BUDGET ACTIVITY: 7  PROGRAM ELEMENT: 0305927N
PROGRAM ELEMENT TITLE: Navy Space Surveillance

(U) COST: (Dollars in thousands)

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<tbody>
<tr>
<td>X0125 Naval Space Surveillance</td>
<td>1,411</td>
<td>3,208</td>
<td>9,548</td>
<td>2,285</td>
<td>2,278</td>
<td>752</td>
<td>775</td>
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<tr>
<td>X9119 SPAWAR Covert Commun/Info Transfer</td>
<td>-</td>
<td>1,685</td>
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<td>TOTAL</td>
<td>1,411</td>
<td>4,893</td>
<td>9,548</td>
<td>2,285</td>
<td>2,278</td>
<td>752</td>
<td>775</td>
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A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Naval Space Surveillance Fence is an integral component of the U. S. Space Command Space Surveillance Network. This system provides continuous surveillance and unalerted detection of space objects crossing the continental United States. The Fence is also the only space surveillance system that provide satellite vulnerability and space control data to the fleet. It is a multistatic continuous wave radar fence consisting of three transmitter sites, six receiver sites, and a computation/communication center. The Alternate Space Control role assigned by U.S. Commander in Chief Space (USCINCSPACE) requires that the Naval Space Command Mission System maintain functional equivalence with the USCINCSPACE Space Control Center and receive, process, and distribute data from 26 surveillance sites. The increase in funding FY01 and out supports this role and the research, design, and development of high-powered transmitters and other system component parts for the next generation Fence system. (X0125)

Congressional Plus-up for SPAWAR Covert Communication and Information Transfer (X9119)

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it encompasses engineering and manufacturing development for upgrading existing operational systems.

(U) PROGRAM CHANGE SUMMARY FOR TOTAL PE:
BUDGET ACTIVITY: 7  PROGRAM ELEMENT: 0305927N
PROGRAM ELEMENT TITLE: Navy Space Surveillance

PROJECT X0125
FY 2001: Section 8086: 0.7% Pro-Rata Reduction (-$10K), Government-Wide Rescission (-$3K), Navy Miscellaneous Adjustments (-$14K). FY 2002: Congressional reduction for excessive program growth (-$1,000K), Section 8123: Management Reform Initiative (-$29K).

PROJECT X9119
FY2002: Congressional Plus-up for SPAWAR Covert Communication and Information Transfer (+$1,700K). Section 8123: Management Reform Initiative (-$15K).

(U) CHANGE SUMMARY EXPLANATION:

(U) Schedule: Not applicable.

(U) Technical: Not applicable.
A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports the Naval Space Surveillance Fence, an integral component of the U.S. Space Command Space Surveillance Network. This system provides continuous surveillance and unalerted detection of space objects crossing the Continental United States. The fence is also the only space surveillance system which provides satellite vulnerability and space control data to the fleet. It is a multistatic continuous wave radar fence consisting of three transmitter sites, six receiver sites, and a computation/communication center. The Alternate Space Control role assigned by U.S. Commander in Chief Space (USCINCSpace), requires that the Naval Space Command Mission System maintain functional equivalence with the USCINCSpace Space Control Center and receive, process, and distribute data from 26 surveillance sites.

B. (U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2001 ACCOMPLISHMENTS:
   • (U) ($87) Studied integrated communications for remote operations.
   • (U) ($1,324) Evaluated requirements for S-band operations to draft performance specification. Performed studies to reduce technical risks of the S-Band sensor system development and numerically intensive processing.

2. (U) FY 2002 PLAN:
   • (U) ($500) Conduct Environmental, Safety, and Hazmat studies in support of frequency selection and allocation.
   • (U) ($2,708) Develop preliminary architecture and design for RF sensors, communications, and processing.

3. (U) FY 2003 PLAN:
   • (U) ($3,655) Complete development of detailed architecture and design for RF sensors, communications, and processing.
   (U) ($5,893) Develop an RF sensor prototype to provide a system demonstration in FY2004 prior to Critical Design Review (CDR)
BUDGET ACTIVITY: 7  PROGRAM ELEMENT: 0305927N  PROGRAM ELEMENT TITLE: Naval Space Surveillance  PROJECT: X0125  PROJECT TITLE: Naval Space Surveillance  

(U) Related RDT&E: Not Applicable  

C. (U) OTHER PROGRAM FUNDING SUMMARY: (Dollars in thousands)

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D. (U) SCHEDULE PROFILE: Not applicable.  

(U) SCHEDULE PROFILE: Not applicable.  

Program Milestones  MS B Decision
UNCLASSIFIED

Exhibit R-2, FY 2003 PB RDT&E,N PROJECT JUSTIFICATION

DATE: February 2002

BUDGET ACTIVITY: 7
PROGRAM ELEMENT: 0305927N
PROGRAM ELEMENT TITLE: Naval Space Surveillance
PROJECT: X0125
PROJECT TITLE: Naval Space Surveillance

Engineering Milestones
Phase II - Sensor Risk Reduction & System Design
Phase III - System Preliminary Design
Phase III - System Detail Design

Production and Installation

T&E Milestones

Contract Milestones
Exercise Phase II Option
Award Phase III Contract
Exercise Phase III Option

Note: In FY04 there will be a formal Milestone C Decision prior to production.
## A. (U) PROJECT COST BREAKDOWN: ($ in thousands)

<table>
<thead>
<tr>
<th>Project Cost Categories</th>
<th>FY 2001</th>
<th>FY 2002</th>
<th>FY 2003</th>
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</thead>
<tbody>
<tr>
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<td>b. Product Development</td>
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<td>9,548</td>
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UNCLASSIFIED

Exhibit R-2a, FY 2003 PB RDT&E,N PROJECT JUSTIFICATION

DATE: February 2002

BUDGET ACTIVITY: 7  PROGRAM ELEMENT: 0305927N  PROJECT: X9119
PROGRAM ELEMENT TITLE: Naval Space Surveillance  PROJECT TITLE: SPAWAR Covert Comm & Info Transfer

(U) COST: (Dollars in Thousands)

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<tbody>
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<td>X9119 SPAWAR Covert Communication and Information Transfer</td>
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</table>

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:
SPAWAR Covert Communication and Information Transfer

B. (U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2001 ACCOMPLISHMENTS: N/A.

2. (U) FY 2002 PLAN:
   • (U) ($1,685) SPAWAR Covert Communication and Information Transfer.

3. (U) FY 2003 PLAN: N/A.

(U) RELATED RDT&E: Not applicable.
**UNCLASSIFIED**

Exhibit R-3, FY 2003 PB RDT&E,N PROGRAM ELEMENT/PROJECT COST BREAKDOWN  

BUDGET ACTIVITY: 7  
PROGRAM ELEMENT: 0305927N  
PROGRAM ELEMENT TITLE: Naval Space Surveillance  
PROJECT: X9119  
PROJECT TITLE: SPAWAR Covert Comm & Info Transfer

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

<table>
<thead>
<tr>
<th>Project Cost Categories</th>
<th>FY 2001</th>
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