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|---|---|
| APPROPRIATION/BUDGET ACTIVITY : RDT&E,N/7 | R-1 ITEM NOMENCLATURE<br>INFORMATION WARFARE 0204575N |
|---|---|

|  |       |       |       |       |       |        |        |       |                  |            |
|--|-------|-------|-------|-------|-------|--------|--------|-------|------------------|------------|
| Exhibit R-2, RDT&E Budget Item Justification               |       |       |       |       |       |        |        |       | Date: FEB 2002   |            |
| COST (\$ in Millions)                                      | FY 00 | FY 01 | FY 02 | FY 03 | FY 04 | FY 05  | FY 06  | FY 07 | Cost to Complete | Total Cost |
| Z2263 Information Warfare                                  | 3.246 | 4.285 | 4.594 | 6.155 | 6.674 | 7.166  | 8.724  | 7.587 | CONT.            | CONT.      |
| Defense Emergency Response Fund (DERF)/Cost of War (COW) * |       |       |       | 9.000 | 9.000 | 11.000 | 11.000 | 9.000 |                  |            |
| Quantity of RDT&E Articles                                 | VAR   | VAR   | TBD   | TBD   | TBD   | TBD    | TBD    | TBD   | CONT.            | CONT.      |

A. Mission Description and Budget Item Justification :

The Naval Information Warfare Activity (NIWA) serves as the Program Manager for the OFFENSIVE IW program. As such NIWA is tasked as the Navy's principal technical agent to research, assess, develop and prototype Information Warfare (IW) capabilities. The key focus is to provide tactical commanders with both an IW Mission Planning, Analysis, and Command and Control Targeting System (IMPACTS) tool and state-of-the-art Electronic Attack hardware and software. FY02 will continue design of the second generation USQ-146 (RUBICON II). This project will continue with upgrades to the USQ-146 through the out-years. Ongoing software efforts are to identify and develop integrated IW Planning and Execution tools.

\*DERF/COW funds provided for RUBICON. Funds will be used to integrate Information Operations Electronic Support (ES) systems with Electronic Attack (EA) weapons system/capabilities in accordance with the Shipboard Info Warfare/Cryptologic systems ORD # 537-06-99. Efforts support war on terrorism by providing capability to deny, degrade or disrupt terrorist command, control and communications. Integrated IO system can disrupt radio-controlled weapons. Additional funding provided in support of Classified Special Access Programs (not identified). Details available under separate cover.

B. Program Change Summary: Miscellaneous funding adjustments are detailed below.

| COST (\$ in Millions)    | FY 00 | FY 01  | FY02   | FY 03 |
|--------------------------|-------|--------|--------|-------|
| PB02                     | 3.246 | 4.414  | 4.635  |       |
| Misc Program Adjustments | 0.000 | -0.129 | -0.041 |       |
| President's Budget 03    | 3.246 | 4.285  | 4.594  | 6.155 |

|                       |          |       |       |       |                           |       |       |       |                  |            |
|-----------------------|----------|-------|-------|-------|---------------------------|-------|-------|-------|------------------|------------|
| RDT&E,N BA-7          | 0204575N |       |       |       | INFORMATION WARFARE Z2263 |       |       |       |                  |            |
| Cost (\$ in Millions) | FY 00    | FY 01 | FY 02 | FY 03 | FY 04                     | FY 05 | FY 06 | FY 07 | Cost to Complete | Total Cost |
| Project Cost          | 3.246    | 4.285 | 4.594 | 6.155 | 6.674                     | 7.166 | 8.724 | 7.587 | CONT.            | CONT.      |
| RDT&E Articles Qty    | VAR      | VAR   | VAR   | TBD   | TBD                       | TBD   | TBD   | TBD   | CONT.            | CONT.      |

**A. Mission Description and Budget Item Justification**

FY 2001 Accomplishments  
 (2.582) IMPACTS Updates  
 (1.703) Electronic Attack  
 FY 2002 Accomplishments & Plan  
 (3.094) IMPACTS Updates  
 (1.500) Electronic Attack  
 FY 2003 Plan  
 (2.756) IMPACTS Updates  
 (1.899) Electronic Attack  
 (1.500) Computer Network Defense

**B. Other Program Funding Summary**

|               | <u>FY00</u> | <u>FY01</u> | <u>FY02</u> | <u>FY03</u> | <u>FY04</u> | <u>FY05</u> | <u>FY06</u> | <u>FY07</u> | <u>Complete</u> | <u>ToTotal<br/>Cost</u> |
|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------|-------------------------|
| OMN Line 4B7N | 1.789       | 1.985       | 2.313       | 2.432       | 2.518       | 2.713       | 2.776       | 2.847       | CONT.           | CONT.                   |
| OPN 234000/6  | 4.003       | 3.866       | 2.882       | 5.158       | 4.661       | 5.578       | 6.349       | 5.462       | CONT.           | CONT.                   |

C. Acquisition Strategy: This is a non-ACAT program.

**D. Schedule Profile:**

IMPACTS: Convert IMPACTS/GCCS-M software (RFMP and CM+) operating system format and support laboratory and shipboard tests of converted software. Continue transition to PC based software in addition to current, UNIX based Graphical User Interface (GUI). Institute a Federated Object Model (FOM) into all IW mission planning support software. Initiate inclusion of EMPIRE, RFMP, C2WC, CM+ into Mission Planning Manager. The software planned for delivery in April 2001 has been delayed. The SPAWAR GCCS-M 4.X software test cycle has slipped until January 2002 and June 2002.

Perception Management: Continued modification of the NIWA/NRL software suite to provide visual evaluation of the impact of tactical deception plans on an enemy's ability to detect ship movements using RADAR.

Electronic Attack: Initiated design of second generation RUBICON II. Completed procurement of four AN/USQ-146 units and spares. The program has also provided carry-on Electronic Support Measures (ESM) systems for deploying battle groups, supported USMC Mobile Electronic Warfare System (MEWS) evaluation and adoption of AN/USQ-146

and (Joint Special Operations Command) JSOC evaluation of modified AN/USQ-146 in a helicopter.

Operationalizing Computer Network Defense: Provide manpower, operational command and control, operating funds and state of the art computer hardware and software to rapidly integrate Computer Network Defense (CND) concepts and capabilities into Navy fleet and shore operations.

Navy Information Operations (IO), Architecture, Training and Data Management: Provides focus in 3 primary functional areas of IO: Electronic Warfare (EW); Computer Network Defense (CND); and Perception Management (PM). The timely development of the Navy IO architecture is key to the alignment of Navy IO with Fleet Operational requirements and the Navy Strategic Planning Guidance (NSPG).

| Cost (\$ in Millions) | FY01  | FY02  | FY03  | FY04  | FY05  | FY06  | FY07  |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|
| IMPACTS               | 2.582 | 3.094 | 2.756 | 2.789 | 2.781 | 3.189 | 2.880 |
| Perception Management | 0.000 | 0.000 | 0.000 | 0.100 | 0.100 | 0.100 | 0.100 |
| Electronic Attack     | 1.703 | 1.500 | 1.899 | 1.600 | 2.100 | 3.250 | 2.422 |
| Computer Net Defense  | 0.000 | 0.000 | 1.500 | 1.500 | 1.500 | 1.500 | 1.500 |
| Navy IO               | 0.000 | 0.000 | 0.000 | 0.685 | 0.685 | 0.685 | 0.685 |

| Exhibit R-3 Cost Analysis                                       |                              |                                      |                      |                           |                       |              |                       |              | Date: FEB 2002            |                     |               |                                |
|---|------------------------------|--------------------------------------|----------------------|---------------------------|-----------------------|--------------|-----------------------|--------------|---------------------------|---------------------|---------------|--------------------------------|
| RDT&E,N/7   |                              |                                      |                      | Program Element: 0204575N |                       |              |                       |              | INFORMATION WARFARE/Z2263 |                     |               |                                |
| Cost Categories<br>(Tailor to WBS, or System/Item Requirements) | Contract<br>Method<br>& Type | Performing<br>Activity &<br>Location | Total<br>PYs<br>Cost | FY01<br>Cost              | FY01<br>Award<br>Date | FY02<br>Cost | FY02<br>Award<br>Date | FY03<br>Cost | FY03<br>Award<br>Date     | Cost To<br>Complete | Total<br>Cost | Target<br>Value of<br>Contract |
| Primary Hardware Development                                    | Var                          | Var                                  | 1.500                | 0.743                     | Var                   | 1.115        | Var                   | 1.000        | Var                       | Cont.               | Cont.         |                                |
|   |                              |                                      |                      |                           |                       |              |                       |              |                           |                     |               |                                |
|   |                              |                                      |                      |                           |                       |              |                       |              |                           |                     |               |                                |
|   |                              |                                      |                      |                           |                       |              |                       |              |                           |                     |               |                                |
| Subtotal Product Development                                    |                              |                                      | 1.500                | 0.743                     | Var                   | 1.115        | Var                   | 1.000        | Var                       | Cont.               | Cont.         |                                |
| Cost of War* RUBICON  | FFP                          |                                      |                      |                           |                       |              |                       | 9.000        | 12/02                     | 40.000              | 49.000        | 49.000                         |
|   |                              |                                      |                      |                           |                       |              |                       |              |                           |                     |               |                                |
| Development Support   | Var                          | Var                                  | 0.500                | 1.414                     | Var                   | 1.079        | Var                   | 1.956        | Var                       | Cont.               | Cont.         |                                |
| Software Development  | Var                          | Var                                  | 0.487                | 1.069                     | 1Q01                  | 1.965        | 1Q02                  | 2.699        | 1Q03                      | Cont.               | Cont.         |                                |
|   |                              |                                      |                      |                           |                       |              |                       |              |                           |                     |               |                                |
|   |                              |                                      |                      |                           |                       |              |                       |              |                           |                     |               |                                |
|   |                              |                                      |                      |                           |                       |              |                       |              |                           |                     |               |                                |
| Subtotal Support  |                              |                                      | .987                 | 2.483                     | Var                   | 3.044        | Var                   | 4.655        | Var                       | Cont.               | Cont.         |                                |
| Remarks   |                              |                                      |                      |                           |                       |              |                       |              |                           |                     |               |                                |

**Exhibit R-3, Project Cost Analysis**  
(Exhibit R-3, page 1 of 2)

| Exhibit R-3 Cost Analysis                                       |                              |                                      |                      |                           |                       |              |                       |              |                       | Date: FEB 2002            |               |                                |
|---|------------------------------|--------------------------------------|----------------------|---------------------------|-----------------------|--------------|-----------------------|--------------|-----------------------|---------------------------|---------------|--------------------------------|
| RDT&E,N/7   |                              |                                      |                      | Program Element: 0204575N |                       |              |                       |              |                       | INFORMATION WARFARE/Z2263 |               |                                |
| Cost Categories<br>(Tailor to WBS, or System/Item Requirements) | Contract<br>Method<br>& Type | Performing<br>Activity &<br>Location | Total<br>PYs<br>Cost | FY01<br>Cost              | FY01<br>Award<br>Date | FY02<br>Cost | FY02<br>Award<br>Date | FY03<br>Cost | FY03<br>Award<br>Date | Cost To<br>Complete       | Total<br>Cost | Target<br>Value of<br>Contract |
| Developmental Test & Evaluation                                 | Var                          | Var                                  | 0.300                | 0.600                     | Var                   | 0            |                       | 0            |                       | 0                         |               |                                |
|   |                              |                                      |                      |                           |                       |              |                       |              |                       |                           |               |                                |
|   |                              |                                      |                      |                           |                       |              |                       |              |                       |                           |               |                                |
| Subtotal T&E  |                              |                                      | 0.300                | 0.600                     | Var                   |              |                       |              |                       |                           |               |                                |
| Remarks   |                              |                                      |                      |                           |                       |              |                       |              |                       |                           |               |                                |
| AIS Support   | Var                          | Var                                  | 0                    | 0.059                     | Var                   | 0            | 0                     | 0            | 0                     | Cont.                     | Cont.         |                                |
| Government Engineering Support                                  | Var                          | Var                                  | 0.200                | 0.200                     |                       | .185         | Var                   | 0.250        | Var                   | Cont.                     | Cont.         |                                |
| Program Management Support                                      | Var                          | Var                                  | 0.259                | 0.200                     |                       | .250         | Var                   | 0.250        | Var                   | Cont.                     | Cont.         |                                |
|   |                              |                                      |                      |                           |                       |              |                       |              |                       |                           |               |                                |
|   |                              |                                      |                      |                           |                       |              |                       |              |                       |                           |               |                                |
| Subtotal Management   |                              |                                      | 0.459                | 0.459                     | Var                   | 0.435        | Var                   | 0.500        | Var                   | Cont.                     | Cont.         |                                |
| Remarks   |                              |                                      |                      |                           |                       |              |                       |              |                       |                           |               |                                |
| Total Cost  |                              |                                      | 3.246                | 4.285                     | Var                   | 4.594        | Var                   | 6.155        | Var                   | Cont.                     | Cont.         |                                |
| Remarks   |                              |                                      |                      |                           |                       |              |                       |              |                       |                           |               |                                |

(Exhibit R-3, page 2 of 2)