

<b>RDT&amp;E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)</b>	DATE <b>February 1999</b>
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<b>BUDGET ACTIVITY</b> <b>2 - Applied Research</b>	<b>PE NUMBER AND TITLE</b> <b>0602805F Dual Use Science &amp; Technology</b>	<b>PROJECT</b> <b>4770</b>
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COST (\$ In Thousands)	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
4770 Dual Use Science and Technology (S&T)	0	9,961	17,927	17,841	17,735	17,726	18,095	18,472	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0

**(U) A. Mission Description:** This Applied Research program allows the Air Force to leverage industry investments in advanced technologies that are mutually advantageous to both the Air Force and industry. One of the program's goals is to incorporate dual use technology as part of the standard Air Force Science and Technology (S&T) way of doing business. A key component of the program is the cost sharing requirement from both industry and laboratory which affirms commitment to the development effort. Specific projects are determined through annual competitive solicitation(s). Another goal is to utilize FY 1997 Defense Authorization Act Section 804, Other Transactions Authority, as part of the Dual Use S&T program in order to educate the Air Force S&T workforce in non-traditional or commercial contracting practices. Dual use technology was previously funded by the Defense Advanced Research Projects Agency (DARPA), first under the Technology Reinvestment Program (TRP) (FY 1993-96) and then under the Dual Use Application Program (DUAP) (FY 1997-98). In FY 1997, the decision was made to begin transferring responsibility for DUAP from DARPA to the Services Dual Use programs. The two existing DUAP efforts, Dual Use S&T (DU S&T) and Commercial Operations and Support Savings Initiative (COSSI), were split and transferred into Service 6.2 and 6.4 PEs, respectively. This PE is the DU S&T effort for the Air Force. Note: In FY 1999, Congress reduced this program by \$9.6 million which explains the perceived increase in FY 2000 and out.

(U) FY 1998: Not Applicable.

(U) FY 1999 (\$ in Thousands):

- (U) \$2,000      Develop air vehicle technologies that extend the life and improve the performance of both Air Force and commercial fixed wing air vehicles. Areas of research include improving flight control, lightweight structures, common electronics, and vehicle subsystems.
- (U) \$2,556      Develop information technologies that improve the capability of both aerospace command and control, and commercial communications and awareness. Areas of research include intelligent information systems, communication systems, information fusion, and collaborative environment development.
- (U) \$5,069      Develop space technologies that will reduce the cost and improve the capability of both Air Force and commercial space vehicles and launch systems. Areas of research include improved space vehicle survivability, space vehicle control, and space-based sensing.
- (U) \$336        Identified as a source for SBIR.
- (U) \$9,961      Total

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<p>(U) <u>FY 2000 (\$ in Thousands):</u></p> <ul style="list-style-type: none"> <li>- (U) \$8,000     Develop air vehicle technologies that extend the life and improve the performance of both Air Force and commercial fixed wing air vehicles. Areas of research include improving flight control, lightweight structures, common electronics, and vehicle subsystems.</li> <li>- (U) \$5,000     Develop information technologies that improve the capability of both aerospace command and control, and commercial communications and awareness. Areas of research include intelligent information systems, communication systems, information fusion, and collaborative environment development.</li> <li>- (U) \$4,927     Develop space technologies that will reduce the cost and improve the capability of both Air Force and commercial space vehicles and launch systems. Areas of research include improved space vehicle survivability, space vehicle control, and space-based sensing.</li> <li>- (U) \$17,927     Total</li> </ul> <p>(U) <u>FY 2001 (\$ in Thousands):</u></p> <ul style="list-style-type: none"> <li>- (U) \$8,500     Develop air vehicle technologies that extend the life and improve the performance of both Air Force and commercial fixed wing air vehicles. Areas of research include improving flight control, lightweight structures, common electronics, and vehicle subsystems.</li> <li>- (U) \$4,500     Develop information technologies that improve the capability of both aerospace command and control, and commercial communications and awareness. Areas of research include intelligent information systems, communication systems, information fusion, and collaborative environment development.</li> <li>- (U) \$4,841     Develop space technologies that will reduce the cost and improve the capability of both Air Force and commercial space vehicles and launch systems. Areas of research include improved space vehicle survivability, space vehicle control, and space-based sensing.</li> <li>- (U) \$17,841     Total</li> </ul>		
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<p>(U) <b>B. Budget Activity Justification:</b> This program is in Budget Activity 2, Applied Research, since it develops and determines the technical feasibility and military utility of evolutionary and revolutionary technologies.</p> <p>(U) <b>C. Program Change Summary (\$ in Thousands):</b></p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>FY 1998</u></th> <th style="text-align: center;"><u>FY 1999</u></th> <th style="text-align: center;"><u>FY 2000</u></th> <th style="text-align: center;"><u>FY 2001</u></th> <th style="text-align: center;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget/FY 1999 PB</td> <td style="text-align: center;">0</td> <td style="text-align: center;">19,606</td> <td style="text-align: center;">18,253</td> <td style="text-align: center;">18,180</td> <td style="text-align: center;">Cont</td> </tr> <tr> <td>(U) Appropriated Value</td> <td style="text-align: center;">0</td> <td style="text-align: center;">10,000</td> <td></td> <td></td> <td style="text-align: center;">0</td> </tr> <tr> <td>(U) Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    a. Congressional/General Reductions</td> <td></td> <td style="text-align: center;">-39</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    b. SBIR</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    c. Omnibus/Other Above Threshold Reprogrammings</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    d. Below Threshold Reprogrammings</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Budget Year Since FY 1999 PB</td> <td></td> <td></td> <td style="text-align: center;">-326</td> <td style="text-align: center;">-339</td> <td></td> </tr> <tr> <td>(U) Current Budget Submit/FY 2000 PB</td> <td style="text-align: center;">0</td> <td style="text-align: center;">9,961</td> <td style="text-align: center;">17,927</td> <td style="text-align: center;">17,841</td> <td style="text-align: center;">Cont</td> </tr> </tbody> </table> <p>FY 1999: \$336 identified as a source for SBIR.</p> <p>(U) <b>D. Project Change Summary - Description of Significant Changes:</b> Not Applicable.</p> <p>(U) <b>E. Other Program Funding Summary:</b></p> <p>    (U) <u>Related Activities:</u></p> <p>        – (U) This project will be coordinated through the Reliance process to harmonize efforts and eliminate duplication.</p> <p>(U) <b>F. Aquisition Strategy:</b> Not Applicable.</p> <p>(U) <b>G. Schedule Profile:</b> Not Applicable.</p>							<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>	(U) Previous President's Budget/FY 1999 PB	0	19,606	18,253	18,180	Cont	(U) Appropriated Value	0	10,000			0	(U) Adjustments to Appropriated Value						a. Congressional/General Reductions		-39				b. SBIR						c. Omnibus/Other Above Threshold Reprogrammings						d. Below Threshold Reprogrammings						(U) Adjustments to Budget Year Since FY 1999 PB			-326	-339		(U) Current Budget Submit/FY 2000 PB	0	9,961	17,927	17,841	Cont
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