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| <b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2013 United States Special Operations Command | <b>DATE:</b> February 2012 |
|---|----------------------------|

| APPROPRIATION/BUDGET ACTIVITY   |         |         |                 | R-1 ITEM NOMENCLATURE                       |                  |         |         |         |         |                     |            |
|---|---------|---------|-----------------|---|------------------|---------|---------|---------|---------|---------------------|------------|
| 0400: Research, Development, Test & Evaluation, Defense-Wide<br>BA 3: Advanced Technology Development (ATD) |         |         |                 | PE 1160422BB: Aviation Engineering Analysis |                  |         |         |         |         |                     |            |
| COST (\$ in Millions)   | FY 2011 | FY 2012 | FY 2013<br>Base | FY 2013<br>OCO                              | FY 2013<br>Total | FY 2014 | FY 2015 | FY 2016 | FY 2017 | Cost To<br>Complete | Total Cost |
| Total Program Element   | 4.628   | 0.837   | 0.861           | -   | 0.861            | 0.876   | 0.891   | 0.906   | 0.921   | Continuing          | Continuing |
| SF101: Aviation Engineering<br>Analysis   | 4.628   | 0.837   | 0.861           | -   | 0.861            | 0.876   | 0.891   | 0.906   | 0.921   | Continuing          | Continuing |

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

This program element provides rapid response capability for the investigation, evaluation, and demonstration of technologies for Special Operations Forces (SOF)-unique aviation requirements. Timely application of SOF-unique technology is critical and necessary to meet requirements in such areas as: sensor integration; enhanced situational awareness; near-real-time intelligence to include data fusion, threat detection and avoidance; electronic support measures for threat geo-location and specific emitter identification; navigation; target detection; and future SOF aircraft requirements.

| <b>B. Program Change Summary (\$ in Millions)</b> | <b>FY 2011</b> | <b>FY 2012</b> | <b>FY 2013 Base</b> | <b>FY 2013 OCO</b> | <b>FY 2013 Total</b> |
|---|----------------|----------------|---------------------|--------------------|----------------------|
| Previous President's Budget                       | 4.234          | 0.837          | 0.851               | -                  | 0.851                |
| Current President's Budget                        | 4.628          | 0.837          | 0.861               | -                  | 0.861                |
| Total Adjustments                                 | 0.394          | -              | 0.010               | -                  | 0.010                |
| • Congressional General Reductions                | -              | -              |                     |                    |                      |
| • Congressional Directed Reductions               | -              | -              |                     |                    |                      |
| • Congressional Rescissions                       | -              | -              |                     |                    |                      |
| • Congressional Adds                              | -              | -              |                     |                    |                      |
| • Congressional Directed Transfers                | -              | -              |                     |                    |                      |
| • Reprogrammings                                  | 0.521          | -              |                     |                    |                      |
| • SBIR/STTR Transfer                              | -0.105         | -              |                     |                    |                      |
| • Other Adjustments                               | -0.022         | -              | 0.010               | -                  | 0.010                |

**Change Summary Explanation**

Funding:

FY 2011: Net increase of \$0.394 million is due to economic assumption reduction (-\$0.022 million), transfer to Small Business Innovative Research (-\$0.105 million) and a reprogramming of funding for engineering studies and analysis of (\$0.521 million).

FY 2012: None.

FY 2013: Increase is due to an economic assumption increase (\$0.010 million).

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| Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command   |  | DATE: February 2012 |
| APPROPRIATION/BUDGET ACTIVITY<br>0400: Research, Development, Test & Evaluation, Defense-Wide<br>BA 3: Advanced Technology Development (ATD) | R-1 ITEM NOMENCLATURE<br>PE 1160422BB: Aviation Engineering Analysis |                     |
| Schedule: None.  |  |                     |
| Technical: None.   |  |                     |

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|--|---------|---------|--------------|--|---------------|---------|---------|---|---------------------|------------------|------------|
| Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Special Operations Command  |         |         |              |  |               |         |         |   | DATE: February 2012 |                  |            |
| APPROPRIATION/BUDGET ACTIVITY<br>0400: Research, Development, Test & Evaluation, Defense-Wide<br>BA 3: Advanced Technology Development (ATD)   |         |         |              | R-1 ITEM NOMENCLATURE<br>PE 1160422BB: Aviation Engineering Analysis |               |         |         | PROJECT<br>SF101: Aviation Engineering Analysis |                     |                  |            |
| COST (\$ in Millions)  | FY 2011 | FY 2012 | FY 2013 Base | FY 2013 OCO  | FY 2013 Total | FY 2014 | FY 2015 | FY 2016   | FY 2017             | Cost To Complete | Total Cost |
| SF101: Aviation Engineering Analysis   | 4.628   | 0.837   | 0.861        | -  | 0.861         | 0.876   | 0.891   | 0.906   | 0.921               | Continuing       | Continuing |
| A. Mission Description and Budget Item Justification   |         |         |              |  |               |         |         |   |                     |                  |            |
| This project provides a rapid response capability to support SOF fixed wing aircraft and unmanned aircraft systems. The purpose is to correct system deficiencies, improve asset life, and enhance mission capability through the means of feasibility studies, analysis of alternatives, pre-developmental risk reduction studies, and engineering analyses. This project provides the engineering required to improve the design and performance integrity of the aircraft support systems, sub-systems, equipment, and embedded computer software as they relate to the maintenance, overhaul, repair, quality assurance, modifications, materiel improvements, and service life extensions. Also conducts risk reduction studies, analyses, and demonstrations to support emerging, time critical weapons and sensor enhancements. |         |         |              |  |               |         |         |   |                     |                  |            |
| B. Accomplishments/Planned Programs (\$ in Millions)   |         |         |              |  |               |         |         | FY 2011   | FY 2012             | FY 2013          |            |
| Title: Aviation Engineering Analysis   |         |         |              |  |               |         |         | 4.628   | 0.837               | 0.861            |            |
| FY 2011 Accomplishments:<br>Performed engineering studies and analyses for fixed wing aviation SOF-unique equipment and missions.  |         |         |              |  |               |         |         |   |                     |                  |            |
| FY 2012 Plans:<br>Performs engineering studies and analyses for fixed wing aviation SOF-unique equipment and missions.   |         |         |              |  |               |         |         |   |                     |                  |            |
| FY 2013 Plans:<br>Perform engineering studies and analyses for fixed wing aviation SOF-unique equipment and missions.  |         |         |              |  |               |         |         |   |                     |                  |            |
| Accomplishments/Planned Programs Subtotals   |         |         |              |  |               |         |         | 4.628   | 0.837               | 0.861            |            |
| C. Other Program Funding Summary (\$ in Millions)  |         |         |              |  |               |         |         |   |                     |                  |            |
| N/A  |         |         |              |  |               |         |         |   |                     |                  |            |
| D. Acquisition Strategy  |         |         |              |  |               |         |         |   |                     |                  |            |
| N/A  |         |         |              |  |               |         |         |   |                     |                  |            |
| E. Performance Metrics   |         |         |              |  |               |         |         |   |                     |                  |            |
| N/A  |         |         |              |  |               |         |         |   |                     |                  |            |

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