

**UNCLASSIFIED**

<b>RDT&amp;E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)</b>	DATE <b>February 2002</b>
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<b>BUDGET ACTIVITY</b> <b>07 - Operational System Development</b>	<b>PE NUMBER AND TITLE</b> <b>0605024F Anti-Tamper Technology Executive Agent</b>	<b>PROJECT</b> <b>5066</b>
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COST (\$ in Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
5066 Anti-Tamper Technology Executive Agent	0	0	8,000	8,000	8,000	8,000	8,000	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0

**(U) A. Mission Description**

The Air Force is the Executive Agent for implementing Anti-Tamper (AT) policy as well as for developing AT technology for DoD. As Executive Agent, the Air Force will coordinate the technology development among the Services, DoD Agencies and laboratories, and with industry. The Executive Agent is also charged to develop a technology roadmap, establish a data bank/library, and provide a security classification guide.

The Anti-Tamper Hardware Technology Development will occur in five areas: advanced sensor hardware, generic electronic hardware, signature control, access detection & denial, and software development. The technical support will focus on Sandia National Laboratories (SNL). SNL has been the focal point for Anti-Tamper and the USAF plans to use them as such. The program management activities will coordinate the technology development and establish the Anti-Tamper database/library.

The purpose of developing AT measures is to protect critical technologies in U.S. weapon systems that may be sold to foreign governments or that could possibly fall into enemy hands. AT technology will permit the U.S. to preserve its critical weapons systems lead while also satisfying customer needs. Furthermore, AT will add longevity to critical technologies by deterring efforts to reverse engineer, or develop weapon countermeasures against a system or system component.

**(U) FY 2001 (\$ in Thousands)**

**(U)** \$0 No Activity  
**(U)** \$0 Total

**(U) FY 2002 (\$ in Thousands)**

**(U)** \$0 No Activity  
**(U)** \$0 Total

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<p>(U) <b><u>A. Mission Description Continued</u></b></p> <p>(U) <u>FY 2003 (\$ in Thousands)</u></p> <p>(U) \$6,240            Anti-Tamper Hardware Technology Development</p> <p>(U) \$590              Technical Support</p> <p>(U) \$1,170            Program Management Activity (PMA)</p> <p>(U) \$8,000            Total</p> <p>(U) <b><u>B. Budget Activity Justification</u></b></p> <p>This program is in Budget Authority (BA) 7 Operational System Development because Anti-Tamper technologies have applicablty to operational systems.</p> <p>(U) <b><u>C. Program Change Summary (\$ in Thousands)</u></b></p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:60%;"></th> <th style="text-align: center;"><u>FY 2001</u></th> <th style="text-align: center;"><u>FY 2002</u></th> <th style="text-align: center;"><u>FY 2003</u></th> <th style="text-align: center;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    a. Congressional/General Reductions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    b. Small Business Innovative Research</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    c. Omnibus or Other Above Threshold Reprogram</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    d. Below Threshold Reprogram</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    e. Rescissions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Budget Years Since FY 2002 PBR</td> <td></td> <td></td> <td style="text-align: right;">8,000</td> <td></td> </tr> <tr> <td>(U) Current Budget Submit/FY 2003 PBR</td> <td></td> <td></td> <td style="text-align: right;">8,000</td> <td style="text-align: right;">TBD</td> </tr> </tbody> </table> <p>(U) <u>Significant Program Changes:</u></p> <p>(U) <b><u>D. Other Program Funding Summary (\$ in Thousands)</u></b></p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:15%;"></th> <th style="text-align: center;"><u>FY 2001</u></th> <th style="text-align: center;"><u>FY 2002</u></th> <th style="text-align: center;"><u>FY 2003</u></th> <th style="text-align: center;"><u>FY 2004</u></th> <th style="text-align: center;"><u>FY 2005</u></th> <th style="text-align: center;"><u>FY 2006</u></th> <th style="text-align: center;"><u>FY 2007</u></th> <th style="text-align: center;"><u>Cost to</u></th> <th style="text-align: center;"><u>Total Cost</u></th> </tr> <tr> <td></td> <th style="text-align: center;"><u>Actual</u></th> <th style="text-align: center;"><u>Estimate</u></th> <th style="text-align: center;"><u>Complete</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>(U) AF RDT&amp;E</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Other APPN</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>									<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Total Cost</u>	(U) Previous President's Budget					(U) Appropriated Value					(U) Adjustments to Appropriated Value					a. Congressional/General Reductions					b. Small Business Innovative Research					c. Omnibus or Other Above Threshold Reprogram					d. Below Threshold Reprogram					e. Rescissions					(U) Adjustments to Budget Years Since FY 2002 PBR			8,000		(U) Current Budget Submit/FY 2003 PBR			8,000	TBD		<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>		<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>		(U) AF RDT&E										(U) Other APPN									
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<p>(U) <b><u>E. Acquisition Strategy</u></b>          Program Research and Development Announcements (PRDAs) will be used for the Anti-Tamper hardware technology development. A sole source contract will be used for some of the technical support.</p> <p>(U) <b><u>F. Schedule Profile</u></b></p> <table style="width:100%; border: none;"> <thead> <tr> <th style="width: 40%;"></th> <th colspan="4" style="text-align: center;"><u>FY 2001</u></th> <th colspan="4" style="text-align: center;"><u>FY 2002</u></th> <th colspan="3" style="text-align: center;"><u>FY 2003</u></th> </tr> <tr> <th></th> <th style="text-align: center;">1</th> <th style="text-align: center;">2</th> <th style="text-align: center;">3</th> <th style="text-align: center;">4</th> <th style="text-align: center;">1</th> <th style="text-align: center;">2</th> <th style="text-align: center;">3</th> <th style="text-align: center;">4</th> <th style="text-align: center;">1</th> <th style="text-align: center;">2</th> <th style="text-align: center;">3</th> <th style="text-align: center;">4</th> </tr> </thead> <tbody> <tr> <td>(U) Anti-Tamper Hardware Technology Development PRDAs on contract</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> </tbody> </table>												<u>FY 2001</u>				<u>FY 2002</u>				<u>FY 2003</u>				1	2	3	4	1	2	3	4	1	2	3	4	(U) Anti-Tamper Hardware Technology Development PRDAs on contract										X		
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE February 2002		
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT		
<b>07 - Operational System Development</b>				<b>0605024F Anti-Tamper Technology Executive Agent</b>				<b>5066</b>		
<b>(U) A. Project Cost Breakdown (\$ in Thousands)</b>										
						<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>
(U)	AT Hardware	Technology Development								6,240
(U)	Technical Support									590
(U)	PMA									1,170
(U)	Total									8,000
<b>(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)</b>										
<b>(U) Performing Organizations:</b>										
<u>Contractor or</u>	<u>Contract</u>									
<u>Government</u>	<u>Method/Type</u>	<u>Award or</u>	<u>Performing</u>	<u>Project</u>						
<u>Performing</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Activity</u>	<u>Office</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Activity</u>	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>	<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>
<u>Product Development Organizations</u>										
AFRL/XPJ	PRDA	TBD	6,240	6,240				6,240	Continuing	TBD
Sandia National Lab	Sole Source	Various	590	590				590	Continuing	TBD
<u>Support and Management Organizations</u>										
AFRL/XPJ -PMA	Various	TBD	1,170	1,170				1,170	Continuing	TBD
<u>Test and Evaluation Organizations</u>										
<u>Subtotals</u>					<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
					<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>
Subtotal Product Development								6,830	TBD	TBD
Subtotal Support and Management								1,170	TBD	TBD
Subtotal Test and Evaluation										
Total Project								8,000	TBD	TBD