

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

February 2003

BUDGET ACTIVITY

**04 - Advanced Component Development and Prototypes
(ACD&P)**

PE NUMBER AND TITLE

0603287F Physical Security Equipment

PROJECT

5121

COST (\$ in Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
5121 Physical Security Equipment	0	0	24,483	22,699	21,878	25,613	30,125	29,721	0	0
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0

In FY 2004, this is a new PE, efforts were transferred from PE 0603228D8Z.

(U) **A. Mission Description**

This program supports the protection of tactical and nuclear weapons systems, DoD personnel and DoD facilities. The funds are used to provide PSE RDT&E for individual Service and Joint PSE requirements. The PSE program is organized so that an ongoing USAF-coordinated Joint Action Group, consisting of Army, Navy, Air Force, and Defense Threat Reduction Agency (DTRA) representatives monitors, directs and prioritizes potential and existing PSE programs. OSD program oversight, to be established by a Memorandum of Understanding, is to be provided by the Office of the Under Secretary of Defense, Acquisition, Technology and Logistics (AT&L), the Assistant Secretary of Defense for Command, Control and Communications (ASD(C3I)), and the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological (ATSD(NCB)) programs. With few exceptions, each Service sponsors RDT&E efforts for technologies and programs that have multi-service application. This program element supports the Army's advanced engineering development of Interior and Exterior Detection, Security Lighting, Security Barriers and Security Display Units. In a like manner, the program element also supports the Air Force's PSE RDT&E effort in the areas of Exterior Detection/Surveillance, Entry Control, Delay/Denial, Tactical Systems and Airborne Intrusion. Finally, the program supports Navy RDT&E efforts in the areas of Waterside Security, Explosive Detection, and improved technology for Locks, Safes and Vaults. This PE includes funding for Force Protection Commercial-Off-The-Shelf (FP COTS) evaluation and testing, which has received focus since the 1996 Khobar Towers terrorist bombing incident. The FP COTS testing applies to all available technologies, which are considered effective for DoD use.

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

(U) \$0 This is a new Air Force program element. Effective October 1, 2003, funding for this program transfers from OUSD(AT&L) PE 0603228D8Z. Please refer to that PE for FY 2002 accomplishments.

(U) \$0 Total

(U) **FY 2003 (\$ in Thousands)**

(U) \$0 This is a new Air Force program element. Effective October 1, 2003, funding for this program transfers from OUSD(AT&L) PE 0603228D8Z. Please refer to that PE for FY 2003 plans.

(U) \$0 Total

Project 5121

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Exhibit R-2 (PE 0603287F)

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(U) **A. Mission Description Continued**

(U) **FY 2004 (\$ in Thousands)**

(U) \$24,483 AIRCRAFT SELF-PROTECTION SECURITY SYSTEM (0.500 million)

- Correct any deficiencies discovered during test and demonstration and prepare for production.

COMMON REMOTELY OPERATED WEAPON SYSTEM (CROWS) (0.200 million)

- Complete the Risk Reduction and Demonstration Phase
- Prepare for Production
- Correct any problems discovered during prototype testing.

DELAY/DENIAL (D/D) DEVELOPMENT/VALIDATION (0.900 million)

- Continue to manage D/D product developments.
- Continue to evaluate D/D COTS products.
- Continue to recommend new D/D technologies.

EXTERIOR PSE DEVELOPMENT/QUALIFICATION (0.925 million)

- Continue to manage sensor, access control, and assessment product developments.
- Continue to evaluate sensor, access control, and assessment COTS products.
- Continue to recommend new sensor, access control, and assessment technologies.

LEAP AHEAD PROGRAM (0.908 million)

- Continue to identify technological advances at DoD, DoE, University Labs, DARPA programs, etc., with PSE utility.
- Continue to respond/research FP Battlelab requests for information.
- Continue to prepare operational systems improvement plans. Develop technology roadmap. Update system architecture.

SMART GATE (0.775 million)

- Continue to test, develop, and integrate equipment to improve security and access to facilities.

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<p>(U) <u>A. Mission Description Continued</u></p> <p>(U) <u>FY 2004 (\$ in Thousands) Continued</u></p> <p>COMMERCIAL-OFF-THE-SHELF TESTING (5.216 million)</p> <ul style="list-style-type: none"> ·Procure and deliver COTS Force Protection Equipment in support of DoD urgent and compelling requirements for evaluation and testing. ·Publish appropriate reports and place them on the Force Protection and Physical Security Communities of Practice Portal. ·Update the User's Guide of commercially available Non Developmental Items for Force Protection users. ·Update methodology and publish test and evaluation schedule for FY 2004. ·Procure and test biometrics systems for integration into portals for greater identity assurance. ·Procure and test systems that reduce manpower and enhance security effectiveness. <p>TACTICAL AUTOMATED SECURITY SYSTEM (4.033 million)</p> <ul style="list-style-type: none"> ·Conduct testing of COTS products to add capabilities to the TASS suite of products. ·Award and perform technology enhancement ECPs to improve/provide new capabilities. ·Continue the miniaturization efforts to produce a system that is small, lightweight, and durable. ·Continue Annunciator efforts to provide a man-portable annunciation capability. ·Continue data communications efforts to increase capability and harden/secure data communications. ·Integrate entry control and annunciation capabilities. ·Continue efforts that increase the situational awareness for the operators. <p>WATERSIDE SECURITY SYSTEM (2.902 million)</p> <ul style="list-style-type: none"> ·Continue T&E of COTS technology at the 5000 Mike Pier integration facility. ·Support WSS operational sites. ·Complete work on the Joint US/UK Sonar RDT&E Project. ·Deploy new sonar technology at a US and UK operational site. ·Integrate teleconferencing, document control, e-learning technology into the KM Portal. ·Evaluate new waterside barrier technologies. ·Evaluate communications technologies for shipboard and waterfront applications. ·Install waterside barrier technology at Navy sites. 		
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<div style="margin-bottom: 10px;"> (U) <u>A. Mission Description Continued</u> </div> <div style="margin-bottom: 10px;"> (U) <u>FY 2004 (\$ in Thousands) Continued</u> </div> <div style="margin-bottom: 10px;"> <p>EXPLOSIVE DETECTION EQUIPMENT (4.908 million)</p> <ul style="list-style-type: none"> ·Conduct market surveys and investigations for COTS and developmental EDE to be further evaluated. ·Conduct laboratory and operational testing of several EDE technologies. ·Integrate COTS and developmental systems for the detection and identification of IEDs. ·Examine the most suitable combinations of EDE technologies, such as imaging and trace, to determine the most effective combination for the detection of explosives. ·Update the threat to DoD from IEDs. ·Continue to develop logistic support plans, summaries, operational manuals for selected COTS products. ·Update and maintain the EDE web site. </div> <div style="margin-bottom: 10px;"> <p>LOCKS, SAFES, VAULTS (1.716 million)</p> <ul style="list-style-type: none"> ·Update and publish guide specifications for security equipment (as needed). ·Develop and publish specification for label seals. ·Develop and implement testing/qualification procedures for label seals. ·Publish four Lock Program Newsletters. ·Test and evaluate forced entry resistance of selected weapon storage and magazine door systems. ·Support DoD locking system/security hardware procurement and troubleshooting requirements. ·Monitor, evaluate, and track problems and vulnerabilities associated with approved security equipment. ·Develop and publish cost effective methods to upgrade attack resistance of AA&E magazine door systems. ·Test and evaluate commercially available forced entry attack tools. ·Determine operational and security requirements for high security, biometrics/mechanical locking systems for protections of conventional and non-conventional arms, ammunition, & explosives, and classified information. ·Select and evaluate biometrics technology to be integrated into currently approved or developing high security locking / security systems </div> <div> <p>ELECTRONIC TRIP FLARE (1.500 million)</p> <ul style="list-style-type: none"> ·Conduct Operational Evaluation portion of Early User Appraisal by Army Research Laboratory Human Factors Field Element at the US Army Maneuver Support Center. </div>		
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5121

(U) **A. Mission Description Continued**(U) **FY 2004 (\$ in Thousands) Continued**

- Prepare Final Prototype Evaluation Report.
- Rewrite Operational Requirements Document to Update Analysis.

(U) \$24,483 Total

(U) **B. Budget Activity Justification**

This program is a level 4 budget activity because of the need to evaluate, test and integrate developmental, non-developmental, and commercial equipment for the protection of DoD personnel and facilities, including nuclear assets and other critical weapon systems. This program supports the development of physical security equipment (PSE), including that equipment used for Force Protection, for all DoD Components.

(U) **C. Program Change Summary (\$ in Thousands)**

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>Total Cost</u>
(U) Previous President's Budget	0	0	0	
(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 2003 PBR	0	0	24,483	
(U) Current Budget Submit/FY 2004 PBR	0	0	24,483	

(U) **Significant Program Changes:**

OSD PBD 203C transferred funding for this existing program, along with PE 0604287F, from OUSD(AT&L) PE 0603228D8Z to the Air Force for management and execution, effective October 1, 2003.

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(U) D. Other Program Funding Summary (\$ in Thousands)

	<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>FY 2008</u>	<u>FY 2009</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>Estimate</u>	<u>Complete</u>	

(U) AF RDT&E

(U) Other APPN

Not Applicable

(U) E. Acquisition Strategy

Not Applicable

(U) F. Schedule Profile

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>
1	2	3	4
1	2	3	4
1	2	3	4

(U) Not Applicable

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2003																																																																																																																																								
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<p>(U) <u>A. Project Cost Breakdown (\$ in Thousands)</u></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: right;"><u>FY 2002</u></th> <th style="text-align: right;"><u>FY 2003</u></th> <th style="text-align: right;"><u>FY 2004</u></th> </tr> </thead> <tbody> <tr><td>(U) ASPSS</td><td style="text-align: right;">0</td><td style="text-align: right;">0</td><td style="text-align: right;">500</td></tr> <tr><td>(U) CROWS</td><td style="text-align: right;">0</td><td style="text-align: right;">0</td><td style="text-align: right;">200</td></tr> <tr><td>(U) Delay/Denial Demonstration/Validation</td><td style="text-align: right;">0</td><td style="text-align: right;">0</td><td style="text-align: right;">900</td></tr> <tr><td>(U) Exterior PSE Development/Qualification</td><td style="text-align: right;">0</td><td style="text-align: right;">0</td><td style="text-align: right;">925</td></tr> <tr><td>(U) Leap Ahead Program</td><td style="text-align: right;">0</td><td style="text-align: right;">0</td><td style="text-align: right;">908</td></tr> <tr><td>(U) Smart Gate (a.k.a. SAFE Gate)</td><td style="text-align: right;">0</td><td style="text-align: right;">0</td><td style="text-align: right;">775</td></tr> <tr><td>(U) COTS</td><td style="text-align: right;">0</td><td style="text-align: right;">0</td><td style="text-align: right;">5,216</td></tr> <tr><td>(U) TASS</td><td style="text-align: right;">0</td><td style="text-align: right;">0</td><td style="text-align: right;">4,033</td></tr> <tr><td>(U) WSS</td><td style="text-align: right;">0</td><td style="text-align: right;">0</td><td style="text-align: right;">2,902</td></tr> <tr><td>(U) EDE</td><td style="text-align: right;">0</td><td style="text-align: right;">0</td><td style="text-align: right;">4,908</td></tr> <tr><td>(U) Locks, Safes, Vaults</td><td style="text-align: right;">0</td><td style="text-align: right;">0</td><td style="text-align: right;">1,716</td></tr> <tr><td>(U) ETF</td><td style="text-align: right;">0</td><td style="text-align: right;">0</td><td style="text-align: right;">1,500</td></tr> <tr><td>(U) Total</td><td style="text-align: right;">0</td><td style="text-align: right;">0</td><td style="text-align: right;">24,483</td></tr> </tbody> </table> <p>(U) <u>B. Budget Acquisition History and Planning Information (\$ in Thousands)</u></p> <p>(U) <u>Performing Organizations:</u></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Contractor or Government</u></th> <th style="text-align: left;"><u>Contract Method/Type or Funding Vehicle</u></th> <th style="text-align: left;"><u>Award or Obligation Date</u></th> <th style="text-align: left;"><u>Performing Activity EAC</u></th> <th style="text-align: left;"><u>Project Office EAC</u></th> <th style="text-align: right;"><u>Total Prior to FY 2002</u></th> <th style="text-align: right;"><u>Budget FY 2002</u></th> <th style="text-align: right;"><u>Budget FY 2003</u></th> <th style="text-align: right;"><u>Budget FY 2004</u></th> <th style="text-align: right;"><u>Budget to Complete</u></th> <th style="text-align: right;"><u>Total Program</u></th> </tr> </thead> <tbody> <tr> <td colspan="11"><u>Product Development Organizations</u></td> </tr> <tr> <td>HQ ESC (Air Force)</td> <td>MIPR</td> <td>1 Nov 03</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">9,980</td> <td></td> <td style="text-align: right;">9,980</td> </tr> <tr> <td>PM-PSE (US Army)</td> <td>MIPR</td> <td>1 Nov 03</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">3,238</td> <td></td> <td style="text-align: right;">3,238</td> </tr> <tr> <td>CNO-N34 (US Navy)</td> <td>MIPR</td> <td>1 Nov 03</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">11,265</td> <td></td> <td style="text-align: right;">11,265</td> </tr> <tr> <td colspan="11"><u>Support and Management Organizations</u></td> </tr> <tr> <td colspan="11"><u>Test and Evaluation Organizations</u></td> </tr> </tbody> </table>												<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	(U) ASPSS	0	0	500	(U) CROWS	0	0	200	(U) Delay/Denial Demonstration/Validation	0	0	900	(U) Exterior PSE Development/Qualification	0	0	925	(U) Leap Ahead Program	0	0	908	(U) Smart Gate (a.k.a. SAFE Gate)	0	0	775	(U) COTS	0	0	5,216	(U) TASS	0	0	4,033	(U) WSS	0	0	2,902	(U) EDE	0	0	4,908	(U) Locks, Safes, Vaults	0	0	1,716	(U) ETF	0	0	1,500	(U) Total	0	0	24,483	<u>Contractor or Government</u>	<u>Contract Method/Type or Funding Vehicle</u>	<u>Award or Obligation Date</u>	<u>Performing Activity EAC</u>	<u>Project Office EAC</u>	<u>Total Prior to FY 2002</u>	<u>Budget FY 2002</u>	<u>Budget FY 2003</u>	<u>Budget FY 2004</u>	<u>Budget to Complete</u>	<u>Total Program</u>	<u>Product Development Organizations</u>											HQ ESC (Air Force)	MIPR	1 Nov 03						9,980		9,980	PM-PSE (US Army)	MIPR	1 Nov 03						3,238		3,238	CNO-N34 (US Navy)	MIPR	1 Nov 03						11,265		11,265	<u>Support and Management Organizations</u>											<u>Test and Evaluation Organizations</u>										
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(U) <u>Government Furnished Property:</u>						
<u>Item</u>	<u>Contract</u> <u>Method/Type</u>	<u>Award or</u> <u>Obligation</u>	<u>Delivery</u> <u>Date</u>	<u>Total Prior</u> <u>to FY 2002</u>	<u>Budget</u> <u>FY 2002</u>	<u>Budget</u> <u>FY 2003</u>
<u>Description</u>	<u>or Funding</u> <u>Vehicle</u>	<u>Date</u>	<u>Date</u>	<u>Budget</u> <u>FY 2004</u>	<u>Budget to</u> <u>Complete</u>	<u>Total</u> <u>Program</u>
<u>Product Development Property</u>						
Not Applicable						
<u>Support and Management Property</u>						
<u>Test and Evaluation Property</u>						
<u>Subtotals</u>				<u>Total Prior</u> <u>to FY 2002</u>	<u>Budget</u> <u>FY 2002</u>	<u>Budget</u> <u>FY 2003</u>
				<u>Budget</u> <u>FY 2004</u>	<u>Budget to</u> <u>Complete</u>	<u>Total</u> <u>Program</u>
Not Applicable						
Subtotal Product Development					24,483	24,483
Subtotal Support and Management						
Subtotal Test and Evaluation						
Total Project					24,483	24,483

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