R2293 NATO COOPERATIVE R & D

9,333 10,053 10,335 10,563 10,949 11,101 11,359 11,620

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: In accordance with Title 10 U.S. Code Section 2350a, this project provides funding for research and development projects with approved Allies under international agreements. These funds can only be applied to work efforts in the U.S., and the Under Secretary of Defense, Acquisition and Technology (USD,A&T) must approve each international agreement. The program provides funds for multiple projects under separately approved international agreements as well as funds that support the establishment of such agreements. Each international agreement is summarized in a separate SSOI which also states why the project serves to increase the conventional defense capabilities of the U.S.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

| | FY 2004 | FY 2005 | FY 2006 | FY 2007 |
|----------------------|---------|---------|---------|---------|
| COOPERATIVE PROJECTS | 9,333 | 10,053 | 10,335 | 10,563 |

FY 2004 Accomplishments:

- Supported the Advance Radar Technology Integrated System Testbed cooperative project between the U.S. and the United Kingdom.
- Supported the Common Operational Picture Interoperability for Coalition Warfare cooperative project between the U.S. and France.
- Supported the Multilateral Memorandum of Understanding (MOU) for Interoperable Networks for Secure Communication.
- Supported the Mechanisms and Prediction of Surface Ship Radiated Flow-Noise cooperative project between the U.S. and the Netherlands.

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FY 2006/2007 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE: Feb 2005 Exhibit R-2a

BUDGET ACTIVITY: 04

PROGRAM ELEMENT: 0603790N PROGRAM ELEMENT TITLE: NATO RESEARCH AND DEVELOPMENT

PROJECT NUMBER: R2293 PROJECT TITLE: NATO COOPERATIVE R & D

• Supported the Submarine Sonar Advanced Processing Build - Acoustic Rapid Commercial Off The Shelf (COTS) Insertion (APB-ARCI) cooperative project between the U.S. and the United Kingdom.

- Supported the Unmanned Undersea Vehicles (UUV), Intelligence, Surveillance and Reconnaissance (ISR) and Anti-Submarine Warfare (ASW) cooperative program between the U.S. and the United Kingdom.
- · Supported the Software Radio cooperative project between the U.S. and Japan.
- Supported the Advanced Hull Materials and Structures Technology (AHM&ST) cooperative project between the U.S. and Japan.
- Supported the Multilateral cooperative project concerning Coalition Maritime Missile Defense Battle Management Command, Control, Communications, Computers and Intelligence (BMC4I) Architecture Definition.
- Supported the Dynamic Failure Prediction of Joints in Composite Sandwich Structures cooperative project between the U.S. and the Netherlands.
- Supported the Maritime Missile Defense Modeling and Simulation cooperative project between the U.S and the United Kingdom.
- Supported the Multilateral MOU for Standard Missile.
- Supported the U.S. and United Kingdom Naval Fires project under the Naval Combat Systems Interoperability Technology cooperative project.
- Supported the Enhanced Undersea Weapons Effectiveness and Ship Survivability through the Application of Validated Computer Codes cooperative project between the U.S. and Germany.

FY 2005 Plans:

- Continue to support the Advance Radar Technology Integrated System Testbed cooperative project between the U.S. and the United Kingdom.
- · Continue to support the Multilateral MOU for Interoperable Networks for Secure Communication.
- Continue to support the Submarine Sonar APB-ARCI cooperative project between the U.S. and the United Kingdom.
- · Continue to support the UUV, ISR and ASW cooperative program between the U.S. and the United Kingdom.
- Continue to support the Software Radio cooperative project between the U.S. and Japan.
- Continue to support the AHM&ST cooperative project between the U.S. and Japan.
- Continue to support the Multilateral cooperative project concerning Coalition Maritime Missile Defense BMC4I Architecture Definition.
- Continue to support the Maritime Missile Defense Modeling and Simulation cooperative project between the U.S and the United Kingdom.
- Continue to support the Multilateral MOU for Standard Missile.

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FY 2006/2007 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE: Feb 2005
Exhibit R-2a

BUDGET ACTIVITY: 04

PROGRAM ELEMENT: 0603790N PROGRAM ELEMENT TITLE: NATO RESEARCH AND DEVELOPMENT

PROJECT NUMBER: R2293 PROJECT TITLE: NATO COOPERATIVE R & D

• Continue to support the Enhanced Undersea Weapons Effectiveness and Ship Survivability through the Application of Validated Computer Codes cooperative project between the U.S. and Germany.

- Support the Six (6) Degrees of Freedom Ship Roll cooperative project between the U.S. and Italy.
- Support the cooperative project concerning Australia United States Phased Array Radar (AUSPAR) between the U.S. and Australia.
- Support the cooperative project between the U.S. and Singapore regarding Multi-Statics Sonar.
- Support the cooperative project between the U.S. and U.K. regarding Next Generation Countermeasures.
- Support the Interoperability Study between the U.S. and the U.K.
- Continue to provide support for the identification and development of MOUs with one or more approved major Allies for the purpose of conducting cooperative research and development projects on defense equipment and munitions. These international agreements (MOUs) are approved by USD, A&T and are submitted in separate SSOIs.

FY 2006 Plans:

- Continue to support the Advance Radar Technology Integrated System Testbed cooperative project between the U.S. and the United Kingdom.
- Continue to support the Multilateral MOU for Interoperable Networks for Secure Communication.
- Continue to support the Submarine Sonar APB-ARCI cooperative project between the U.S. and the United Kingdom.
- · Continue to support the UUV, ISR and ASW cooperative program between the U.S. and the United Kingdom.
- Continue to support the AHM&ST cooperative project between the U.S. and Japan.
- Continue to support the Multilateral cooperative project concerning Coalition Maritime Missile Defense BMC4I Architecture Definition.
- Continue to support the Enhanced Undersea Weapons Effectiveness and Ship Survivability through the Application of Validated Computer Codes cooperative project between the U.S. and Germany.
- Support the cooperative project concerning Australia United States Phased Array Radar (AUSPAR) between the U.S. and Australia.
- · Support the cooperative project between the U.S. and Singapore regarding Multi-Statics Sonar.
- Support the cooperative project between the U.S. and U.K. regarding Next Generation Countermeasures.
- Support the cooperative project between the U.S. and U.K. regarding Fiber Laser Sensors.
- Support the cooperative project between the U.S. and Japan regarding S-Band Radar.
- Support the cooperative project between the U.S. and Japan regarding Open Architecture.
- Support the cooperative project between the U.S. and Australia regarding the Australia/U.S. Distributed Engineering Plan (AUSDEP).

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FY 2006/2007 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET DATE: Feb 2005 Exhibit R-2a

BUDGET ACTIVITY: 04

PROGRAM ELEMENT: 0603790N PROGRAM ELEMENT TITLE: NATO RESEARCH AND DEVELOPMENT

PROJECT NUMBER: R2293 PROJECT TITLE: NATO COOPERATIVE R & D

• Continue to provide support for the identification and development of MOUs with one or more approved major Allies for the purpose of conducting cooperative research and development projects on defense equipment and munitions. These international agreements (MOUs) are approved by USD, A&T and are summarized in separate SSOIs.

FY 2007 Plans:

• Continue to provide support for the identification and development of MOUs with one or more approved major Allies for the purpose of conducting cooperative research and development projects on defense equipment and munitions. These international agreements (MOUs) are approved by USD, A&T and are summarized in separate SSOIs.

C. OTHER PROGRAM FUNDING SUMMARY:

NAVY RELATED RDT&E:

PE 0605853N (Management, Technical and International Support)

NON-NAVY RELATED RDT&E:

PE 0605130D (Foreign Comparative Testing)

D. ACQUISITION STRATEGY:

Not applicable.

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FY 2005 RDT&E,N PROGRAM ELEMENT/PROJECT COST BREAKDOWN DATE: Feb 2005 Exhibit R-3

BA: 04 PROGRAM ELEMENT: 0603790N

PROJECT ELEMENT TITLE: NATO Research and Development

Project Title: NATO

Project Number: R2293

Cooperative R&D

A. PROJECT COST BREAKDOWN: (\$ in thousands)

| Project Cost Categories | <u>FY 2004</u> | FY 2005 | FY 2006 | <u>FY 2007</u> |
|---|----------------|---------|---------|----------------|
| a. Cooperative Research and Development | 9,333 | 10,053 | 10,335 | 10,563 |

B. BUDGET ACQUISITION HISTORY AND PLANNING INFORMATION:

PERFORMING ORGANIZATIONS

| Contractor/ Government Performing <u>Activity</u> Product Develo | Contract Method/ Fund Type <u>Vehicle</u> opment | Award/ Oblig <u>Date</u> | Perform Activity <u>EAC</u> | Project Office <u>EAC</u> | FY 2004 <u>Budqet</u> | FY 2005 <u>Budget</u> | FY 2006 <u>Budget</u> | FY 2007 <u>Budget</u> | To <u>Complete</u> | Total <u>Program</u> |
|--|--|--------------------------------|-----------------------------------|---------------------------------|-------------------------------------|-------------------------------------|---------------------------------|--------------------------|-------------------------|-------------------------|
| NAVSEA NSWC NUWC SPAWAR PEO(LMW) PEO(IWS) | PD WX WX PD PD PD | | | | 2,162 850 0 1,600 2,500 | 2,700 3,250 0 250 2,998 | 2,070 1,600 0 0 500 | | CONT. CONT. CONT. | CONT. CONT. CONT. |
| Miscellaneous | | | | | 2,221 | 855 | 6,165 | 10,563 | CONT. | CONT. |

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FY 2005 RDT&E,N PROGRAM ELEMENT/PROJECT COST BREAKDOWN DATE: Feb 2005 Exhibit R-3

BA: 04 PROGRAM ELEMENT: 0603790N

PROJECT ELEMENT TITLE: NATO Research and Development

Project Title: NATO

Project Number: R2293

Cooperative R&D

Contractor/ Contract

Government Method/ Award/ Perform Project

Performing Fund Type Obliq Activity Office FY 2004 FY 2005 FY 2006 FY 2007 To Total <u>Activity</u> <u>Vehicle</u> <u>Date</u> EAC EAC Budget <u>Budget</u> <u>Budget</u> Budget Complete Program Support and Management

Contractor/ Contract

Government Method/ Award/ Perform Project

Activity Office Performing Fund Type Obliq FY 2004 FY 2005 FY 2006 FY 2007 Total To Budget Activity Vehicle Budget Budget Complete Program Date EAC EAC Budget Test and Evaluation

GOVERNMENT FURNISHED PROPERTY: Not applicable.

| | FY 2004 <u>Budget</u> | FY 2005 <u>Budget</u> | FY 2006 <u>Budget</u> | FY 2007 <u>Budget</u> | To <u>Complete</u> | Total <u>Program</u> |
|---------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------------------|-------------------------|
| Subtotal Product Development | 9,333 | 10,053 | 10,335 | 10,563 | CONT. | CONT. |
| Subtotal Support and Management | 0 | 0 | 0 | 0 | CONT. | CONT. |
| Subtotal Test and Evaluation | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Project | 9,333 | 10,053 | 10,335 | 10,563 | CONT. | CONT. |

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