

CLASSIFICATION:

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|---|---------|---------|---------|---------|--|---------|-------------------------------|---------|
| EXHIBIT R-2, RDT&E Budget Item Justification | | | | | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5 | | | | | R-1 ITEM NOMENCLATURE 0604270N Electronic Warfare Development | | | |
| COST (\$ in Millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| Total PE Cost | 119.237 | 79.543 | 256.701 | 390.964 | 431.955 | 337.740 | 263.017 | 38.827 |
| E0556 EW Counter Response | 80.409 | 52.615 | 36.644 | 38.452 | 35.904 | 36.514 | 37.181 | 37.643 |
| E2175/E2635 Tactical Air Electronic Warfare | 28.136 | 13.063 | 13.639 | | | | | |
| E3063 AEA Follow On | 5.000 | 9.780 | 204.822 | 350.768 | 394.280 | 299.110 | 224.673 | |
| R2260 Specific Emitter Identification | 0.965 | 0.996 | 0.764 | 0.827 | 0.826 | 0.975 | | |
| X2422 LOCO GPSI | 3.756 | 2.054 | | | | | | |
| Z1742 EW Technical Development and Testing | 0.971 | 1.035 | 0.832 | 0.917 | 0.945 | 1.141 | 1.163 | 1.184 |
| | | | | | | | | |
| | | | | | | | | |
| A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: (U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This element includes development of electronic warfare systems for the United States Navy (USN), United States Marine Corps (USMC), and United States Army (USA) tactical aircraft, USMC helicopters, surface combatants, data link vulnerability assessments, precision targeting, USMC communications and non-communications jammers, and development and testing of electronic warfare devices for emergency contingencies. | | | | | | | | |

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 Exhibit R-2, RDTEN Budget Item Justification
 (Exhibit R-2, page 1 of 52)

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| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | | | PROJECT NUMBER AND NAME E0556 EW Counter Response | | | |
| COST (\$ in Millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| Project Cost | 85.409 | 52.615 | 36.644 | 38.452 | 35.904 | 36.514 | 37.181 | 37.643 |
| RDT&E Articles Qty | 10 | | | | | | | |

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The EA-6B weapon system is designed for jamming and destruction of enemy landbased, shipborne and airborne command, control and communications (C3), and radars associated with early warning, target acquisition surveillance, anti-aircraft artillery, air-to-surface, surface-to-surface, and surface-to-air missiles. In this capacity, it will support carrier based tactical aircraft, battle group operations, and joint forces, in dense radar controlled environments. The efforts under this program element (PE) provide for the electronic countermeasures response to these advanced threat weapon systems and C3 networks which are expanding in density and technical complexity. This PE funds the continuing development and integration of all EW systems for the EA-6B electronic support aircraft. The test articles being funded are; two EA-6B aircraft modified to support the Improved Capability (ICAP) III program and eight Low Band Transmitter (LBT) Engineering Development Models (EDMs). The two EA-6B aircraft will be used as test articles during government test and evaluation (TECHEVAL/OPEVAL). The LBT EDMs are broken out as three LBT Antenna Set EDMs and five Amplifier Set EDMs. All Amplifier Set EDM and Antenna Set EDMs will be delivered in FY 2002. The ALQ-99 LBT Antenna Group will provide an expanded war fighting capability against the early warning/acquisition radars and communication links of modern integrated air defense systems. The LBT entered E&MD in September 1996, followed by Low Rate Initial Production (LRIP) anticipated in 1st quarter FY 2004 and Full Rate Production (FRP) approval (Milestone III) anticipated in 1st quarter FY 2005. This effort includes the conversion of the Tactical EA-6B Mission System (TEAMS) software to the Joint Mission Planning System (JMPS), including development of the EA-6B Unique Planning Module.

The Airborne Electronic Attack (AEA) aircraft AOA has been completed for the replacement to the EA-6B. Transition to this weapon system, known as the EA-18G will commence in 2006 and will coincide with the planned retirement of the EA-6B.

A requirement exists to allow the EA-6B to participate in Network Centric Warfare. A method of implementing this requirement is to include the EA-6B on the Link-16 Network. Link-16 will allow the EA-6B to receive and send critical situational awareness and tactical data with other aircraft and the battle group.

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|---|--|--|-------------------------------|--------|----------|-------|-------|-------|-------|--------------------------------------|--------|--------|--------|--------|-------------------------|---|--|--|--|-----------------|-------|-------|-------|-------|--------------------------------------|--|-------|-------|--------|-------------------------|--|--|--|--|
| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | PROJECT NUMBER AND NAME E0556 EW Counter Response | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B. Accomplishments/Planned Program | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 20px;"><tr><td style="width: 30%;">ICAP III</td><td style="width: 15%;">FY 02</td><td style="width: 15%;">FY 03</td><td style="width: 15%;">FY 04</td><td style="width: 15%;">FY 05</td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td>58.032</td><td>35.349</td><td>13.011</td><td>12.935</td></tr><tr><td>RDT&E Articles Quantity</td><td>2</td><td></td><td></td><td></td></tr></table> <div style="border: 1px solid black; padding: 5px; margin-bottom: 20px;">- (U) Continue development of ICAP III system. Efforts will concentrate on completion of Operational Testing (OPEVAL). Continue the baseline ICAP III software update. Continue testing of correction of defect modifications for the ICAP III program. Full rate production contract will be put in place in FY04.</div> <table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 30%;">ICAP III UPDATE</td><td style="width: 15%;">FY 02</td><td style="width: 15%;">FY 03</td><td style="width: 15%;">FY 04</td><td style="width: 15%;">FY 05</td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td></td><td>3.455</td><td>9.790</td><td>10.791</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></table> <div style="border: 1px solid black; padding: 5px;">- (U) Continue updating the baseline ICAP III system to include integration of avionics items which include the second Embedded Global Positioning System/Inertial Navigation System (EGI), HARM VI, Low Band Transmitter, Band 7/8, Night Vision Devices (NVDs) and data fusion with national assets. In conjunction with this commence developing dual purpose (ICAP III and AEA) enabling technologies that will reduce risk to, and support transitions to a follow-on system as addressed in the Analysis of Alternatives (AOA) for the Airborne Electronic Attack (AEA) aircraft.</div> | | | | | ICAP III | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 58.032 | 35.349 | 13.011 | 12.935 | RDT&E Articles Quantity | 2 | | | | ICAP III UPDATE | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | | 3.455 | 9.790 | 10.791 | RDT&E Articles Quantity | | | | |
| ICAP III | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 58.032 | 35.349 | 13.011 | 12.935 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ICAP III UPDATE | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | | 3.455 | 9.790 | 10.791 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | PROJECT NUMBER AND NAME E0556 EW Counter Response | | |
| B. Accomplishments/Planned Program (Cont.) | | | | |
| Low Band Transmitter | FY 02 | FY 03 | FY 04 | FY 05 |
| Accomplishments/Effort/Subtotal Cost | 5.395 | 1.976 | | |
| RDT&E Articles Quantity | 8 | | | |
| (U) Continue developmental testing (TECHEVAL). Conduct Operational Assessment (OA) and Operational Test (OPEVAL) of LBT. | | | | |
| Mission Planning | FY 02 | FY 03 | FY 04 | FY 05 |
| Accomplishments/Effort/Subtotal Cost | 0.000 | 1.986 | 1.976 | 1.974 |
| RDT&E Articles Quantity | | | | |
| (U) Transition of the Tactical EA-6B Mission System (TEAMS) software to the Joint Mission Planning Systems (JMPS). | | | | |
| LINK-16 | FY 02 | FY 03 | FY 04 | FY 05 |
| Accomplishments/Effort/Subtotal Cost | 6.647 | | 1.780 | 2.400 |
| RDT&E Articles Quantity | | | | |
| (U) Continue to develop Link-16 capability. Commence systems integration of Link-16 in FY-02. Complete testing and correction of defect of the Link-16 modification in FY-04. | | | | |

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 4 of 52)

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| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | | | | | | | | | | | | | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | PROJECT NUMBER AND NAME E0556 EW Counter Response | | | | | | | | | | | | | | | | | |
| B. Accomplishments/Planned Program (Cont.) | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 30%;">AOA</td><td style="width: 15%;">FY 02</td><td style="width: 15%;">FY 03</td><td style="width: 15%;">FY 04</td><td style="width: 15%;">FY 05</td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td>1.951</td><td></td><td></td><td></td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></table> | | | | | AOA | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 1.951 | | | | RDT&E Articles Quantity | | | | |
| AOA | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 1.951 | | | | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | | | | | | | | | | | | | | | | |
| <div style="border: 1px solid black; height: 80px; margin-top: 10px;"></div> | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 30%;">JATO</td><td style="width: 15%;">FY 02</td><td style="width: 15%;">FY 03</td><td style="width: 15%;">FY 04</td><td style="width: 15%;">FY 05</td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td>7.770</td><td>9.849</td><td>10.087</td><td>10.352</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></table> | | | | | JATO | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 7.770 | 9.849 | 10.087 | 10.352 | RDT&E Articles Quantity | | | | |
| JATO | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 7.770 | 9.849 | 10.087 | 10.352 | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | | | | | | | | | | | | | | | | |
| <div style="border: 1px solid black; height: 80px; margin-top: 10px;"></div> | | | | | | | | | | | | | | | | | | | |

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| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | PROJECT NUMBER AND NAME E0556 EW Counter Response | | |

C. PROGRAM CHANGE SUMMARY:

| | FY 2002 | FY 2003 | FY 2004 | FY 2005 |
|--|---------|---------|---------|---------|
| Funding: | | | | |
| Previous President's Budget: | 87.837 | 66.907 | 40.693 | 39.380 |
| Current BES/President's Budget | 85.409 | 52.615 | 36.644 | 38.452 |
| Total Adjustments | -2.428 | -14.292 | -4.049 | -0.928 |
| Summary of Adjustments | | | | |
| Congressional program reductions | | -13.100 | | |
| Congressional undistributed reductions | | -0.319 | | |
| Congressional rescissions | -0.179 | | | |
| SBIR/STTR Transfer | -0.614 | | | |
| Economic Assumptions | -0.238 | -0.873 | -0.961 | -0.855 |
| Reprogrammings | 3.403 | | | |
| Other Adjustments | -4.800 | | -3.088 | -0.073 |
| Congressional increases | | | | |
| Subtotal | -2.428 | -14.292 | -4.049 | -0.928 |

Schedule:

Not Applicable

Technical:

Not Applicable

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| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | | | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | | | | PROJECT NUMBER AND NAME E0556 EW Counter Response | | | | |

D. OTHER PROGRAM FUNDING SUMMARY:

| <u>Line Item No. & Name</u> | <u>FY 2001 & Prior</u> | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>FY 2005</u> | <u>FY 2006</u> | <u>FY 2007</u> | <u>FY 2008</u> | <u>FY 2009</u> | <u>To Complete</u> | <u>Total Cost</u> |
|---------------------------------|--------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------------|-----------------------|
| P-1 # 24, EA-6 Series | 344.0 | 150.349 | 223.527 | 213.402 | 183.402 | 113.544 | 40.583 | 21.709 | 25.546 | 160.700 | 1,476.762 |

E. ACQUISITION STRATEGY: *

- The LBT development contract occurred following a full and open competition and was awarded to BAE Systems (formerly MARCONI). Following development and successful DT/OA, sole source LRIP contracts will be awarded. Following successful OT, a sole source production contract will be awarded.

- The ICAP III contract, an E&MD CPIF/AF basic contract with two Fixed Price Incentive (FPI) production options, was awarded to a Northrop Grumman team in March 1998 following Milestone II and a full and open competition. The contract was changed to a CPAF contract in FY 1999. LRIP is scheduled for FY 2003. Milestone III and Full Rate Production are scheduled for FY 2004 with Initial Operating Capability to follow in FY 2005.

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| Exhibit R-3 Cost Analysis (page 1) | | | | | | | | DATE: February 2003 | | | | |
|------------------------------------|------------------------|--------------------------------|---|------------|------------------|---------------------------|------------------|---------------------|------------------|------------------|------------|--------------------------|
| APPROPRIATION/BUDGET ACTIVITY | | | PROGRAM ELEMENT | | | PROJECT NUMBER AND NAME | | | | | | |
| RDT&E, N / BA-5 | | | 0604270N Electronic Warfare Development | | | E0556 EW Counter Response | | | | | | |
| Cost Categories | Contract Method & Type | Performing Activity & Location | Total PY s Cost | FY 03 Cost | FY 03 Award Date | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | Cost to Complete | Total Cost | Target Value of Contract |
| Primary Hardware Dev -LBT | FPI | BAE Systems Lansdale, PA | 31.567 | | | | | | | | 31.567 | 31.567 |
| Primary Hdw Develop - ICAP III | C/CPAF | Northrop Grumman, NY | 209.528 | 25.965 | 11/02 | 9.811 | 11/03 | 10.328 | 11/04 | | 255.632 | 256.632 |
| Primary Hdw Develop - Spray Cool | CPFF | Isothermal Sys Research | 2.612 | | | | | | | | 2.612 | 2.612 |
| Primary Hdw Develop - Link 16 | CPFF | Northrop Grumman, NY | 55.797 | | | 0.890 | 02/04 | | | | 56.687 | 56.687 |
| Primary Hdw Develop - Min of ICAP | TBD | Northrop Grumman, NY | 2.636 | | | | | | | | 2.636 | 2.636 |
| Primary Hdw Develop - LOCO GPSI | TBD | SPAWAR | 8.786 | | | | | | | | 8.786 | |
| | | | | | | | | | | | 0.000 | |
| Aircraft Integration - Spray Cool | CPFF | Isotermal Sys Research | 6.531 | | | | | | | | 6.531 | 6.531 |
| | | | | | | | | | | | 0.000 | |
| Systems Engineering | WX | NRL, Wash DC | 8.541 | 0.500 | 10/02 | 0.929 | 10/03 | 1.525 | 10/04 | Continuing | Continuing | |
| Systems Engineering | WX | NADEP, JAX | 5.227 | 0.628 | 10/02 | 0.675 | 10/03 | 1.300 | 10/04 | Continuing | Continuing | |
| Systems Engineering | WX | NSWC Crane | 8.116 | 0.459 | 10/02 | 2.695 | 10/03 | 4.595 | 10/04 | Continuing | Continuing | |
| Systems Engineering | WX | NAWCAD PAX | 15.252 | 0.596 | 10/02 | 2.200 | 10/03 | 3.367 | 10/04 | Continuing | Continuing | |
| Systems Engineering | WX | NAWCAD LKE | 2.804 | 0.406 | 10/02 | 0.345 | 10/03 | 1.193 | 10/04 | Continuing | Continuing | |
| Systems Engineering | WX | NAWCWD, PT MUGU | 23.997 | 2.555 | 10/02 | 3.216 | 10/03 | 6.524 | 10/04 | Continuing | Continuing | |
| Systems Engineering | Various | VARIOUS | 45.836 | 0.400 | 10/02 | 5.701 | 10/03 | 5.220 | 10/04 | Continuing | Continuing | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| Award Fees - ICAP III | C/CPAF | Northrop Grumman | 6.900 | 8.680 | 09/03 | | | | | | 15.580 | 15.580 |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| Subtotal Product Development | | | 434.130 | 40.189 | | 26.462 | | 34.052 | | Continuing | Continuing | |
| Remarks: | | | | | | | | | | | | |

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 8 of 52)

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 9 of 52)

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| Exhibit R-3 Cost Analysis (page 2) | | | | | | | | | | DATE: February 2003 | | | |
| APPROPRIATION/BUDGET ACTIVITY | | | PROGRAM ELEMENT | | | | PROJECT NUMBER AND NAME | | | | | | |
| RDT&E, N / BA-5 | | | 0604270N Electronic Warfare Development | | | | E0556 EW Counter Response | | | | | | |
| Cost Categories | Contract Method & Type | Performing Activity & Location | Total PY s Cost | FY 03 Cost | FY 03 Award Date | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | Cost to Complete | Total Cost | Target Value of Contract | |
| Developmental Testing - ICAP III | WX | NAWCAD, PAX | 3.000 | 3.000 | 11/02 | 2.522 | 11/03 | | | | 8.522 | | |
| | | | | | | | | | | | 0.000 | | |
| | | | | | | | | | | | 0.000 | | |
| Developmental Testing - Mission Planning | WX | NAWCWD, PT MUGU | | 0.100 | 12/02 | 0.100 | 12/03 | 0.100 | 12/04 | | 0.300 | | |
| | | NAWCAD, PAX | | 0.100 | 12/02 | 0.100 | 12/03 | 0.100 | 12/04 | | 0.300 | | |
| Developmental Testing - LBT | WX | NAWCAD, PAX | 3.000 | 0.976 | 10/03 | | | | | | 3.976 | | |
| Developmental Testing - Spray Cool | WX | NAWCWD, PT MUGU | 1.306 | | | | | | | | 1.306 | | |
| Operational Test & Eval: Mission Planning | WX | OPTEVFOR, Norfolk, VA | | 0.100 | 12/02 | 0.100 | 12/03 | 0.100 | 12/04 | | | | |
| Operational Test & Eval: ICAP III | WX | OPTEVFOR, Norfolk, VA | 5.146 | 3.250 | 11/02 | 3.360 | 11/03 | | | | | | |
| Operational Test & Eval: LBT | WX | OPTEVFOR, Norfolk, VA | | 1.000 | 11/02 | | | | | | | | |
| Subtotal T&E | | | 12.452 | 8.526 | | 6.182 | | 0.300 | | Continuing | Continuing | | |
| Remarks: Remarks: Funding is required to conduct ICAP III and LBT developmental/operational assessment planning, execution, and reporting. | | | | | | | | | | | | | |
| | | | | | | | | | | | 0.000 | | |
| Government Eng Supt - Mission Planning | WX | NAWCWD, PT MUGU | | 0.100 | 12/02 | 0.100 | 12/03 | 0.100 | 02/05 | | 0.300 | | |
| | | | | | | | | | | | 0.000 | | |
| Program Mgmt Supt - Spray Cool | WX | NAWCAD, PAX | 1.306 | | | | | | | | 1.306 | | |
| | | | | | | | | | | | 0.000 | | |
| | | | | | | | | | | | 0.000 | | |
| Subtotal Management | | | 1.306 | 0.100 | | 0.100 | | 0.100 | | Continuing | Continuing | | |
| Remarks: | | | | | | | | | | | | | |
| Total Cost | | | 486.944 | 52.615 | | 36.644 | | 38.452 | | Continuing | Continuing | | |
| Remarks: | | | | | | | | | | | | | |

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| EXHIBIT R4, Schedule Profile | | | | | | | | | | | | | | | | | | | | | | | | | DATE: | | | | February 2003 | | | |
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| APPROPRIATION/BUDGET ACTIVITY | | | | | | | | | | PROGRAM ELEMENT NUMBER AND NAME | | | | | | | | | | PROJECT NUMBER AND NAME | | | | | | | | | | | | |
| RDT&E, N / BA-5 | | | | | | | | | | 0604270N Electronic Warfare Development | | | | | | | | | | E0556 EW Counter Response | | | | | | | | | | | | |
| Fiscal Year | 2002 | | | | 2003 | | | | 2004 | | | | 2005 | | | | 2006 | | | | 2007 | | | | 2008 | | | | 2009 | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | | | |
| Acquisition Milestones LBT | | | | | | | | | | | | | | IOC ☆ LBT | | | | | | | | | | | | | | | | | | |
| LBT | | | | | | | | | | | | | | MS III/FRP △ LBT | | | | | | | | | | | | | | | | | | |
| Acquisition Milestones ICAP III | | | | | | △ LRIP Decision ICAP III | | | | | MS III △ ICAP III | | | IOC ☆ ICAP III | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Test & Evaluation Milestones | | DT ICAP III | | | | DT-II LBT | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Development Test/OT | | | | | | | | | | | ICAP III DT/OT | | | | | | | | | | | | | | | | | | | | | |
| Operational Test | | | | | | OT-II LBT | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Production Milestones LBT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LRIP Start - FY04 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FRP Start - FY05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ICAP III | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LRIP Award - FY03 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FRP Award - FY04 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deliveries | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 102

* Not required for Budget Activities 1, 2, 3, and 6

UNCLASSIFIED

Exhibit R-4, Schedule Profile
(Exhibit R-4, page 11 of 52)

UNCLASSIFIED

CLASSIFICATION:

[illegible]

R-1 SHOPPING LIST - Item No. 102

UNCLASSIFIED

Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 12 of 52)

UNCLASSIFIED

CLASSIFICATION:

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|---|----------------|--|---------|---------|--|---------|-------------------------------|---------|
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | | | PROJECT NUMBER AND NAME E2175 TACAIR EW & E2635 IDECM | | | |
| COST (\$ in Millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| Project Cost | 28.136* | 13.063** | 13.639 | | | | | |
| RDT&E Articles Qty | Not Applicable | | | | | | | |

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This joint service subproject develops the new techniques generator and fiber optic towed decoy of the Radio Frequency Countermeasures (RFCM) Subsystem as well as the Navy-unique portions of the Common Missile Warning System (CMWS) and Advanced Strategic and Tactical Expendables (ASTE). It also integrates RFCM, CMWS and ASTE with Radar Warning Receiver (RWR), Countermeasures Dispensing Set (CMDS) and associated cockpit controls and displays to provide the lead aircraft (F/A-18E/F) with increased survivability against Infrared/Radio Frequency (IR/RF) threats.

AN/ALR-67(V)3&4 RADAR WARNING RECEIVER: This subproject developed the system which provides enhanced situational awareness by providing accurate azimuth display of all programmed threats, independent of aircraft attitude. This also acted as Electronic Warfare (EW) Bus Controller.

AN/ALE-50 ADVANCED AIRBORNE EXPENDABLE DECOY (AAED): This Joint Service (with Air Force) subproject developed the system to decoy enemy radio frequency homing missiles away from friendly aircraft.

FLEET ELECTRONIC WARFARE SUPPORT GROUP (FEWSG): This subproject developed new EW equipment and technology which is used to provide realistic hostile EW threat environment, and support the evaluation and development of tactics and training.

* The FY 2002 budget reflects a \$2.5M Congressional add for IDECM, project E2635 which has been revised by -\$22K for Congressional Undistributed Adjustments and -\$65K for Small Business Innovative Research and -\$7K for economic assumptions.

** The FY 2003 budget reflects a \$7.6M Congressional add for IDECM, project E2635 which has been revised by -\$87 for Congressional Undistributed Adjustments and -\$81K for economic assumptions.

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CLASSIFICATION:

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|---|--|--|--------|-------|
| EXHIBIT R-2a, RDT&E Project Justification | | DATE: February 2003 | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | PROJECT NUMBER AND NAME E2175 TACAIR EW & E2635 IDECM | | |
| B. Accomplishments/Planned Program | | | | |
| | FY 02 | FY 03 | FY 04 | FY 05 |
| Accomplishments/Effort/Subtotal Cost | 28.136 | 13.063 | 13.639 | |
| RDT&E Articles Quantity | | | | |
| <p>Fund engineering and manufacturing (E&MD) contract and engineering, technical and logistic support. Fund A-Kit Block 2 efforts for integration of the Radio Frequency Countermeasure (RFCM) subsystem into the F/A-18 E/F.</p> <p>Fund Block 3 efforts for integration of the RFCM subsystem into the F/A-18 E/F. Fund Block 2 Operational Evaluation (OPEVAL) and Milestone III decision for RFCM.</p> <p>Fund E&MD contract and engineering, technical and logistic support. Fund A-Kit Block 3 efforts for integration of the RFCM subsystem into the F/A-18 E/F. Fund Block 3 Combined Developmental Testing and Operational Testing (CDT/OT). Fund Block 3 OPEVAL and Milestone III decision.</p> | | | | |

R-1 SHOPPING LIST - Item No.

102

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 14 of 52)

UNCLASSIFIED

CLASSIFICATION:

| | | | | |
|---|--|--|----------------------------|--|
| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | PROJECT NUMBER AND NAME E2175 TACAIR EW & E2635 IDECM | | |

C. PROGRAM CHANGE SUMMARY:

| | FY 2002 | FY 2003 | FY 2004 | FY 2005 |
|--|---------|---------|---------|---------|
| Funding: | | | | |
| Previous President's Budget: | 27.886 | 5.758 | 5.929 | |
| Current BES/President's Budget | 28.136 | 13.063 | 13.639 | |
| Total Adjustments | 0.250 | 7.305 | 7.710 | 0.000 |
| Summary of Adjustments | | | | |
| Congressional program reductions | | | | |
| Congressional undistributed reductions | | -0.078 | | |
| Congressional rescissions | -0.059 | | | |
| SBIR/STTR Transfer | -0.827 | | | |
| Economic Assumptions | -0.074 | -0.217 | -0.337 | |
| Reprogrammings | 1.709 | | | |
| Other Adjustments | -0.499 | | 8.047 | |
| Congressional increases | | 7.600 | | |
| Subtotal | 0.250 | 7.305 | 7.710 | 0.000 |

Schedule:

LRIP II moved from FY2002, 1st Qtr to FY2002, 2nd Qtr due to schedule restructuring.
 Block 2 OPEVAL moved from FY2002, 3rd Qtr to FY2003, 1st Qtr due to schedule restructuring.
 Block 2 FRP moved from FY2003, 1st Qtr to FY2004, 2nd Qtr due to schedule restructuring.
 Block 3 OPEVAL moved from FY2004, 1st Qtr to FY2005, 1st Qtr due to schedule restructuring.
 Block 3 FRP moved from FY2005, 1st Qtr to FY 2007, 1st Qtr due to schedule restructuring.

Technical:

Not Applicable.

R-1 SHOPPING LIST - Item No. 102

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CLASSIFICATION:

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|---|----------------|--|----------------|----------------|--|----------------------------|----------------|----------------|--------------------|-------------------|
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | DATE: February 2003 | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | | | PROJECT NUMBER AND NAME E2175 TACAIR EW & E2635 IDECM | | | | | |
| D. OTHER PROGRAM FUNDING SUMMARY: | | | | | | | | | | |
| <u>Line Item No. & Name</u> | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>FY 2005</u> | <u>FY 2006</u> | <u>FY 2007</u> | <u>FY 2008</u> | <u>FY 2009</u> | <u>To Complete</u> | <u>Total Cost</u> |
| APN-5 Line 51 Common ECM (OSIP 007-03 - IDECM) | 0 | 4.3 | 12 | 36.5 | 49.5 | 40.4 | 41 | 41.7 | 435 | 660.4 |
| E. ACQUISITION STRATEGY: | | | | | | | | | | |
| IDECM sole source LRIP 1/2/3 in FY 01, 02, and 03; sole source radio frequency countermeasure full rate production (FRP) in FY 03 and Fiber optic towed decoy sole source FRP in FY 05. | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 102

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Remarks:

Remarks:

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R-1 SHOPPING LIST - Item No. 102

Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 18 of 52)

| | | | | | | | | | | | | |
|--|------------------------|--------------------------------|--|------------|------------------|--|---------------------|------------|------------------|------------------|------------|--------------------------|
| Exhibit R-3 Cost Analysis (page 1) | | | | | | | DATE: February 2003 | | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | | | PROGRAM ELEMENT 0604270N Electronic Warfare Development | | | PROJECT NUMBER AND NAME E2175 TACAIR EW & E2635 IDECM | | | | | | |
| Cost Categories | Contract Method & Type | Performing Activity & Location | Total PY s Cost | FY 03 Cost | FY 03 Award Date | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | Cost to Complete | Total Cost | Target Value of Contract |
| Development Support | | | | | | | | | | | | |
| Software Development (IDECM) | SS/CPFF | RAYTHEON/CA | 5.655 | 0.150 | 04/03 | 0.200 | 11/03 | | | | 6.005 | 6.005 |
| Integrated Logistics Support | WX/RX | JACKSONVILLE/FL | | 0.225 | 01/03 | 0.300 | 03/04 | | | | 0.525 | |
| Configuration Management | | | | | | | | | | | | |
| Technical Data | | | | | | | | | | | | |
| Studies & Analysis | | | | | | | | | | | | |
| GFE | | | | | | | | | | | | |
| Software Development (IDECM) | SS/CPFF | LITTON/CA | 4.336 | | | | | | | | 4.336 | 4.336 |
| | | | | | | | | | | | | |
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| | | | | | | | | | | | | |
| Subtotal Support | | | 9.991 | 0.375 | | 0.500 | | | | | 10.866 | |
| Remarks: | | | | | | | | | | | | |

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CLASSIFICATION:

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|---|------------------------|--------------------------------|--|------------|------------------|------------|--|------------|------------------|----------------------------|------------|--------------------------|--|
| Exhibit R-3 Cost Analysis (page 2) | | | | | | | | | | DATE: February 2003 | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | | | PROGRAM ELEMENT 0604270N Electronic Warfare Development | | | | PROJECT NUMBER AND NAME E2175 TACAIR EW & E2635 IDECM | | | | | | |
| Cost Categories | Contract Method & Type | Performing Activity & Location | Total PY s Cost | FY 03 Cost | FY 03 Award Date | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | Cost to Complete | Total Cost | Target Value of Contract | |
| ENGINEERING/LOGISTIC/SPT | WX/RX | NAWC-AD/PAX | 25.047 | 1.004 | 03/03 | 2.438 | 11/03 | | | | 28.489 | | |
| ENGINEERINGTECH DATA | WX/RX | NAWC-WD, CA | 36.452 | | | 0.350 | 12/03 | | | | 36.802 | | |
| Miscellaneous (efforts < \$m each) | WX/RX | Various | 1.608 | | | 0.395 | 01/04 | | | | 2.003 | | |
| Test Support | WX/RX | OPTEVFOR | 1.500 | 1.108 | 01/03 | 0.250 | 12/03 | | | | 2.858 | | |
| Subtotal T&E | | | 64.607 | 2.112 | | 3.433 | | | | | 70.152 | | |
| Remarks: | | | | | | | | | | | | | |
| Program Management Support | WX/RX | NAWC-AD/PAX/Various | 21.384 | 0.664 | 03/03 | 0.560 | 11/03 | | | | 22.608 | | |
| Miscellaneous (efforts < \$m each) | WX/RX | Various | 6.561 | | | | | | | | 6.561 | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Subtotal Management | | | 27.945 | 0.664 | | 0.560 | | | | | 29.169 | | |
| Remarks: | | | | | | | | | | | | | |
| Total Cost | | | 461.238 | 13.063 | | 13.639 | | | | | 487.940 | | |
| Remarks: | | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 102

UNCLASSIFIED

Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 19 of 52)

UNCLASSIFIED

CLASSIFICATION:

| EXHIBIT R4, Schedule Profile | | | | | | | | | | | | | | | | | | | | | | | | | DATE: | | | | | | | |
|-------------------------------|--------------------------|-------------|---------------|----------|------|----------|---------------------|-----------|------|---|------------------|-------------|---------------|------------|-------------|------------|---------------------|------------|---|-------------------------------|------|------------|------------|------------|-------|------------|------------|------------|------|-------------|---|-------------|
| APPROPRIATION/BUDGET ACTIVITY | | | | | | | | | | PROGRAM ELEMENT NUMBER AND NAME | | | | | | | | | | PROJECT NUMBER AND NAME | | | | | | | | | | | | |
| RDT&E, N / BA-5 | | | | | | | | | | 0604270N Electronic Warfare Development | | | | | | | | | | E2175 TACAIR EW & E2685 IDECM | | | | | | | | | | | | |
| Fiscal Year | 2002 | | | | 2003 | | | | 2004 | | | | 2005 | | | | 2006 | | | | 2007 | | | | 2008 | | | | 2009 | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Acquisition Milestones | | | | | | | MS III △ 1B-2 | | | | IOC ★ 1B-2 | | | | | | MS III △ 1B-3 | | | | | | | | | | | | | | | |
| IB-3 Development | | | ▲ SAFE | ▲ SEP | | △ LAB | | △ SAFE | SEP | CVS | △ | | | | | | | | | | | | | | | | | | | | | |
| Software | 1B-2 UPDATES SAFE SEP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Test & Evaluation Milestones | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IB-2 | | | ▲ COMBINED | △ | | | △ OT RPT | | | | | | | | | | | | | | | | | | | | | | | | | |
| IB-2 OPEVAL | | | | △ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IB-3 Development | | | | | | | △ DT | △ | | | | △ CDT/OT | △ | | △ OPEVAL | △ OTRPT | | | | | | | | | | | | | | | | |
| Production Milestones | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IB-2 | | ▲ LRIP 2 | | | | | △ LRIP 3 | | | △ FRP 1 | | | △ FRP 2 | | | △ FRP 3 | | | | △ FRP 4 | | | △ FRP 5 | | | | △ FRP 6 | | | | | |
| IB-3 Development | | | | | | | | | | △ LRIP 1 | → | △ FRP 1 | → | △ FRP 2 | → | △ FRP 3 | → | △ FRP 4 | → | △ FRP 5 | → | △ FRP 6 | → | △ FRP 7 | → | △ FRP 8 | → | △ FRP 9 | → | △ FRP 10 | → | △ FRP 11 |
| Deliveries | | | | | | | LRIP 1 (6/30) | | | LRIP 2 (14/0) | | | LRIP 3 (20/0) | | | | | | | FRP | | | | | | | | | | | | Lot 24 (36) |

R-1 SHOPPING LIST - Item No. 102

* Not required for Budget Activities 1, 2, 3, and 6

UNCLASSIFIED

Exhibit R-4, Schedule Profile
(Exhibit R-4, page 20 of 52)

UNCLASSIFIED

CLASSIFICATION:

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R-1 SHOPPING LIST - Item No. 102

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Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 21 of 52)

UNCLASSIFIED

CLASSIFICATION:

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|---|--|---------|---------|---------|--|---------|-------------------------------|---------|
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | | | | PROJECT NUMBER AND NAME E3063 AEA Follow On | | | |
| COST (\$ in Millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| Project Cost | 5.000 | 9.780 | 204.822 | 350.768 | 394.280 | 299.110 | 224.673 | |
| RDT&E Articles Qty | | | | | | | | |

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The EA-18G is designed to replace the EA-6B aircraft. The EA-18G's electronic attack upgrades will meet or exceed EA-6B (with LR-700, ALQ-99, USQ-113) Airborne Electronic Attack (AEA) capability to detect, identify, locate and suppress hostile emitters; provide enhanced connectivity to National, Theater and strike assets; and provide organic precision emitter targeting for employment of onboard suppression weapons (HARM) to fulfill operational requirements. The EA-18G will have the capability to operate autonomously or as a major node in a network centric operation. The performance of the aircraft is compatible with the primary strike/fighter aircraft projected to be in the inventory in the 2010 time period, allowing it to be fully integrated into specific strike packages. It will also have the capacity to provide broad area coverage for extended periods of time to support numerous strikes or other air operations in a federated context. The EA-18G is a scaleable, flexible solution that facilitates "Task Organized" force structures. The task organized force structures employ adequate forces to accomplish a specific task while maintaining the operation and personnel tempo at acceptable levels. The EA-18G is being designed to perform a range of Electronic Warfare/Electronic Attack functions either simultaneously or independently. The man in the loop operation and advanced information display system will allow real time assessment of the tactical situation and the appropriate response executed in accordance with the rules of engagement.

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|---|--|--|----------------------------|---------|---------------|-------|-------|-------|-------|--------------------------------------|-------|-------|--|--|-------------------------|--|--|--|--|---------------|-------|-------|-------|-------|--------------------------------------|--|--|---------|---------|-------------------------|--|--|--|--|--|-------|-------|-------|-------|--------------------------------------|--|--|--|--|-------------------------|--|--|--|--|
| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | PROJECT NUMBER AND NAME E3063 AEA Follow On | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B. Accomplishments/Planned Program | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 30%;">AEA Follow On</td><td style="width: 15%;">FY 02</td><td style="width: 15%;">FY 03</td><td style="width: 15%;">FY 04</td><td style="width: 15%;">FY 05</td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td>5.000</td><td>9.780</td><td></td><td></td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></table> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;">- (U) Funding is Pre-SDD contract activity which will prepare the necessary documentation and requirements to enter the SDD phase in FY 2004. Examples of work currently being preformed are: detailed weapon system-level specification, SDD ground and flight test plan, software requirements.</div> <div style="border: 1px solid black; padding: 10px; margin-top: 20px;"><table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 30%;">AEA Follow On</td><td style="width: 15%;">FY 02</td><td style="width: 15%;">FY 03</td><td style="width: 15%;">FY 04</td><td style="width: 15%;">FY 05</td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td></td><td></td><td>204.822</td><td>350.768</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></table><div style="border: 1px solid black; padding: 10px; margin-top: 10px;">- (U) Funding is for SDD contract activity: Air Vehicle Design and Integration, Avionics Development, and Software Development of the EA-18G.</div><div style="border: 1px solid black; padding: 10px; margin-top: 20px;"><table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 30%;"></td><td style="width: 15%;">FY 02</td><td style="width: 15%;">FY 03</td><td style="width: 15%;">FY 04</td><td style="width: 15%;">FY 05</td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td></td><td></td><td></td><td></td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></table><div style="border: 1px solid black; padding: 10px; margin-top: 10px;">- -</div></div></div> | | | | | AEA Follow On | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 5.000 | 9.780 | | | RDT&E Articles Quantity | | | | | AEA Follow On | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | | | 204.822 | 350.768 | RDT&E Articles Quantity | | | | | | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | | | | | RDT&E Articles Quantity | | | | |
| AEA Follow On | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 5.000 | 9.780 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AEA Follow On | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | | | 204.822 | 350.768 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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CLASSIFICATION:

| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|----------------------------|---------|--|---------|---------|---------|---------|----------|--|--|--|--|------------------------------|--|--|-------|---------|--------------------------------|-------|-------|---------|---------|-------------------|-------|-------|---------|---------|------------------------|--|--|--|--|----------------------------------|--|--|--|--|--|--|--------|--|--|---------------------------|--|--|--|--|--------------------|--|--|--|--|----------------------|--|--------|--------|--------|----------------|--|--|--|--|-------------------|--|--|---------|---------|-------------------------|-------|--------|--|--|----------|-------|-------|---------|---------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | PROJECT NUMBER AND NAME E3063 AEA Follow On | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>C. PROGRAM CHANGE SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 35%;"></th> <th style="text-align: right; width: 12.5%;">FY 2002</th> <th style="text-align: right; width: 12.5%;">FY 2003</th> <th style="text-align: right; width: 12.5%;">FY 2004</th> <th style="text-align: right; width: 12.5%;">FY 2005</th> </tr> </thead> <tbody> <tr> <td>Funding:</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Previous President's Budget:</td> <td></td> <td></td> <td style="text-align: right;">9.880</td> <td style="text-align: right;">100.164</td> </tr> <tr> <td>Current BES/President's Budget</td> <td style="text-align: right;">5.000</td> <td style="text-align: right;">9.780</td> <td style="text-align: right;">204.822</td> <td style="text-align: right;">350.768</td> </tr> <tr> <td>Total Adjustments</td> <td style="text-align: right; border-top: 1px solid black;">5.000</td> <td style="text-align: right; border-top: 1px solid black;">9.780</td> <td style="text-align: right; border-top: 1px solid black;">194.942</td> <td style="text-align: right; border-top: 1px solid black;">250.604</td> </tr> <tr> <td colspan="5" style="padding-top: 10px;">Summary of Adjustments</td> </tr> <tr> <td> Congressional program reductions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional undistributed reductions</td> <td></td> <td style="text-align: right;">-0.058</td> <td></td> <td></td> </tr> <tr> <td> Congressional rescissions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> SBIR/STTR Transfer</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Economic Assumptions</td> <td></td> <td style="text-align: right;">-0.162</td> <td style="text-align: right;">-4.955</td> <td style="text-align: right;">-7.880</td> </tr> <tr> <td> Reprogrammings</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Other Adjustments</td> <td></td> <td></td> <td style="text-align: right;">199.513</td> <td style="text-align: right;">258.484</td> </tr> <tr> <td> Congressional increases</td> <td style="text-align: right;">5.000</td> <td style="text-align: right;">10.000</td> <td></td> <td></td> </tr> <tr> <td> Subtotal</td> <td style="text-align: right; border-top: 1px solid black; border-bottom: 1px solid black;">5.000</td> <td style="text-align: right; border-top: 1px solid black; border-bottom: 1px solid black;">9.780</td> <td style="text-align: right; border-top: 1px solid black; border-bottom: 1px solid black;">194.558</td> <td style="text-align: right; border-top: 1px solid black; border-bottom: 1px solid black;">250.604</td> </tr> </tbody> </table> <p style="margin-top: 20px;">Schedule:</p> <p style="margin-left: 20px;">Not Applicable</p> <p style="margin-top: 20px;">Technical:</p> <p style="margin-left: 20px;">Not Applicable</p> | | | | | | FY 2002 | FY 2003 | FY 2004 | FY 2005 | Funding: | | | | | Previous President's Budget: | | | 9.880 | 100.164 | Current BES/President's Budget | 5.000 | 9.780 | 204.822 | 350.768 | Total Adjustments | 5.000 | 9.780 | 194.942 | 250.604 | Summary of Adjustments | | | | | Congressional program reductions | | | | | Congressional undistributed reductions | | -0.058 | | | Congressional rescissions | | | | | SBIR/STTR Transfer | | | | | Economic Assumptions | | -0.162 | -4.955 | -7.880 | Reprogrammings | | | | | Other Adjustments | | | 199.513 | 258.484 | Congressional increases | 5.000 | 10.000 | | | Subtotal | 5.000 | 9.780 | 194.558 | 250.604 |
| | FY 2002 | FY 2003 | FY 2004 | FY 2005 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Funding: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Previous President's Budget: | | | 9.880 | 100.164 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Current BES/President's Budget | 5.000 | 9.780 | 204.822 | 350.768 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Adjustments | 5.000 | 9.780 | 194.942 | 250.604 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Summary of Adjustments | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional program reductions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional undistributed reductions | | -0.058 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional rescissions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SBIR/STTR Transfer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Economic Assumptions | | -0.162 | -4.955 | -7.880 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Reprogrammings | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other Adjustments | | | 199.513 | 258.484 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional increases | 5.000 | 10.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subtotal | 5.000 | 9.780 | 194.558 | 250.604 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 102

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|--|----------------|--|----------------|----------------|--|----------------|----------------------------|----------------|--------------------|-------------------|
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | DATE: February 2003 | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | | | PROJECT NUMBER AND NAME E3063 AEA Follow On | | | | | |
| D. OTHER PROGRAM FUNDING SUMMARY: | | | | | | | | | | |
| <u>Line Item No. & Name</u> | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>FY 2005</u> | <u>FY 2006</u> | <u>FY 2007</u> | <u>FY 2008</u> | <u>FY 2009</u> | <u>To Complete</u> | <u>Total Cost</u> |
| APN-1 (G) | | | | 8.243 | 297.834 | 862.052 | 1,392.590 | 1,463.417 | 2,517.277 | 6,541.413 |
| E. ACQUISITION STRATEGY: | | | | | | | | | | |
| <p>- Development of EA-18G will be based on the findings of an OSD sponsored Analysis of Alternatives and a Navy sponsored Refinement of Alternatives study. It is anticipated that a sole source award for the EA-18G SDD contract will be given to the platform manufacturer. The contract will be structured to minimize the Navy's up-front investment and cancellation penalty while reducing costs for the total program life cycle. The Cost Plus Incentive Fee / Award Fee (CPIF/AF) contract arrangement provides incentive based on cost. The arrangement provides an incentive to the contractor to meet all performance requirements on cost and schedule.</p> | | | | | | | | | | |

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| Exhibit R-3 Cost Analysis (page 1) | | | | | | | | DATE: February 2003 | | | | |
|------------------------------------|------------------------|--------------------------------|---|------------|------------------|-------------------------|------------------|---------------------|------------------|------------------|------------|--------------------------|
| APPROPRIATION/BUDGET ACTIVITY | | | PROGRAM ELEMENT | | | PROJECT NUMBER AND NAME | | | | | | |
| RDT&E, N / BA-5 | | | 0604270N Electronic Warfare Development | | | E3063 AEA Follow On | | | | | | |
| Cost Categories | Contract Method & Type | Performing Activity & Location | Total PY s Cost | FY 03 Cost | FY 03 Award Date | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | Cost to Complete | Total Cost | Target Value of Contract |
| Primary Hardware Develop(SDD) | CPIF/AF | Boeing, St Loius, MO | | | | 177.817 | 10/03 | 292.978 | 10/04 | 743.633 | 1,214.428 | 1,224.208 |
| Primary Hardware Develop(Pre-SDD) | CPIF/AF | Boeing, St Loius, MO | 3.100 | 7.100 | 03/03 | | | | | | 10.200 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| Subtotal Product Development | | | 3.100 | 7.100 | | 177.817 | | 292.978 | | 743.633 | 1,224.628 | |
| Remarks: | | | | | | | | | | | | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| Subtotal Support | | | 0.000 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | |
| Remarks: | | | | | | | | | | | | |

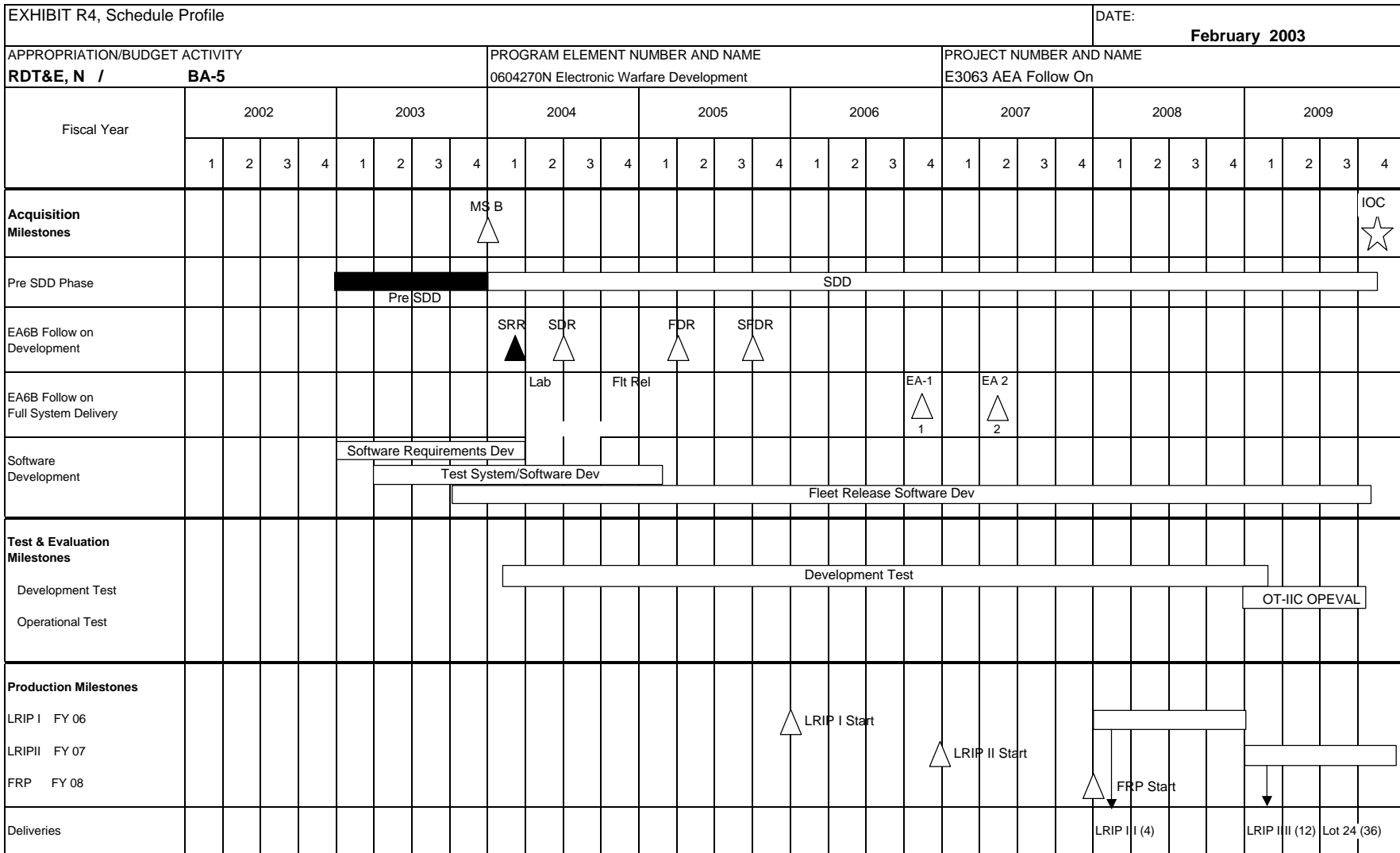
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|--|------------------------|--------------------------------|--|------------|------------------|--|------------------|------------|------------------|----------------------------|------------|--------------------------|
| Exhibit R-3 Cost Analysis (page 2) | | | | | | | | | | DATE: February 2003 | | |
| APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-5 | | | PROGRAM ELEMENT 0604270N Electronic Warfare Development | | | PROJECT NUMBER AND NAME E3063 AEA Follow On | | | | | | |
| Cost Categories | Contract Method & Type | Performing Activity & Location | Total PY s Cost | FY 03 Cost | FY 03 Award Date | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | Cost to Complete | Total Cost | Target Value of Contract |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| Subtotal T&E | | | 0.000 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | |
| Remarks: | | | | | | | | | | | | |
| Government Engineering Support | | | 1.900 | 2.680 | 06/03 | 27.005 | 11/03 | 57.790 | 11/04 | 174.430 | 263.805 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| Subtotal Management | | | 1.900 | 2.680 | | 27.005 | | 57.790 | | 174.430 | 263.805 | |
| Remarks: | | | | | | | | | | | | |
| Total Cost | | | 5.000 | 9.780 | | 204.822 | | 350.768 | | 918.063 | 1,488.433 | |
| Remarks: | | | | | | | | | | | | |

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* Not required for Budget Activities 1, 2, 3, and 6

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Exhibit R-4, Schedule Profile
(Exhibit R-4, page 28 of 52)

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| Exhibit R-4a, Schedule Detail | | | | | | DATE: February 2003 | | |
|--|---|---------|---------|---------|-------------------------|---------------------|---------|---------|
| APPROPRIATION/BUDGET ACTIVITY | PROGRAM ELEMENT | | | | PROJECT NUMBER AND NAME | | | |
| RDT&BA-5 | 0604270N Electronic Warfare Development | | | | E3063 AEA Follow On | | | |
| Schedule Profile | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| Pre Systems Demonstation & Development Phase | | 1Q-4Q | | | | | | |
| Software Requirements Development | | 1Q - 4Q | 1Q | | | | | |
| Test System/Software Development | | 2Q - 4Q | 1Q - 4Q | 1Q | | | | |
| Fleet Release Software Development | | 4Q | 1Q - 4Q | 1Q - 4Q | 1Q - 4Q | 1Q - 4Q | 1Q - 4Q | 1Q - 4Q |
| Milestone B | | | 1Q | | | | | |
| Systems Design Review (SDR) | | | 3Q | | | | | |
| Systems Demonstration & Development | | | 1Q-4Q | 1Q-4Q | 1Q-4Q | 1Q-4Q | 1Q-4Q | 1Q-4Q |
| Software Specification Review (SSR) | | | 1Q | | | | | |
| Developmental Testing (DT-II) | | | 1Q - 4Q | 1Q - 4Q | 1Q - 4Q | 1Q - 4Q | 1Q - 4Q | 1Q |
| Systems Functional Design Review (SFDR) | | | | 3Q-4Q | | | | |
| Functional Design Review (FDR) | | | | 2Q | | | | |
| Start Low-Rate Initial Production I | | | | | 1Q | | | |
| Start Low-Rate Initial Production II | | | | | | 1Q | | |
| Operational Testing (OT-IIB) | | | | | 3Q | 1Q-2Q | | |
| Developmental Testing (DT-IIC) | | | | | 4Q | 1Q-2Q | | |
| Follow On Full System Delivery LOT 1 | | | | | 4Q | | | |
| Follow On Full System Delivery LOT 2 | | | | | | 2Q | | |
| Low-Rate Initail Production II Delivery | | | | | | | 1Q - 4Q | |
| Full Rate Production Start | | | | | | | 1Q | |
| Operational Testing (OT-IIC) | | | | | | | | 1Q - 4Q |
| Lot Rate Initial Production III Delivery | | | | | | | | 1Q - 4Q |
| IOC | | | | | | | | 4Q |
| Full Rate Production (FRP) Decision | | | | | | | | 4Q |
| | | | | | | | | |
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Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 29 of 52)

| | | | | | | | | |
|--|--------------|--|--------------|--------------|--------------|--|----------------------------|--------------|
| CLASSIFICATION: UNCLASSIFIED | | | | | | | | |
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | | | | PROJECT NUMBER AND NAME R2260 Specific Emitter ID | | |
| COST (\$ in Millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| Project Cost | 0.965 | 0.996 | 0.764 | 0.827 | 0.826 | 0.975 | 0.000 | 0.000 |
| RDT&E Articles Qty | | | | | | | | |
| <p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>This project supports systems development and collection of Specific Emitter Identification (SEI) information from National Technical Means (NTM) to track commercial ships over 200 gross registered tons world-wide. Research and development will cover improvements and enhancements to Electronic Intelligence technology. This will include improved/next generation SEI technology for miniaturization and automation of hardware, national collection systems, signal processing and analysis, and de-interleaving of signals. Propagation in a multi-path signal environment will also be assessed. All work on this project will be undertaken in pursuit of goals stated by the Office of Naval Intelligence and the National Security Agency in support of the Worldwide Ship Tracking Program.</p> | | | | | | | | |

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|--|--|--|-------------------------------|-------|--|-------|-------|-------|-------|--------------------------------------|-------|-------|-------|-------|-------------------------|--|--|--|--|
| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | | | | | | | | | | | | | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | PROJECT NUMBER AND NAME R2260 Specific Emitter ID | | | | | | | | | | | | | | | | | |
| (U) B. Accomplishments/Planned Program | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"></td> <td style="width: 15%; text-align: center;">FY 02</td> <td style="width: 15%; text-align: center;">FY 03</td> <td style="width: 15%; text-align: center;">FY 04</td> <td style="width: 15%; text-align: center;">FY 05</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td style="text-align: center;">0.570</td> <td style="text-align: center;">0.508</td> <td style="text-align: center;">0.200</td> <td style="text-align: center;">0.000</td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p style="margin-top: 10px;">This effort supports systems development and information fusion of improved SEI technology for automation of hardware, national collection systems, signal processing and analysis, and de-interleaving of signals. Work was performed on increasing sensor fusion and automation to reduce staffing and support remote access and control capability. In FY 03 this effort will demonstrate the sensor fusion and automation aspects of SEI systems to reduce staffing and support remote access and control capability. In FY 04 this effort will support the deployment and real world tuning of highly automated SEI systems with sensor fusion, achieving goals of increased performance and reduced staffing.</p> | | | | | | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 0.570 | 0.508 | 0.200 | 0.000 | RDT&E Articles Quantity | | | | |
| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 0.570 | 0.508 | 0.200 | 0.000 | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"></td> <td style="width: 15%; text-align: center;">FY 02</td> <td style="width: 15%; text-align: center;">FY 03</td> <td style="width: 15%; text-align: center;">FY 04</td> <td style="width: 15%; text-align: center;">FY 05</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td style="text-align: center;">0.395</td> <td style="text-align: center;">0.488</td> <td style="text-align: center;">0.350</td> <td style="text-align: center;">0.327</td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p style="margin-top: 10px;">This effort supports development of a autonomous surveillance system capable of providing emitter signal information to a central location. Work was begun on this effort in FY02. In FY03 a demonstration of a complete autonomous emitter signal surveillance system consisting of central base station and one or more remote sensor sites will be performed. In FY 04 & FY 05, this effort will support the deployment and real world tuning of an autonomous emitter signal surveillance system and monitor base station and remote site operations.</p> | | | | | | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 0.395 | 0.488 | 0.350 | 0.327 | RDT&E Articles Quantity | | | | |
| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 0.395 | 0.488 | 0.350 | 0.327 | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"></td> <td style="width: 15%; text-align: center;">FY 02</td> <td style="width: 15%; text-align: center;">FY 03</td> <td style="width: 15%; text-align: center;">FY 04</td> <td style="width: 15%; text-align: center;">FY 05</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.214</td> <td style="text-align: center;">0.500</td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p style="margin-top: 10px;">Improved SEI system performance, real-time communication and tactical use of SEI will be expanded with next generation SEI technology. In FY 04, this effort will develop and demonstrate enhanced system support for real-time communication and tactical use of SEI and other signal data. In FY 05, this effort will improve and deploy enhanced system support for real-time communication and tactical use of SEI and other signal data.</p> | | | | | | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 0.000 | 0.000 | 0.214 | 0.500 | RDT&E Articles Quantity | | | | |
| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 0.000 | 0.000 | 0.214 | 0.500 | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | | | | | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No.

102

UNCLASSIFIED

Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 31 of 52)

UNCLASSIFIED

CLASSIFICATION:

| | | | | |
|---|--|--|----------------------------|--|
| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | PROJECT NUMBER AND NAME R2260 Specific Emitter ID | | |

(U) C. PROGRAM CHANGE SUMMARY:

| | FY 2002 | FY 2003 | FY 2004 | FY 2005 |
|--|---------|---------|---------|---------|
| (U) Funding: | | | | |
| Previous President's Budget: | 1.003 | 1.019 | 1.017 | 1.016 |
| Current BES/President's Budget | 0.965 | 0.996 | 0.764 | 0.827 |
| Total Adjustments | -0.038 | -0.023 | -0.253 | -0.189 |
| Summary of Adjustments | | | | |
| Congressional program reductions | -0.002 | -0.002 | | |
| Congressional undistributed reductions | | | | |
| Congressional rescissions | | | | |
| SBIR/STTR Transfer | -0.013 | | | |
| Economic Assumptions | -0.003 | -0.006 | | |
| Reprogrammings | -0.020 | | | |
| Other Adjustments | 0.000 | -0.015 | -0.253 | -0.189 |
| Congressional increases | | | | |
| Subtotal | -0.038 | -0.023 | -0.253 | -0.189 |
| (U) Schedule: | | | | |
| Not Applicable | | | | |
| (U) Technical: | | | | |
| Not Applicable | | | | |

R-1 SHOPPING LIST - Item No. 102

UNCLASSIFIED

Exhibit R-2a, RD TEN Project Justification
(Exhibit R-2a, page 32 of 52)

UNCLASSIFIED

CLASSIFICATION:

| | | | | | | | | | | |
|---|----------------|--|----------------|----------------|--|----------------|----------------------------|----------------|----------------|---------------|
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | DATE: February 2003 | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-5 | | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | | | PROJECT NUMBER AND NAME R2260 Specific Emitter ID | | | | | |
| (U) D. OTHER PROGRAM FUNDING SUMMARY: | | | | | | | | | | |
| <u>Line Item No. & Name</u> | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>FY 2005</u> | <u>FY 2006</u> | <u>FY 2007</u> | <u>FY 2008</u> | <u>FY 2009</u> | To Complete | Total Cost |
| None | | | | | | | | | | |
| (U) E. ACQUISITION STRATEGY: | | | | | | | | | | |
| This is a non-acquisition Research and Development Program. | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 102

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CLASSIFICATION:

| | | | | | | | | | | | | |
|---|------------------------|--------------------------------|--|------------|------------------|--|------------------|----------------------------|------------------|------------------|------------|--------------------------|
| Exhibit R-3 Cost Analysis (page 1) | | | | | | | | DATE: February 2003 | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | | | PROGRAM ELEMENT 0604270N Electronic Warfare Development | | | PROJECT NUMBER AND NAME R2260 Specific Emitter ID | | | | | | |
| Cost Categories | Contract Method & Type | Performing Activity & Location | Total PY s Cost | FY 03 Cost | FY 03 Award Date | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | Cost to Complete | Total Cost | Target Value of Contract |
| Primary Hardware Development | C/FFP | ITT, Virginia | | 0.200 | 02/03 | 0.324 | 02/04 | 0.150 | 02/05 | 0.300 | 0.974 | |
| Ancillary Hardware Development | | | | | | | | | | | 0.000 | |
| Aircraft Integration | | | | | | | | | | | 0.000 | |
| Ship Integration | | | | | | | | | | | 0.000 | |
| Ship Suitability | | | | | | | | | | | 0.000 | |
| Systems Engineering | | | | | | | | | | | 0.000 | |
| Training Development | | | | | | | | | | | 0.000 | |
| Licenses | | | | | | | | | | | 0.000 | |
| Tooling | | | | | | | | | | | 0.000 | |
| GFE | | | | | | | | | | | 0.000 | |
| *Prior Years Funding Total | N/A | | 8.558 | | | | | | | | 8.558 | |
| Subtotal Product Development | | | 8.558 | 0.200 | | 0.324 | | 0.150 | | 0.300 | 9.532 | |
| Remarks: | | | | | | | | | | | | |
| Development Support | | | | | | | | | | | 0.000 | |
| Software Development | WR | NRL, Washington, DC | | 0.200 | 10/02 | 0.090 | 10/03 | 0.230 | 10/04 | 0.500 | 1.020 | |
| Integrated Logistics Support | | | | | | | | | | | 0.000 | |
| Configuration Management | | | | | | | | | | | 0.000 | |
| Technical Data | | | | | | | | | | | 0.000 | |
| Studies & Analyses | | | | | | | | | | | 0.000 | |
| GFE | | | | | | | | | | | 0.000 | |
| Award Fees | | | | | | | | | | | 0.000 | |
| Subtotal Support | | | 0.000 | 0.200 | | 0.090 | | 0.230 | | 0.500 | 1.020 | |
| Remarks: | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 102

UNCLASSIFIED

Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 34 of 52)

UNCLASSIFIED

CLASSIFICATION:

| Exhibit R-3 Cost Analysis (page 2) | | | | | | | | DATE: February 2003 | | | | |
|------------------------------------|------------------------|--------------------------------|---|------------|------------------|---------------------------|------------------|---------------------|------------------|------------------|------------|--------------------------|
| APPROPRIATION/BUDGET ACTIVITY | | | PROGRAM ELEMENT | | | PROJECT NUMBER AND NAME | | | | | | |
| RDT&E, N / BA-5 | | | 0604270N Electronic Warfare Development | | | R2260 Specific Emitter ID | | | | | | |
| Cost Categories | Contract Method & Type | Performing Activity & Location | Total PY s Cost | FY 03 Cost | FY 03 Award Date | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | Cost to Complete | Total Cost | Target Value of Contract |
| Developmental Test & Evaluation | WR | NRL, Washington, DC | | 0.200 | 10/02 | 0.050 | 10/03 | 0.100 | 10/04 | 0.229 | 0.579 | |
| Developmental Test & Evaluation | C/FFP | CACI, Virginia | | 0.150 | 03/03 | 0.075 | 03/04 | | | | 0.225 | |
| Live Fire Test & Evaluation | | | | | | | | | | | 0.000 | |
| Test Assets | | | | | | | | | | | 0.000 | |
| Tooling | | | | | | | | | | | 0.000 | |
| GFE | | | | | | | | | | | 0.000 | |
| Award Fees | | | | | | | | | | | 0.000 | |
| Subtotal T&E | | | 0.000 | 0.350 | | 0.125 | | 0.100 | | 0.229 | 0.804 | |
| Remarks: | | | | | | | | | | | | |
| Contractor Engineering Support | C/FFP | AIMS, Maryland | | 0.146 | 03/03 | 0.150 | 03/04 | 0.150 | 03/05 | 0.400 | 0.846 | |
| Government Engineering Support | WR | NRL, Washington, DC | | 0.100 | 10/02 | 0.075 | 10/03 | 0.197 | 10/04 | 0.419 | 0.791 | |
| Program Management Support | | | | | | | | | | | 0.000 | |
| Travel | | | | | | | | | | | 0.000 | |
| Transportation | | | | | | | | | | | 0.000 | |
| SBIR Assessment | | | | | | | | | | | 0.000 | |
| Subtotal Management | | | 0.000 | 0.246 | | 0.225 | | 0.347 | | 0.819 | 1.637 | |
| Remarks: | | | | | | | | | | | | |
| Total Cost | | | 8.558 | 0.996 | | 0.764 | | 0.827 | | 1.848 | 12.993 | |
| Remarks: | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 102

UNCLASSIFIED

CLASSIFICATION:

[illegible]

* Not required for Budget Activities 1, 2, 3, and 6

R-1 SHOPPING LIST - Item No. 102

UNCLASSIFIED

Exhibit R-4, Schedule Profile
(Exhibit R-4, page 36 of 52)

UNCLASSIFIED

CLASSIFICATION:

[illegible]

R-1 SHOPPING LIST - Item No. 102

UNCLASSIFIED

Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 37 of 52)

UNCLASSIFIED

CLASSIFICATION:

| | | | | | | | | |
|---|----------------|--|---------|---------|--|---------|-------------------------------|---------|
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | | | PROJECT NUMBER AND NAME X2422 LOCO GPSI | | | |
| COST (\$ in Millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| Project Cost | 3.756 | 2.054 | | | | | | |
| RDT&E Articles Qty | Not Applicable | | | | | | | |

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Global Positioning System (GPS) is an integral part of virtually every warfighting capability from navigation to asset tracking to precision weapons. However, this very weak signal is susceptible to interference and jamming. GPS Interference Situational Awareness (GISA) will provide operational forces with knowledge of threats to GPS as part of Intelligence Preparation of the Battlespace and in support of Time Critical Targeting. Operational forces would be able to plan and/or modify existing plans based on the threat and own force capabilities (GPS protection such as anti-jam antennas). The Electronic Support Annex to GPS I/II/III ORD (AFSPC/ACC 003-92) outlines requirements for GPS interference and jammer detection and is scheduled for JROC review in late-summer/early-fall 2002.

The National Security Agency (NSA) may now take over the requirements of the ES ORD Annex. This has delayed the formalizing of requirements.

The Location Of GPS Interferers (LOCO GPSI) is a Congressional Add project managed for the Government by SPAWAR Systems Center, San Diego. FALON, Incorporated is the system developer. This project is developing a prototype system to detect, identify, and geo-locate GPS jammers and interference sources. The system uses phase interferometry to determine accurate emitter angle of arrival then passive ranging algorithms to derive accurate emitter position. The current prototype system completed flight demonstration, and FY02 objective is to miniaturize the system to achieve an operationally suitable form factor compatible with unmanned air/ground vehicles as well as tactical pod, pylon, and large vehicle/aircraft integration. This UAV configuration is called the Mini Lite configuration. The FY03 objective is to complete the evaluation of the LOCO GPSI Mini Lite System through ground and flight tests, conduct JGPSCE-Charlie flight tests, develop a second system, and plan and coordinate with potential sponsors to tailor CONOPS for specific applications

LOCO GPSI represents the most mature technology with a focused capability against the GPS threat and is a complementary capability to existing SIGINT systems that would require system modification (with impact to their primary mission area) to achieve some similar capability.

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CLASSIFICATION:

| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | | | | | | | | | | | | | | | | |
|--|--|--|-------------------------------|-------|-----------|-------|-------|-------|-------|--------------------------------------|-------|-------|--|--|-------------------------|--|--|--|--|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | PROJECT NUMBER AND NAME X2422 LOCO GPSI | | | | | | | | | | | | | | | | | |
| B. Accomplishments/Planned Program <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th style="width: 30%;">LOCO GPSI</th> <th style="width: 15%;">FY 02</th> <th style="width: 15%;">FY 03</th> <th style="width: 15%;">FY 04</th> <th style="width: 15%;">FY 05</th> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td>3.756</td> <td>2.054</td> <td></td> <td></td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p>(U) FY02 ACCOMPLISHMENTS: LOCO GPSI FY02 primary effort is to miniaturize the current prototype from slightly over 60 pounds to under 10 pounds and reduce form factor to be compatible with the full spectrum of candidate platforms from UAV to large aircraft. Flight demonstration data have been evaluated, the test report has been completed, and demonstration results presented to the Naval Air and Strike Warfare Center who provided the aircraft and test range for the flight demonstration. Lessons learned from the preliminary lab and ground testing as well as the flight demonstration have been incorporated in the current prototype design as well as in the miniaturized system design. A Preliminary Design Review was successfully completed on 31 July. Concepts of operation have been developed and are being refined through socialization with fleet and operational units. Preparations are continuing for LOCO GPSI participation, funding permitting, in the Coalition Combat Identification (CCID) Advanced Concept Technology Demonstration scheduled for 2004. A GPS Interference Situational Awareness (GISA) ACTD is also being investigated, as are candidate operational host platforms for flight demonstration of the LOCO GPSI miniaturized prototype and potential participation in the Joint GPS Combat Effectiveness test in 2003.</p> <p>(U) FY03 PLAN: In FY03 the Mini Lite unit will then be calibrated in an F/A-18 airframe mounted on a pedestal at the NAWC-AD (Patuxant River) outdoor antenna range. In order to provide a comparison of the Mini Lite system performance and that of the legacy LOCO GPSI system, the legacy (with upgrades) system will be recalibrated at the antenna range as well. Both units will then undergo flight demonstration testing at NSA/CSS (Fallon, NV) on separate aircraft flying similar flight profiles. Following the flight demonstration testing and any refurbishment of the systems, the unit will support JGPSCE-Charlie flight exercises at White Sands Missile Range. The Mini Lite system will be the primary unit for testing, the legacy system will serve as the backup. Data from the exercise will support the operational assessment of the LOCO GPSI system. Data from multiple flights will be collected and analyzed. The LOCO GPSI development team will also develop and laboratory test a second LOCO GPSI Mini Lite system identical to the first unit to serve as a backup for future testing or limited quick reaction capability support in the field. Components will be selected, procured, and integrated to meet product goals. FY03 efforts will also continue to refine and/or coordinate CONOPS for the LOCO GPSI system. This will involve planning sessions and technical interchanges with potential sponsors or experiment/exercise venue representatives. This may involve modeling and simulation efforts to explore LOCO GPSI operational utility in robust combat environments. This will form the foundation for a LOCO GPSI ACTD submitted for FY04 and tentatively sponsored by EUCOM pending lead service determination.</p> </div> | | | | | LOCO GPSI | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 3.756 | 2.054 | | | RDT&E Articles Quantity | | | | |
| LOCO GPSI | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 3.756 | 2.054 | | | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | | | | | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No.

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 39 of 52)

UNCLASSIFIED

CLASSIFICATION:

| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|----------------------------|---------|--|---------|---------|---------|---------|----------|--|--|--|--|------------------------------|-------|-------|--|--|--------------------------------|-------|-------|--|--|-------------------|--------|-------|-------|-------|------------------------|--|--|--|--|----------------------------------|--|--|--|--|--|--------|--------|--|--|---------------------------|--|--|--|--|--------------------|--|--|--|--|----------------------|--------|--------|--|--|----------------|--|--|--|--|-------------------|--|--------|--|--|-------------------------|--|-------|--|--|----------|--------|-------|--|--|
| APPROPRIATION/BUDGET ACTIVITY RDTE&E, N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | PROJECT NUMBER AND NAME X2422 LOCO GPSI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>C. PROGRAM CHANGE SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 35%;"></th> <th style="text-align: right; width: 15%;">FY 2002</th> <th style="text-align: right; width: 15%;">FY 2003</th> <th style="text-align: right; width: 15%;">FY 2004</th> <th style="text-align: right; width: 20%;">FY 2005</th> </tr> </thead> <tbody> <tr> <td>Funding:</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Previous President's Budget:</td> <td style="text-align: right;">3.800</td> <td style="text-align: right;">0.000</td> <td></td> <td></td> </tr> <tr> <td>Current BES/President's Budget</td> <td style="text-align: right;">3.756</td> <td style="text-align: right;">2.054</td> <td></td> <td></td> </tr> <tr> <td>Total Adjustments</td> <td style="text-align: right; border-top: 1px solid black;">-0.044</td> <td style="text-align: right; border-top: 1px solid black;">2.054</td> <td style="text-align: right; border-top: 1px solid black;">0.000</td> <td style="text-align: right; border-top: 1px solid black;">0.000</td> </tr> <tr> <td colspan="5" style="padding-top: 10px;">Summary of Adjustments</td> </tr> <tr> <td> Congressional program reductions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional undistributed reductions</td> <td style="text-align: right;">-0.034</td> <td style="text-align: right;">-0.012</td> <td></td> <td></td> </tr> <tr> <td> Congressional rescissions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> SBIR/STTR Transfer</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Economic Assumptions</td> <td style="text-align: right;">-0.010</td> <td style="text-align: right;">-0.012</td> <td></td> <td></td> </tr> <tr> <td> Reprogrammings</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Other Adjustments</td> <td></td> <td style="text-align: right;">-0.022</td> <td></td> <td></td> </tr> <tr> <td> Congressional increases</td> <td></td> <td style="text-align: right;">2.100</td> <td></td> <td></td> </tr> <tr> <td> Subtotal</td> <td style="text-align: right;">-0.044</td> <td style="text-align: right;">2.054</td> <td></td> <td></td> </tr> </tbody> </table> <p style="margin-top: 20px;">Schedule:</p> <p style="margin-left: 20px;">Not Applicable.</p> <p style="margin-top: 20px;">Technical:</p> <p style="margin-left: 20px;">Not Applicable.</p> | | | | | | FY 2002 | FY 2003 | FY 2004 | FY 2005 | Funding: | | | | | Previous President's Budget: | 3.800 | 0.000 | | | Current BES/President's Budget | 3.756 | 2.054 | | | Total Adjustments | -0.044 | 2.054 | 0.000 | 0.000 | Summary of Adjustments | | | | | Congressional program reductions | | | | | Congressional undistributed reductions | -0.034 | -0.012 | | | Congressional rescissions | | | | | SBIR/STTR Transfer | | | | | Economic Assumptions | -0.010 | -0.012 | | | Reprogrammings | | | | | Other Adjustments | | -0.022 | | | Congressional increases | | 2.100 | | | Subtotal | -0.044 | 2.054 | | |
| | FY 2002 | FY 2003 | FY 2004 | FY 2005 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Funding: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Previous President's Budget: | 3.800 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Current BES/President's Budget | 3.756 | 2.054 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Adjustments | -0.044 | 2.054 | 0.000 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Summary of Adjustments | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional program reductions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional undistributed reductions | -0.034 | -0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional rescissions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SBIR/STTR Transfer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Economic Assumptions | -0.010 | -0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Reprogrammings | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other Adjustments | | -0.022 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional increases | | 2.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subtotal | -0.044 | 2.054 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 102

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

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|---|----------------|--|----------------|----------------|--|----------------|----------------------------|----------------|-----------------------|----------------------|
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | DATE: February 2003 | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | | | PROJECT NUMBER AND NAME X2422 LOCO GPSI | | | | | |
| D. OTHER PROGRAM FUNDING SUMMARY: | | | | | | | | | | |
| <u>Line Item No. & Name</u> | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>FY 2005</u> | <u>FY 2006</u> | <u>FY 2007</u> | <u>FY 2008</u> | <u>FY 2009</u> | To <u>Complete</u> | Total <u>Cost</u> |
| Not Applicable | | | | | | | | | | |
| E. ACQUISITION STRATEGY: | | | | | | | | | | |
| Not Applicable | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 102

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

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| Exhibit R-3 Cost Analysis (page 1) | | | | | | | | DATE: February 2003 | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | | | PROGRAM ELEMENT 0604270N Electronic Warfare Development | | | PROJECT NUMBER AND NAME X2422 LOCO GPSI | | | | | | |
| Cost Categories | Contract Method & Type | Performing Activity & Location | Total PY s Cost | FY 03 Cost | FY 03 Award Date | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | Cost to Complete | Total Cost | Target Value of Contract |
| Primary Hardware Development | TBD | SPAWAR | 3.756 | 2.054 | 06/03 | | | | | | 5.810 | |
| Ancillary Hardware Development | | | | | | | | | | | 0.000 | |
| Aircraft Integration | | | | | | | | | | | 0.000 | |
| Ship Integration | | | | | | | | | | | 0.000 | |
| Ship Suitability | | | | | | | | | | | 0.000 | |
| Systems Engineering | | | | | | | | | | | 0.000 | |
| Training Development | | | | | | | | | | | 0.000 | |
| Licenses | | | | | | | | | | | 0.000 | |
| Tooling | | | | | | | | | | | 0.000 | |
| GFE | | | | | | | | | | | 0.000 | |
| Award Fees | | | | | | | | | | | 0.000 | |
| Subtotal Product Development | | | 3.756 | 2.054 | | 0.000 | | 0.000 | | 0.000 | 5.810 | |
| Remarks: | | | | | | | | | | | | |
| Development Support | | | | | | | | | | | 0.000 | |
| Software Development | | | | | | | | | | | 0.000 | |
| Integrated Logistics Support | | | | | | | | | | | 0.000 | |
| Configuration Management | | | | | | | | | | | 0.000 | |
| Technical Data | | | | | | | | | | | 0.000 | |
| Studies & Analyses | | | | | | | | | | | 0.000 | |
| GFE | | | | | | | | | | | 0.000 | |
| Award Fees | | | | | | | | | | | 0.000 | |
| Subtotal Support | | | 0.000 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | |
| Remarks: | | | | | | | | | | | | |

UNCLASSIFIED

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|---|------------------------|--------------------------------|--|------------|------------------|--|------------------|------------|----------------------------|------------------|------------|--------------------------|
| Exhibit R-3 Cost Analysis (page 2) | | | | | | | | | DATE: February 2003 | | | |
| APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-5? | | | PROGRAM ELEMENT 0604270N Electronic Warfare Development | | | PROJECT NUMBER AND NAME X2422 LOCO GPSI | | | | | | |
| Cost Categories | Contract Method & Type | Performing Activity & Location | Total PY s Cost | FY 03 Cost | FY 03 Award Date | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | Cost to Complete | Total Cost | Target Value of Contract |
| Developmental Test & Evaluation | | | | | | | | | | | 0.000 | |
| Operational Test & Evaluation | | | | | | | | | | | 0.000 | |
| Live Fire Test & Evaluation | | | | | | | | | | | 0.000 | |
| Test Assets | | | | | | | | | | | 0.000 | |
| Tooling | | | | | | | | | | | 0.000 | |
| GFE | | | | | | | | | | | 0.000 | |
| Award Fees | | | | | | | | | | | 0.000 | |
| Subtotal T&E | | | 0.000 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | |
| Remarks: | | | | | | | | | | | | |
| Contractor Engineering Support | | | | | | | | | | | 0.000 | |
| Government Engineering Support | | | | | | | | | | | 0.000 | |
| Program Management Support | | | | | | | | | | | 0.000 | |
| Travel | | | | | | | | | | | 0.000 | |
| Transportation | | | | | | | | | | | 0.000 | |
| SBIR Assessment | | | | | | | | | | | 0.000 | |
| Subtotal Management | | | 0.000 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | |
| Remarks: | | | | | | | | | | | | |
| Total Cost | | | 3.756 | 2.054 | | 0.000 | | 0.000 | | 0.000 | 5.810 | |
| Remarks: | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 102

UNCLASSIFIED

Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 43 of 52)

UNCLASSIFIED

CLASSIFICATION:

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| EXHIBIT R4, Schedule Profile | | | | | | | | | | | | | | | | | | | | | | | | | | DATE: FEBRUARY 2003 | | | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | | | | | | | | | | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | | | | | | | | | | PROJECT NUMBER AND NAME X2422 LOCO GPSI | | | | | | | | | | | | |
| Fiscal Year | 2002 | | | | 2003 | | | | 2004 | | | | 2005 | | | | 2006 | | | | 2007 | | | | 2008 | | | | 2009 | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | | | |
| Acquisition Milestones | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LOCO GPSI Miniaturized Preliminary Design Review | | | | ▲ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LOCO GPSI Miniaturized Prototype Development | | | | ▲ | Unit #1 | | | | △ | | | | | | | | | | | | | | | | | | | | | | | |
| LOCO GPSI Miniaturized Critical Design Review | | | | | | | | △ | Unit #2 | | | | △ | | | | | | | | | | | | | | | | | | | |
| ACTD Planning/Coordination | | | | | ▲ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Test & Evaluation Milestones | | | | ▲ | Unit #1 Lab/Ground Testing | | | | △ | | | | | | | | | | | | | | | | | | | | | | | |
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R-1 SHOPPING LIST - Item No. 102

UNCLASSIFIED

Exhibit R-4, Schedule Profile
(Exhibit R-4, page 44 of 52)

UNCLASSIFIED

CLASSIFICATION:

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R-1 SHOPPING LIST - Item No. 102

UNCLASSIFIED

Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 45 of 52)

UNCLASSIFIED

CLASSIFICATION:

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|---|--|---------|---------|---------|---|---------|-------------------------------|---------|
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | | | | PROJECT NUMBER AND NAME Z1742 EW Technical Development | | | |
| COST (\$ in Millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| Project Cost | 0.971 | 1.035 | 0.832 | 0.917 | 0.945 | 1.141 | 1.163 | 1.184 |
| RDT&E Articles Qty | | | | | | | | |

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Skunkworks is a CNO N614 funded effort that focuses on the quick reaction prototyping of tactical information warfare systems. This program directly addresses various fleet requirements, airborne and surface cryptologic operational requirements documents and the joint requirements oversight council mission needs statement for information warfare systems and capabilities across the spectrum of conflict. The projects developed under this program are designed to deny, degrade, disrupt or destroy enemy command and control communications. These systems provide information dominance to friendly forces during conflict, which is necessary for successful mission accomplishment.

UNCLASSIFIED

CLASSIFICATION:

| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | | | | | | | | | | | | | | | | |
|--|--|---|-------------------------------|-------|--|-------|-------|-------|-------|--------------------------------------|-------|-------|-------|-------|-------------------------|-----|-----|-----|-----|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | PROJECT NUMBER AND NAME Z1742 EW Technical Development | | | | | | | | | | | | | | | | | |
| B. Accomplishments/Planned Program | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.300</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td style="text-align: center;">N/A</td><td style="text-align: center;">N/A</td><td style="text-align: center;">N/A</td><td style="text-align: center;">N/A</td></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">- (U) Completed airborne IW pod test and certification.</div> | | | | | | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 0.300 | 0.000 | 0.000 | 0.000 | RDT&E Articles Quantity | N/A | N/A | N/A | N/A |
| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 0.300 | 0.000 | 0.000 | 0.000 | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | N/A | N/A | N/A | N/A | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.400</td><td style="text-align: center;">0.400</td><td style="text-align: center;">0.400</td><td style="text-align: center;">0.400</td></tr><tr><td>RDT&E Articles Quantity</td><td style="text-align: center;">N/A</td><td style="text-align: center;">N/A</td><td style="text-align: center;">N/A</td><td style="text-align: center;">N/A</td></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">- (U) Continue heliborne IW jammer development, test and evaluation.</div> | | | | | | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 0.400 | 0.400 | 0.400 | 0.400 | RDT&E Articles Quantity | N/A | N/A | N/A | N/A |
| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 0.400 | 0.400 | 0.400 | 0.400 | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | N/A | N/A | N/A | N/A | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.200</td><td style="text-align: center;">0.200</td><td style="text-align: center;">0.200</td><td style="text-align: center;">0.200</td></tr><tr><td>RDT&E Articles Quantity</td><td style="text-align: center;">N/A</td><td style="text-align: center;">N/A</td><td style="text-align: center;">N/A</td><td style="text-align: center;">N/A</td></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">- (U) Continue unmanned aerial vehicle IW payload test and development</div> | | | | | | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 0.200 | 0.200 | 0.200 | 0.200 | RDT&E Articles Quantity | N/A | N/A | N/A | N/A |
| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 0.200 | 0.200 | 0.200 | 0.200 | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | N/A | N/A | N/A | N/A | | | | | | | | | | | | | | | |

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| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | PROJECT NUMBER AND NAME Z1742 EW Technical Development | | |
| B. Accomplishments/Planned Program | | | | |
| | FY 02 | FY 03 | FY 04 | FY 05 |
| Accomplishments/Effort/Subtotal Cost | 0.071 | 0.435 | 0.232 | 0.317 |
| RDT&E Articles Quantity | N/A | N/A | N/A | N/A |
| - (U) Continue aircraft IW system design. | | | | |
| | | | | |
| | FY 02 | FY 03 | FY 04 | FY 05 |
| Accomplishments/Effort/Subtotal Cost | | | | |
| RDT&E Articles Quantity | | | | |
| | | | | |
| | FY 02 | FY 03 | FY 04 | FY 05 |
| Accomplishments/Effort/Subtotal Cost | | | | |
| RDT&E Articles Quantity | | | | |
| | | | | |

R-1 SHOPPING LIST - Item No.

102

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| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|----------------------------|---------|--|---------|---------|---------|---------|----------|--|--|--|--|------------------------------|-------|-------|-------|-------|--------------------------------|-------|-------|-------|-------|-------------------|--------|--------|--------|--------|------------------------|--|--|--|--|----------------------------------|--|--|--|--|--|--------|--|--|--|---------------------------|--------|--|--------|--------|--------------------|--------|--|--|--|----------------------|--|--------|--------|--------|----------------|--|--|--|--|-------------------|--|--------|--------|--------|----------|--------|--------|--------|--------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development | PROJECT NUMBER AND NAME Z1742 EW Technical Development | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>C. PROGRAM CHANGE SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"></th> <th style="text-align: right;">FY 2002</th> <th style="text-align: right;">FY 2003</th> <th style="text-align: right;">FY 2004</th> <th style="text-align: right;">FY 2005</th> </tr> </thead> <tbody> <tr> <td>Funding:</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Previous President's Budget:</td> <td style="text-align: right;">0.997</td> <td style="text-align: right;">1.058</td> <td style="text-align: right;">1.081</td> <td style="text-align: right;">1.119</td> </tr> <tr> <td>Current BES/President's Budget</td> <td style="text-align: right;">0.971</td> <td style="text-align: right;">1.035</td> <td style="text-align: right;">0.832</td> <td style="text-align: right;">0.917</td> </tr> <tr> <td>Total Adjustments</td> <td style="text-align: right; border-top: 1px solid black;">-0.026</td> <td style="text-align: right; border-top: 1px solid black;">-0.023</td> <td style="text-align: right; border-top: 1px solid black;">-0.249</td> <td style="text-align: right; border-top: 1px solid black;">-0.202</td> </tr> <tr> <td colspan="5" style="padding-top: 10px;">Summary of Adjustments</td> </tr> <tr> <td> Congressional program reductions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional undistributed reductions</td> <td style="text-align: right;">-0.011</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional rescissions</td> <td style="text-align: right;">-0.014</td> <td></td> <td style="text-align: right;">-0.081</td> <td style="text-align: right;">-0.119</td> </tr> <tr> <td> SBIR/STTR Transfer</td> <td style="text-align: right;">-0.001</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Economic Assumptions</td> <td></td> <td style="text-align: right;">-0.012</td> <td style="text-align: right;">-0.060</td> <td style="text-align: right;">-0.063</td> </tr> <tr> <td> Reprogrammings</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Inflation Savings</td> <td></td> <td style="text-align: right;">-0.011</td> <td style="text-align: right;">-0.108</td> <td style="text-align: right;">-0.020</td> </tr> <tr> <td> Subtotal</td> <td style="text-align: right; border-top: 1px solid black;">-0.026</td> <td style="text-align: right; border-top: 1px solid black;">-0.023</td> <td style="text-align: right; border-top: 1px solid black;">-0.249</td> <td style="text-align: right; border-top: 1px solid black;">-0.202</td> </tr> </tbody> </table> <p style="margin-top: 20px;">Schedule:</p> <p style="margin-left: 20px;">Not Applicable</p> <p>Technical:</p> <p style="margin-left: 20px;">Not Applicable</p> | | | | | | FY 2002 | FY 2003 | FY 2004 | FY 2005 | Funding: | | | | | Previous President's Budget: | 0.997 | 1.058 | 1.081 | 1.119 | Current BES/President's Budget | 0.971 | 1.035 | 0.832 | 0.917 | Total Adjustments | -0.026 | -0.023 | -0.249 | -0.202 | Summary of Adjustments | | | | | Congressional program reductions | | | | | Congressional undistributed reductions | -0.011 | | | | Congressional rescissions | -0.014 | | -0.081 | -0.119 | SBIR/STTR Transfer | -0.001 | | | | Economic Assumptions | | -0.012 | -0.060 | -0.063 | Reprogrammings | | | | | Inflation Savings | | -0.011 | -0.108 | -0.020 | Subtotal | -0.026 | -0.023 | -0.249 | -0.202 |
| | FY 2002 | FY 2003 | FY 2004 | FY 2005 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Funding: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Previous President's Budget: | 0.997 | 1.058 | 1.081 | 1.119 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Current BES/President's Budget | 0.971 | 1.035 | 0.832 | 0.917 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Adjustments | -0.026 | -0.023 | -0.249 | -0.202 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Summary of Adjustments | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional program reductions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional undistributed reductions | -0.011 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional rescissions | -0.014 | | -0.081 | -0.119 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SBIR/STTR Transfer | -0.001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Economic Assumptions | | -0.012 | -0.060 | -0.063 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Reprogrammings | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflation Savings | | -0.011 | -0.108 | -0.020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subtotal | -0.026 | -0.023 | -0.249 | -0.202 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 102

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| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | DATE: | | | | | | | | | | | | | | | | | | | | | | | | |
|---|----------------|---|----------------|----------------|--------------------------------|----------------|----------------|----------------|-----------------------|---------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------------|----------------------|----------------|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | February 2003 | | | | | | | | | | | | | | | | | | | | | | | | |
| APPROPRIATION/BUDGET ACTIVITY | | PROGRAM ELEMENT NUMBER AND NAME | | | PROJECT NUMBER AND NAME | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RDT&E, N / BA-5 | | 0604270N Electronic Warfare Development | | | Z1742 EW Technical Development | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>D. OTHER PROGRAM FUNDING SUMMARY:</p> <table border="1"> <thead> <tr> <th><u>Line Item No. & Name</u></th> <th><u>FY 2002</u></th> <th><u>FY 2003</u></th> <th><u>FY 2004</u></th> <th><u>FY 2005</u></th> <th><u>FY 2006</u></th> <th><u>FY 2007</u></th> <th><u>FY 2008</u></th> <th><u>FY 2009</u></th> <th>To <u>Complete</u></th> <th>Total <u>Cost</u></th> </tr> </thead> <tbody> <tr> <td>Not Applicable</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | | | | | | | | | | <u>Line Item No. & Name</u> | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>FY 2005</u> | <u>FY 2006</u> | <u>FY 2007</u> | <u>FY 2008</u> | <u>FY 2009</u> | To <u>Complete</u> | Total <u>Cost</u> | Not Applicable | | | | | | | | | | |
| <u>Line Item No. & Name</u> | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>FY 2005</u> | <u>FY 2006</u> | <u>FY 2007</u> | <u>FY 2008</u> | <u>FY 2009</u> | To <u>Complete</u> | Total <u>Cost</u> | | | | | | | | | | | | | | | | | | | | | |
| Not Applicable | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>E. ACQUISITION STRATEGY:</p> <p>Not Applicable</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 102

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|---|------------------------|--------------------------------|--|------------|------------------|---|------------------|----------------------------|------------------|------------------|------------|--------------------------|
| Exhibit R-3 Cost Analysis (page 1) | | | | | | | | DATE: February 2003 | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 | | | PROGRAM ELEMENT 0604270N Electronic Warfare Development | | | PROJECT NUMBER AND NAME Z1742 EW Technical Development | | | | | | |
| Cost Categories | Contract Method & Type | Performing Activity & Location | Total PY s Cost | FY 03 Cost | FY 03 Award Date | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | Cost to Complete | Total Cost | Target Value of Contract |
| Primary Hardware Development | Var | Var | 0.918 | 0.475 | Var | 0.300 | Var | 0.380 | Var | 0.400 | 2.473 | |
| Ancillary Hardware Development | | | | | | | | | | | 0.000 | |
| Aircraft Integration | | | | | | | | | | | 0.000 | |
| Ship Integration | | | | | | | | | | | 0.000 | |
| Ship Suitability | | | | | | | | | | | 0.000 | |
| Systems Engineering | | | | | | | | | | | 0.000 | |
| Training Development | | | | | | | | | | | 0.000 | |
| Licenses | | | | | | | | | | | 0.000 | |
| Tooling | | | | | | | | | | | 0.000 | |
| GFE | | | | | | | | | | | 0.000 | |
| Award Fees | | | | | | | | | | | 0.000 | |
| Subtotal Product Development | | | 0.918 | 0.475 | | 0.300 | | 0.380 | | 0.400 | 2.473 | |
| Remarks: | | | | | | | | | | | | |
| Development Support | | | | | | | | | | | 0.000 | |
| Software Development | Var | Var | 0.406 | 0.100 | Var | 0.100 | Var | 0.100 | Var | 0.110 | 0.816 | |
| Integrated Logistics Support | | | | | | | | | | | 0.000 | |
| Configuration Management | | | | | | | | | | | 0.000 | |
| Technical Data | | | | | | | | | | | 0.000 | |
| Studies & Analyses | | | | | | | | | | | 0.000 | |
| GFE | | | | | | | | | | | 0.000 | |
| Award Fees | | | | | | | | | | | 0.000 | |
| Subtotal Support | | | 0.406 | 0.100 | | 0.100 | | 0.100 | | 0.110 | 0.816 | |
| Remarks: | | | | | | | | | | | | |

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|--|------------------------|--------------------------------|--|------------|------------------|---|------------------|----------------------------|------------------|------------------|------------|--------------------------|
| Exhibit R-3 Cost Analysis (page 2) | | | | | | | | DATE: February 2003 | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-5 | | | PROGRAM ELEMENT 0604270N Electronic Warfare Development | | | PROJECT NUMBER AND NAME Z1742 EW Technical Development | | | | | | |
| Cost Categories | Contract Method & Type | Performing Activity & Location | Total PY s Cost | FY 03 Cost | FY 03 Award Date | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | Cost to Complete | Total Cost | Target Value of Contract |
| Developmental Test & Evaluation | Var | Var | 0.700 | 0.210 | Var | 0.200 | Var | 0.200 | Var | 0.200 | 1.510 | |
| Operational Test & Evaluation | | | | | | | | | | | 0.000 | |
| Live Fire Test & Evaluation | | | | | | | | | | | 0.000 | |
| Test Assets | | | | | | | | | | | 0.000 | |
| Tooling | | | | | | | | | | | 0.000 | |
| GFE | | | | | | | | | | | 0.000 | |
| Award Fees | | | | | | | | | | | 0.000 | |
| Subtotal T&E | | | 0.700 | 0.210 | | 0.200 | | 0.200 | | 0.200 | 1.510 | |
| Remarks: | | | | | | | | | | | | |
| Contractor Engineering Support | Var | Var | 0.300 | 0.138 | Var | 0.120 | Var | 0.120 | Var | 0.120 | 0.798 | |
| Government Engineering Support | Var | Var | 0.300 | 0.112 | Var | 0.112 | Var | 0.117 | Var | 0.115 | 0.756 | |
| Program Management Support | | | | | | | | | | | 0.000 | |
| Travel | | | | | | | | | | | 0.000 | |
| Transportation | | | | | | | | | | | 0.000 | |
| SBIR Assessment | | | | | | | | | | | 0.000 | |
| Subtotal Management | | | 0.600 | 0.250 | | 0.232 | | 0.237 | | 0.235 | 1.554 | |
| Remarks: | | | | | | | | | | | | |
| Total Cost | | | 2.624 | 1.035 | | 0.832 | | 0.917 | | 0.945 | 6.353 | |
| Remarks: | | | | | | | | | | | | |

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 52 of 52)