PE NUMBER: 0603859F
PE TITLE: Pollution Prevention

|      | Exhib   | oit R-2, RDT      | &E Budge            | t Item Jus          | stification         |                       |                     | DATE                | February            | 2006  |
|------|---|-------------------|---------------------|---------------------|---------------------|-----------------------|---------------------|---------------------|---------------------|-------|
|      | BUDGET ACTIVITY  04 Advanced Component Development and Prototypes (ACD&P) |                   |                     |                     |                     | TITLE<br>ution Preven | tion                |                     | -                   |       |
|      | Cost (\$ in Millions)   | FY 2005<br>Actual | FY 2006<br>Estimate | FY 2007<br>Estimate | FY 2008<br>Estimate | FY 2009<br>Estimate   | FY 2010<br>Estimate | FY 2011<br>Estimate | Cost to<br>Complete | Total |
|      | Total Program Element (PE) Cost   | 4.768             | 10.483              | 2.853               | 3 2.808             | 2.862                 | 2.928               | 2.979               | Continuing          | TBD   |
| 4852 | Pollution Prevention  | 4.768             | 10.483              | 2.853               | 3 2.808             | 2.862                 | 2.928               | 2.979               | Continuing          | TBD   |

#### (U) A. Mission Description and Budget Item Justification

Funds will be used to target R&D activities that demonstrate and prototype alternative weapon system painting/depainting, maintenance processes that reduce compliance burden associated with National Emissions Standards for Hazardous Air Pollutants (Clean Air Act driven), and other hazardous waste reduction development/prototype requirements. Specifically, funds will target pollution prevention technologies, including replacement of chromate conversion coating on aluminum and magnesium based metals, nonchromated primers to replace zinc chromate, and environmentally safe replacements for cadmium and chrome plating. This progam is Budget Activity (BA) 4, Advanced Component Development and Prototypes, because this account is primarily for development and prototyping of pollution prevention technologies to eliminate/reduce hazardous materials/waste and overall total ownership costs to the Air Force.

#### (U) B. Program Change Summary (\$ in Millions)

| ı |                                      | <u>FY 2005</u> | <u>FY 2006</u> | <u>FY 2007</u> |
|---|--------------------------------------|----------------|----------------|----------------|
| ı | (U) Previous President's Budget      | 2.692          | 2.735          | 2.821          |
| ı | (U) Current PBR/President's Budget   | 4.768          | 10.483         | 2.853          |
| ı | (U) Total Adjustments                | 2.076          | 7.748          |                |
| ı | (U) Congressional Program Reductions | -0.051         | -0.152         |                |
| ı | Congressional Rescissions            |                |                |                |
| ı | Congressional Increases              | 2.800          | 7.900          |                |
| ı | Reprogrammings                       | -0.520         |                |                |
| ı | SBIR/STTR Transfer                   | -0.153         |                |                |
|   |                                      |                |                |                |

#### (U) Significant Program Changes:

Program increased in FY05 and FY06 due to two and three Congressional Inserts respectively.

R-1 Shopping List - Item No. 54-2 of 54-6

|      | Exhibit R-2a, RDT&E Project Justification                                 |                   |                     |                     |                     |                     |                     |                     |   | February 2006 |  |  |
|------|---|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---|---------------|--|--|
|      | BUDGET ACTIVITY  04 Advanced Component Development and Prototypes (ACD&P) |                   |                     |                     |                     |                     |                     |                     | CT NUMBER AND TITLE  Pollution Prevention |               |  |  |
|      | Cost (\$ in Millions)   | FY 2005<br>Actual | FY 2006<br>Estimate | FY 2007<br>Estimate | FY 2008<br>Estimate | FY 2009<br>Estimate | FY 2010<br>Estimate | FY 2011<br>Estimate | Cost to<br>Complete                       | Total         |  |  |
| 4852 | Pollution Prevention  | 4.768             | 10.483              | 2.853               | 2.808               | 2.862               | 2.928               | 2.979               | Continuing                                | TBD           |  |  |
|      | Quantity of RDT&E Articles  | 0                 | 0                   | C                   | 0                   | 0                   | 0                   | 0                   |   |               |  |  |

#### (U) A. Mission Description and Budget Item Justification

Funds will be used to target R&D activities that demonstrate and prototype alternative weapon system painting/depainting, maintenance processes that reduce compliance burden associated with National Emissions Standards for Hazardous Air Pollutants (Clean Air Act driven), and other hazardous waste reduction development/prototype requirements. Specifically, funds will target pollution prevention technologies, including replacement of chromate conversion coating on aluminum and magnesium based metals, nonchromated primers to replace zinc chromate, and environmentally safe replacements for cadmium and chrome plating. This progam is Budget Activity (BA) 4, Advanced Component Development and Prototypes, because this account is primarily for development and prototyping of pollution prevention technologies to eliminate/reduce hazardous materials/waste and overall total ownership costs to the Air Force.

| ( <b>U</b> ) | B. Accomplishments/Planned Program (\$ in Millions)             |                  |                 |                 | FY              | 2005            | FY 2006  | FY 2007    |
|--------------|---|------------------|-----------------|-----------------|-----------------|-----------------|----------|------------|
| (U)          | Resource Conservation and Recovery Act (RCRA) Subtitle C - Haz  |                  | 0.821           | 0.956           | 1.079           |                 |          |            |
| (U)          | Clean Air Act Compliance Burden Reduction                       |                  |                 |                 |                 | 0.934           | 1.017    | 1.109      |
| (U)          | O2 Diesel Air Quality Improvement (Congressional Insert)        |                  |                 |                 |                 | 0.963           | 1.100    | 0.000      |
| (U)          | Laser Applications to Improve AF Operations and Readiness (Cong | ressional Insert | )               |                 |                 | 1.489           | 3.000    | 0.000      |
| (U)          | Advanced Power Technologies (Congressional Insert)              |                  |                 |                 |                 | 0.000           | 3.800    | 0.000      |
| (U)          | Clean Water Act Compliance Burden Reduction                     |                  |                 |                 |                 | 0.170           | 0.185    | 0.201      |
| (U)          | Hazardous Material Use Reduction                                |                  |                 |                 |                 | 0.301           | 0.328    | 0.358      |
| (U)          | Other   |                  |                 |                 |                 | 0.090           | 0.097    | 0.106      |
| (U)          | Total Cost  |                  |                 |                 |                 | 4.768           | 10.483   | 2.853      |
| (U)          | C. Other Program Funding Summary (\$ in Millions)               |                  |                 |                 |                 |                 |          |            |
|              | <u>FY 2005</u> <u>FY 2006</u>                                   | FY 2007          | FY 2008         | FY 2009         | FY 2010         | FY 2011         | Cost to  | Total Cost |
|              | Actual Estimate   | <b>Estimate</b>  | <b>Estimate</b> | <b>Estimate</b> | <b>Estimate</b> | <b>Estimate</b> | Complete | 10tai COSt |

## (U) Not Applicable

#### (U) D. Acquisition Strategy

Pollution Prevention activities are level of effort and use time and materials support contracts.

Project 4852 R-1 Shopping List - Item No. 54-3 of 54-6 Exhibit R-2a (PE 0603859F)

|     | E  | xhibit R-                    | 3, RDT&E                       | Project Co                  | st Anal         | ysis                     |                 |                          |                 | D                        | ATE<br><b>Feb</b> i      | ruary 20   | 06                          |
|-----|--|------------------------------|--------------------------------|-----------------------------|-----------------|--------------------------|-----------------|--------------------------|-----------------|--------------------------|--------------------------|------------|-----------------------------|
|     | PROJECT NO DA Advanced Component Development and Prototypes (ACD&P)  PE NUMBER AND TITLE  PROJECT NO D603859F Pollution Prevention  PROJECT NO D603859F Pollution Prevention |                              |                                |                             |                 |                          |                 |                          |                 | -                        |                          |            |                             |
|     | Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)  | Contract<br>Method &<br>Type | Performing Activity & Location | Total Prior to FY 2005 Cost | FY 2005<br>Cost | FY 2005<br>Award<br>Date | FY 2006<br>Cost | FY 2006<br>Award<br>Date | FY 2007<br>Cost | FY 2007<br>Award<br>Date | Cost to<br>Complete      | Total Cost | Target Value<br>of Contract |
| (U) | Product Development Air Force Research Lab Subtotal Product Development Remarks:   | Various                      | Various                        | 2.989<br>2.989              | 1.716<br>1.716  | Apr-05                   | 2.944<br>2.944  | Apr-06                   | 0.792<br>0.792  | Apr-07                   | Continuing<br>Continuing | TBD<br>TBD | TBD<br>TBD                  |
| (U) | Support Air Force Research Lab Subtotal Support Remarks:   | Various                      | Various                        | 2.715<br>2.715              | 1.175<br>1.175  | Apr-05                   | 2.472<br>2.472  | Apr-06                   | 0.664<br>0.664  | Apr-07                   | Continuing<br>Continuing | TBD<br>TBD | TBD<br>TBD                  |
| (U) | Management Air Force Research Lab Subtotal Management Remarks:   | Various                      | Various                        | 0.407<br>0.407              | 0.131<br>0.131  | Sep-05                   | 0.575<br>0.575  | Sep-06                   | 0.152<br>0.152  | Sep-07                   | Continuing<br>Continuing | TBD<br>TBD | TBD<br>TBD                  |
| (U) | Prototype Air Force Research Lab Subtotal Prototype Remarks:   | Various                      | Various                        | 4.385<br>4.385              | 1.746<br>1.746  | Apr-05                   | 4.492<br>4.492  | Apr-06                   | 1.245<br>1.245  | Apr-07                   | Continuing<br>Continuing | TBD<br>TBD | TBD<br>TBD                  |
| (U) | Total Cost   |                              |                                | 10.496                      | 4.768           |                          | 10.483          |                          | 2.853           |                          | Continuing               | TBD        | TBD                         |

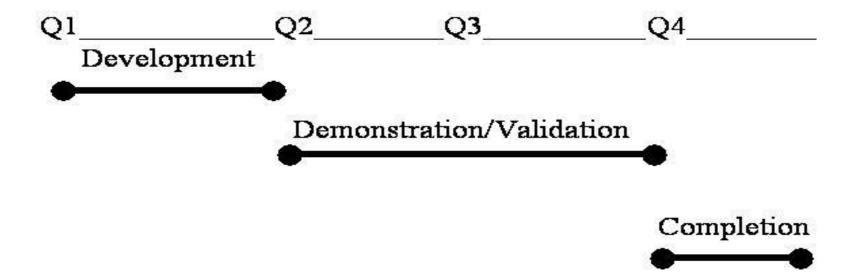
Project 4852

R-1 Shopping List - Item No. 54-4 of 54-6

Exhibit R-3 (PE 0603859F)

| Exhibit R-4, RDT&E Schedule F | February 2006 |                                       |
|-------------------------------|---------------|---------------------------------------|
|                               |               | NUMBER AND TITLE  Illution Prevention |

# Pollution Prevention Demonstration Schedules



Project 4852

R-1 Shopping List - Item No. 54-5 of 54-6

Exhibit R-4 (PE 0603859F)

DATE

| Exhibit R-4a, RDT&E Sche   | Febru   | February 2006               |                             |  |
|--|---|-----------------------------|-----------------------------|--|
| BUDGET ACTIVITY  04 Advanced Component Development and Prototypes (ACD&P)  | mponent Development and Prototypes (ACD&P)  PE NUMBER AND TITLE 0603859F Pollution Prevention |                             |                             |  |
| (U) Schedule Profile (U) Development (U) Prototype (U) Contract Completion | FY 2005<br>1Q<br>2-3Q<br>4Q   | FY 2006<br>1Q<br>2-3Q<br>4Q | FY 2007<br>1Q<br>2-3Q<br>4Q |  |
|  |   |                             |                             |  |
|  |   |                             |                             |  |
|  |   |                             |                             |  |
|  |   |                             |                             |  |
| Project 4852 R-1 Shopping  | g List - Item No. 54-6 of 54-6  | Evhihit G                   | R-4a (PE 0603859F)          |  |