

**UNCLASSIFIED**

|   |                |                  |                       |   |                        |                  |                  |                  |                     |                  |            |
|---|----------------|------------------|-----------------------|---|------------------------|------------------|------------------|------------------|---------------------|------------------|------------|
| Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy  |                |                  |                       |   |                        |                  |                  |                  | DATE: February 2010 |                  |            |
| APPROPRIATION/BUDGET ACTIVITY<br>1319: Research, Development, Test & Evaluation, Navy<br>BA 6: RDT&E Management Support |                |                  |                       | R-1 ITEM NOMENCLATURE<br>PE 0305885N: Tactical Cryptologic Activities |                        |                  |                  |                  |                     |                  |            |
| COST (\$ in Millions)   | FY 2009 Actual | FY 2010 Estimate | FY 2011 Base Estimate | FY 2011 OCO Estimate  | FY 2011 Total Estimate | FY 2012 Estimate | FY 2013 Estimate | FY 2014 Estimate | FY 2015 Estimate    | Cost To Complete | Total Cost |
| Total Program Element   | 1.993          | 2.454            | 1.859                 | 0.000   | 1.859                  | 1.886            | 1.924            | 1.967            | 2.009               | Continuing       | Continuing |
| 0037: TACT COMBAT OPER SYS  | 1.993          | 2.454            | 1.859                 | 0.000   | 1.859                  | 1.886            | 1.924            | 1.967            | 2.009               | Continuing       | Continuing |

A. Mission Description and Budget Item Justification

This is a continuing program that will provide advanced technologies and capabilities to current Electronic Warfare / Electronic Intelligence System Programs of Record (POR). Develop concepts of data / information exchange within the Global Information Grid (GIG) as envisioned by Chief of Naval Operations (CNO) and outlined within the FORCEnet concept. To comply with the intent of the GIG, this program will address compression, transmission, decompression, re-compression and long term storage of targeted data / information without degradation. This program will become an enabler for future capabilities such as remote operation of surface, subsurface, and air EW/ELINT open architecture PORs. A holistic approach to data / information format, processing, transmission, and storage will require developments in antenna technology, communications capabilities, operational concepts, and software development.

|  |         |         |              |             |               |
|--|---------|---------|--------------|-------------|---------------|
| B. Program Change Summary (\$ in Millions) |         |         |              |             |               |
|  | FY 2009 | FY 2010 | FY 2011 Base | FY 2011 OCO | FY 2011 Total |
| Previous President's Budget                | 1.993   | 2.464   | 0.000        | 0.000       | 0.000         |
| Current President's Budget                 | 1.993   | 2.454   | 1.859        | 0.000       | 1.859         |
| Total Adjustments                          | 0.000   | -0.010  | 1.859        | 0.000       | 1.859         |
| • Congressional General Reductions         |         | -0.010  |              |             |               |
| • Congressional Directed Reductions        |         | 0.000   |              |             |               |
| • Congressional Rescissions                | 0.000   | 0.000   |              |             |               |
| • Congressional Adds                       |         | 0.000   |              |             |               |
| • Congressional Directed Transfers         |         | 0.000   |              |             |               |
| • Reprogrammings                           | 0.000   | 0.000   |              |             |               |
| • SBIR/STTR Transfer                       | 0.000   | 0.000   |              |             |               |
| • Program Adjustments                      | 0.000   | 0.000   | 1.859        | 0.000       | 1.859         |

Change Summary Explanation

Technical: Not applicable.

**UNCLASSIFIED**

R-1 Line Item #156

Page 1 of 4

**UNCLASSIFIED**

|   |  |                     |
|---|--|---------------------|
| Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy  |  | DATE: February 2010 |
| APPROPRIATION/BUDGET ACTIVITY<br>1319: <i>Research, Development, Test &amp; Evaluation, Navy</i><br>BA 6: <i>RDT&amp;E Management Support</i> | R-1 ITEM NOMENCLATURE<br>PE 0305885N: <i>Tactical Cryptologic Activities</i> |                     |
| Schedule: Not applicable.   |  |                     |
| FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.                      |  |                     |

**UNCLASSIFIED**

R-1 Line Item #156

Page 2 of 4

**UNCLASSIFIED**

|   |                           |                             |                                      |   |                                       |                             |                             |   |                             |                             |                          |
|---|---------------------------|-----------------------------|--------------------------------------|---|---------------------------------------|-----------------------------|-----------------------------|---|-----------------------------|-----------------------------|--------------------------|
| <b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Navy  |                           |                             |                                      |   |                                       |                             |                             | <b>DATE:</b> February 2010                          |                             |                             |                          |
| <b>APPROPRIATION/BUDGET ACTIVITY</b><br>1319: <i>Research, Development, Test &amp; Evaluation, Navy</i><br>BA 6: <i>RDT&amp;E Management Support</i>  |                           |                             |                                      | <b>R-1 ITEM NOMENCLATURE</b><br>PE 0305885N: <i>Tactical Cryptologic Activities</i> |                                       |                             |                             | <b>PROJECT</b><br>0037: <i>TACT COMBAT OPER SYS</i> |                             |                             |                          |
| <b>COST (\$ in Millions)</b>  | <b>FY 2009<br/>Actual</b> | <b>FY 2010<br/>Estimate</b> | <b>FY 2011<br/>Base<br/>Estimate</b> | <b>FY 2011<br/>OCO<br/>Estimate</b>   | <b>FY 2011<br/>Total<br/>Estimate</b> | <b>FY 2012<br/>Estimate</b> | <b>FY 2013<br/>Estimate</b> | <b>FY 2014<br/>Estimate</b>                         | <b>FY 2015<br/>Estimate</b> | <b>Cost To<br/>Complete</b> | <b>Total<br/>Cost</b>    |
| 0037: <i>TACT COMBAT OPER SYS</i>   | 1.993                     | 2.454                       | 1.859                                | 0.000   | 1.859                                 | 1.886                       | 1.924                       | 1.967   | 2.009                       | Continuing                  | Continuing               |
| Quantity of RDT&E Articles  | 0                         | 0                           | 0                                    | 0   | 0                                     | 0                           | 0                           | 0   | 0                           |                             |                          |
| <b>A. Mission Description and Budget Item Justification</b><br>This is a continuing program that will provide advanced technologies and capabilities to current Electronic Warfare/Electronic Intelligence system programs of record (POR). Develop concepts of data/information exchange within the Global Information Grid (GIG) as envisioned by Chief of Naval Operations (CNO) and outlined within the FORCEnet concept. To comply with the intent of the GIG, this program will address compression, transmission, de-compression, re-compression and long term storage of targeted data/information without degradation. This program will become an enabler for future capabilities such as remote operation of surface, subsurface, and air EW/ELINT open architecture PORs. A holistic approach to data/information format, processing, transmission, and storage will require developments in antenna technology, communications capabilities, operational concepts, and software development. |                           |                             |                                      |   |                                       |                             |                             |   |                             |                             |                          |
| <b>B. Accomplishments/Planned Program (\$ in Millions)</b>  |                           |                             |                                      |   |                                       |                             |                             |   |                             |                             |                          |
|   |                           |                             |                                      |   |                                       |                             | <b>FY 2009</b>              | <b>FY 2010</b>                                      | <b>FY 2011<br/>Base</b>     | <b>FY 2011<br/>OCO</b>      | <b>FY 2011<br/>Total</b> |
| TACT COMBAT OPER SYS  |                           |                             |                                      |   |                                       |                             | 1.993                       | 2.454   | 1.859                       | 0.000                       | 1.859                    |
| <i>FY 2009 Accomplishments:</i><br>Develop concepts of data/information exchange within the Global Information Grid (GIG) as envisioned by Chief of Naval Operations (CNO) and outlined within the FORCEnet concept.  |                           |                             |                                      |   |                                       |                             |                             |   |                             |                             |                          |
| <i>FY 2010 Plans:</i><br>Develop concepts of data/information exchange within the Global Information Grid (GIG) as envisioned by Chief of Naval Operations (CNO) and outlined within the FORCEnet concept.  |                           |                             |                                      |   |                                       |                             |                             |   |                             |                             |                          |
| <i>FY 2011 Base Plans:</i><br>Develop concepts of data/information exchange within the Global Information Grid (GIG) as envisioned by Chief of Naval Operations (CNO) and outlined within the FORCEnet concept.   |                           |                             |                                      |   |                                       |                             |                             |   |                             |                             |                          |

**UNCLASSIFIED**

R-1 Line Item #156

Page 3 of 4

# UNCLASSIFIED

|  |  |   |  |   |                    |
|--|--|---|--|---|--------------------|
| <b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Navy   |  |   |  | <b>DATE:</b> February 2010                          |                    |
| <b>APPROPRIATION/BUDGET ACTIVITY</b><br>1319: <i>Research, Development, Test &amp; Evaluation, Navy</i><br>BA 6: <i>RDT&amp;E Management Support</i> |  | <b>R-1 ITEM NOMENCLATURE</b><br>PE 0305885N: <i>Tactical Cryptologic Activities</i> |  | <b>PROJECT</b><br>0037: <i>TACT COMBAT OPER SYS</i> |                    |
| <b>B. Accomplishments/Planned Program (\$ in Millions)</b>   |  |   |  |   |                    |
|  |  |   |  | <b>FY 2009</b>                                      | <b>FY 2010</b>     |
|  |  |   |  | <b>FY 2011 Base</b>                                 | <b>FY 2011 OCO</b> |
|  |  |   |  | <b>FY 2011 Total</b>                                |                    |
| Accomplishments/Planned Programs Subtotals   |  |   |  | 1.993   | 2.454              |
|  |  |   |  | 1.859   | 0.000              |
|  |  |   |  | 1.859   |                    |
| <b>C. Other Program Funding Summary (\$ in Millions)</b>   |  |   |  |   |                    |
| N/A  |  |   |  |   |                    |
| <b>D. Acquisition Strategy</b>   |  |   |  |   |                    |
| N/A  |  |   |  |   |                    |
| <b>E. Performance Metrics</b>  |  |   |  |   |                    |
| Provide advanced technologies and capabilities to current Electronic Warfare/Electronic Intelligence System Programs of Record (POR).                |  |   |  |   |                    |

# UNCLASSIFIED

R-1 Line Item #156

Page 4 of 4