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| <b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2012 Chemical and Biological Defense Program | <b>DATE:</b> February 2011 |
|--|----------------------------|

| APPROPRIATION/BUDGET ACTIVITY  |         |         |              | R-1 ITEM NOMENCLATURE  |               |         |         |         |         |                  |            |
|--|---------|---------|--------------|--|---------------|---------|---------|---------|---------|------------------|------------|
| 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i><br>BA 6: <i>RDT&amp;E Management Support</i> |         |         |              | PE 0605502BP: <i>SMALL BUSINESS INNOVATIVE RESEARCH (SBIR)</i> |               |         |         |         |         |                  |            |
| COST (\$ in Millions)  | FY 2010 | FY 2011 | FY 2012 Base | FY 2012 OCO  | FY 2012 Total | FY 2013 | FY 2014 | FY 2015 | FY 2016 | Cost To Complete | Total Cost |
| Total Program Element  | 14.976  | -       | -            | -  | -             | -       | -       | -       | -       | 0.000            | 14.976     |
| SB6: <i>SMALL BUSINESS INNOVATIVE RESEARCH (SBIR)</i>  | 14.976  | -       | -            | -  | -             | -       | -       | -       | -       | 0.000            | 14.976     |

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

The overall objective of the CBD SBIR program is to improve the transition or transfer of innovative CBD technologies between DoD components and the private sector for mutual benefit. The CBD program includes those technology efforts that maximize a strong defensive posture in a biological or chemical environment using passive and active means as deterrents. These technologies include chemical and biological detection; information assessment, which includes identification, modeling, and intelligence; contamination avoidance; and protection of both individual soldiers and equipment.

| <b>B. Program Change Summary (\$ in Millions)</b> | <b><u>FY 2010</u></b> | <b><u>FY 2011</u></b> | <b><u>FY 2012 Base</u></b> | <b><u>FY 2012 OCO</u></b> | <b><u>FY 2012 Total</u></b> |
|---|-----------------------|-----------------------|----------------------------|---------------------------|-----------------------------|
| Previous President's Budget                       | -                     | -                     | -                          | -                         | -                           |
| Current President's Budget                        | 14.976                | -                     | -                          | -                         | -                           |
| Total Adjustments                                 | 14.976                | -                     | -                          | -                         | -                           |
| • Congressional General Reductions                |                       | -                     |                            |                           |                             |
| • Congressional Directed Reductions               |                       | -                     |                            |                           |                             |
| • Congressional Rescissions                       | -                     | -                     |                            |                           |                             |
| • Congressional Adds                              |                       | -                     |                            |                           |                             |
| • Congressional Directed Transfers                |                       | -                     |                            |                           |                             |
| • Reprogrammings                                  | -                     | -                     |                            |                           |                             |
| • SBIR/STTR Transfer                              | 14.976                | -                     |                            |                           |                             |
| • Other Adjustments                               | -                     | -                     |                            | -                         | -                           |

**Change Summary Explanation**

Funding: FY10 - Funding transferred and applied to SBIR program (+\$14,976K).

Schedule: N/A

Technical: N/A

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| Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program                                      |         |         |                 |   |                  |         |         |  | DATE: February 2011 |                     |            |
|---|---------|---------|-----------------|---|------------------|---------|---------|--|---------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY<br>0400: Research, Development, Test & Evaluation, Defense-Wide<br>BA 6: RDT&E Management Support |         |         |                 | R-1 ITEM NOMENCLATURE<br>PE 0605502BP: SMALL BUSINESS<br>INNOVATIVE RESEARCH (SBIR) |                  |         |         | PROJECT<br>SB6: SMALL BUSINESS INNOVATIVE<br>RESEARCH (SBIR) |                     |                     |            |
| COST (\$ in Millions)   | FY 2010 | FY 2011 | FY 2012<br>Base | FY 2012<br>OCO  | FY 2012<br>Total | FY 2013 | FY 2014 | FY 2015  | FY 2016             | Cost To<br>Complete | Total Cost |
| SB6: SMALL BUSINESS<br>INNOVATIVE RESEARCH (SBIR)   | 14.976  | -       | -               | -   | -                | -       | -       | -  | -                   | 0.000               | 14.976     |
| Quantity of RDT&E Articles  |         |         |                 |   |                  |         |         |  |                     |                     |            |

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

The SBIR Program is a Congressionally mandated program established to increase the participation of small business in federal research and development (R&D). Currently, each participating government agency must reserve 2.5% of its extramural R&D for SBIR awards to competing small businesses. The goal of the SBIR Program is to invest in the innovative capabilities of the small business community to help meet government R&D objectives while allowing small companies to develop technologies and products which they can then commercialize through sales back to the government or in the private sector.

The Small Business Technology Transfer (STTR) Program like SBIR, is a Government-wide program, mandated by the Small Business Research and Development Enhancement Act of 1992, PL 102-564. STTR was established in FY94 as a three-year pilot program. In early 1996, the General Accounting Office (GAO) conducted a comprehensive review of the Government-wide STTR Program to determine the effectiveness of the pilot program. Upon review of the GAO report, Congress voted to reauthorize the STTR Program to the year 2000, consistent with the authorization period for the SBIR Program.

STTR was established as a companion program to the SBIR Program and is executed in essentially the same manner; however, there are several distinct differences. The STTR Program provides a mechanism for participation by university, Federally-Funded Research and Development Centers (FFRDCs), and other non-profit research institutions. Specifically, the STTR Program is designed to provide an incentive for small companies and research at academic institutions and non-profit research and development institutions to work together to move emerging technical ideas from the laboratory to the marketplace to foster high-tech economic development and to advance U.S. economic competitiveness. Each STTR proposal must be submitted by a team which includes a small business (as the prime contractor for contracting purposes) and at least one research institution, which have entered into a Cooperative Research and Development Agreement for the purposes of the STTR effort. Furthermore, the project must be divided up such that the small business performs at least 40% of the work and the research institution(s) performs at least 30% of the work. The remainder of the work may be performed by either party or a third party. The budget is separate from the SBIR budget and is significantly smaller (0.15% of the extramural R&D budget vs. 2.5% for the SBIR Program).

The DoD has consolidated management and oversight of the CBDP into a single office within the OSD. The Army was designated as the Executive Agent for coordination and integration of the Chemical and Biological Defense (CBD) program. The executive agent for the SBIR/STTR portion of the program is the Army Research Office-Washington.

The overall objective of the CBD SBIR/STTR program is to improve the transition or transfer of innovative CBD technologies between DoD components and the private sector for mutual benefit. The CBD program includes those technology efforts that maximize a strong defensive posture in a biological or chemical environment using passive and active means as deterrents. These technologies include chemical and biological detection; information assessment, which includes identification, modeling, and intelligence; contamination avoidance; and protection of both individual soldiers and equipment.

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| <b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2012 Chemical and Biological Defense Program  |  |  | <b>DATE:</b> February 2011 |   |                |
| <b>APPROPRIATION/BUDGET ACTIVITY</b><br>0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i><br>BA 6: <i>RDT&amp;E Management Support</i> |  | <b>R-1 ITEM NOMENCLATURE</b><br>PE 0605502BP: <i>SMALL BUSINESS INNOVATIVE RESEARCH (SBIR)</i> |                            | <b>PROJECT</b><br>SB6: <i>SMALL BUSINESS INNOVATIVE RESEARCH (SBIR)</i> |                |
| <b>B. Accomplishments/Planned Programs (\$ in Millions)</b>  |  |  | <b>FY 2010</b>             | <b>FY 2011</b>  | <b>FY 2012</b> |
| <b>Title:</b> 1) ZSBIR   |  |  | 14.976                     | -   | -              |
| <b>FY 2010 Accomplishments:</b><br>Small Business Innovative Research.   |  |  |                            |   |                |
| <b>Accomplishments/Planned Programs Subtotals</b>  |  |  | 14.976                     | -   | -              |
| <b>C. Other Program Funding Summary (\$ in Millions)</b><br>N/A  |  |  |                            |   |                |
| <b>D. Acquisition Strategy</b><br>N/A  |  |  |                            |   |                |
| <b>E. Performance Metrics</b><br>N/A   |  |  |                            |   |                |

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