

UNCLASSIFIED

PE NUMBER: 0603287F
 PE TITLE: Physical Security Equipment

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2008
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BUDGET ACTIVITY 04 Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603287F Physical Security Equipment
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Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	1.248	2.847	0.477	0.478	0.492	0.502	0.512	Continuing	TBD
5121 Physical Security Equipment	1.248	2.847	0.477	0.478	0.492	0.502	0.512	Continuing	TBD

(U) A. Mission Description and Budget Item Justification

This program is a budget activity level 4 based on the concept/technology development activities ongoing within the program. The purpose of this program is to develop physical security equipment (PSE) systems, to include Force Protection, for all DoD components. This program supports the protection of tactical, fixed, 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 members of the physical security equipment action group (PSEAG), which consist of the Army, Navy, Air Force, and Defense Threat Reduction Agency (DTRA) representatives monitors, directs and prioritizes potential and existing PSE programs. OSD program oversight is provided by the Office of the Under Secretary of Defense, Acquisition, Technology and Logistics (AT&L) and the Assistant Secretary of Defense for Intelligence (USD(I)). 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. Beginning with FY 1997, 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 physical security use.

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	1.284	0.466	0.481
(U) Current PBR/President's Budget	1.248	2.847	0.477
(U) Total Adjustments	-0.036		
(U) Congressional Program Reductions			
Congressional Rescissions			
Congressional Increases			
Reprogrammings			
SBIR/STTR Transfer	-0.036		

(U) Significant Program Changes:

In FY 2007, Project Number 0603287F, Physical Security Equipment, efforts will transferred to PE 603161D, Nuclear and Conventional Physical Security Equipment, in order to recognize the synergy between nuclear weapons and conventional physical security and to leverage common solutions to common capability gaps.

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These residual funds will be reprogrammed.

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BUDGET ACTIVITY 04 Advanced Component Development and Prototypes (ACD&P)				PE NUMBER AND TITLE 0603287F Physical Security Equipment			PROJECT NUMBER AND TITLE 5121 Physical Security Equipment			
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total	
5121 Physical Security Equipment	1.248	2.847	0.477	0.478	0.492	0.502	0.512	Continuing	TBD	
Quantity of RDT&E Articles	0	0	0	0	0	0	0			

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

This program is a budget activity level 4 based on the concept/technology development activities ongoing within the program. The purpose of this program is to develop physical security equipment (PSE) systems, to include Force Protection, for all DoD components. This program supports the protection of tactical, fixed, 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 members of the physical security equipment action group (PSEAG), which consist of the Army, Navy, Air Force, and Defense Threat Reduction Agency (DTRA) representatives monitors, directs and prioritizes potential and existing PSE programs. OSD program oversight is provided by the Office of the Under Secretary of Defense, Acquisition, Technology and Logistics (AT&L) and the Assistant Secretary of Defense for Intelligence (USD(I)). 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. Beginning with FY 1997, 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 physical security use.

(U) **B. Accomplishments/Planned Program (\$ in Millions)**FY 2007FY 2008FY 2009

(U) FORCE PROTECTION/TACTICAL SECURITY EQUIPMENT

- Awarded LKMD SDD contract. Conduct Production Qualification LKMD testing.
- Issued Federal Business Opportunities Announcement for the Tactical Video Surveillance System (TVSS).
- Conducted market survey for the TVSS.
- Conducted Concept Exploration for the best technical approach to integrate TVSS with other phenomenology for tactical intrusion detection.
- Conducted operational testing of ASPSS.
- Refined and researched improvements for the Smart Gate program.
- Continued TASS P3I efforts including improvements to the annunciator.
- Continued to manage, develop, evaluate, and test Delay/Denial products.
- Continued to manage sensor and assessment product developments and tests.
- Continued to research technological advances at DoD, DoE, University Labs, DARPA, within industry, etc., with PSE utility.
- Continued to prepare operational systems improvement plans; develop technology roadmap, update system architecture.
- Continued to test, develop, and integrate equipment to improve security and access to facilities.

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04 Advanced Component Development and Prototypes (ACD&P)

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0603287F Physical Security
Equipment

PROJECT NUMBER AND TITLE

5121 Physical Security Equipment

(U) <u>B. Accomplishments/Planned Program (\$ in Millions)</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
- Began to develop the XML Wide Area Sensor.			
(U) FORCE PROTECTION/TACTICAL SECURITY EQUIPMENT	1.248		
In FY 2006, Project Number 0603287F - Physical Security Equipment efforts transferred to PE 603161D8Z - Nuclear and Conventional Physical Security Equipment. Please see PE 603161D8Z for FY 2007 plans.			
(U) FORCE PROTECTION/TACTICAL SECURITY EQUIPMENT		2.847	
In FY 2006, Project Number 0603287F - Physical Security Equipment efforts transferred to PE 603161D8Z - Nuclear and Conventional Physical Security Equipment. Please see PE 603161D8Z for FY 2008 plans.			
(U) FORCE PROTECTION/TACTICAL SECURITY EQUIPMENT			0.477
In FY 2006, Project Number 0603287F - Physical Security Equipment efforts transferred to PE 603161D8Z - Nuclear and Conventional Physical Security Equipment. Please see PE 603161D8Z for FY 2009 plans.			
(U) ROBOTIC SECURITY SYSTEMS INTEGRATION			
- Demonstrated ability to network robotic systems to provide enhanced detection, surveillance, and response in all aspects of installation force protection and installation security.			
- Continued efforts to improve the operational capability and safety of integrated weapon systems and robotics platforms employed in force protection and security missions.			
- Continues imagery improvements for the FPASS.			
- Developed a Digital Network Centric capability for the Remotely Operated Weapons System (ROWS).			
(U) ROBOTIC SECURITY SYSTEMS INTEGRATION			
In FY 2006, Project Number 0603287F - Physical Security Equipment efforts transferred to PE 603161D8Z - Nuclear and Conventional Physical Security Equipment. Please see PE 603161D8Z for FY 2007 plans.			
(U) ROBOTIC SECURITY SYSTEMS INTEGRATION			
In FY 2006, Project Number 0603287F, Physical Security Equipment, efforts transferred to PE 603161D, Nuclear and Conventional Physical Security Equipment. Please see PE 603161D for FY 2008 plans.			
(U) ROBOTIC SECURITY SYSTEMS INTEGRATION			
In FY 2006, Project Number 0603287F - Physical Security Equipment efforts transferred to PE 603161D8Z - Nuclear and Conventional Physical Security Equipment. Please see PE 603161D8Z for FY 2009 plans.			
(U) WATERSIDE SECURITY SYSTEM			
- Began the C3 integration of Pierside and Shipboard Security Systems.			
- Began the upgrade of Swimmer Detection sonars.			
(U) WATERSIDE SECURITY SYSTEM			
In FY 2006, Project Number 0603287F - Physical Security Equipment efforts transferred to PE 603161D8Z - Nuclear and Conventional Physical Security Equipment. Please see PE 603161D8Z for FY 2007 plans.			

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**0603287F Physical Security
Equipment**

PROJECT NUMBER AND TITLE

5121 Physical Security Equipment**(U) B. Accomplishments/Planned Program (\$ in Millions)**FY 2007FY 2008FY 2009**(U) WATERSIDE SECURITY SYSTEM**

In FY 2006, Project Number 0603287F - Physical Security Equipment efforts transferred to PE 603161D8Z - Nuclear and Conventional Physical Security Equipment. Please see PE 603161D8Z for FY 2008 plans.

(U) WATERSIDE SECURITY SYSTEM

In FY 2006, Project Number 0603287F - Physical Security Equipment efforts transferred to PE 603161D8Z - Nuclear and Conventional Physical Security Equipment. Please see PE 603161D8Z for FY 2009 plans.

(U) EXPLOSIVE DETECTION EQUIPMENT

- Invested in the integration of image and chem/bio detection to counter the WMD threat.
- Invested in the reduction of the manpower footprint associated with the detection of vehicle and cargo explosive threats.
- Awarded the development contract for Video/Radar Concealed Bomb Detection.
- Began to build the infrastructure to test Shaped Energy X-Ray Detection Systems.

(U) EXPLOSIVE DETECTION EQUIPMENT

In FY 2006, Project Number 0603287F - Physical Security Equipment efforts transferred to PE 603161D8Z - Nuclear and Conventional Physical Security Equipment. Please see PE 603161D8Z for FY 2007 plans.

(U) EXPLOSIVE DETECTION EQUIPMENT

In FY 2006, Project Number 0603287F - Physical Security Equipment efforts transferred to PE 603161D8Z - Nuclear and Conventional Physical Security Equipment. Please see PE 603161D8Z for FY 2008 plans.

(U) EXPLOSIVE DETECTION EQUIPMENT

In FY 2006, Project Number 0603287F - Physical Security Equipment efforts transferred to PE 603161D8Z - Nuclear and Conventional Physical Security Equipment. Please see PE 603161D8Z for FY 2009 plans.

(U) LOCKS, SAFES, VAULTS

- Completed the light-wight weapons armory door ILD prototype.
- Developed ILD design improvements to increase operational capability and improved resistance against forced entry.
- Continued evaluating Lock technology and attack tools.

(U) LOCKS, SAFES, VAULTS

In FY 2006, Project Number 0603287F - Physical Security Equipment efforts transferred to PE 603161D8Z - Nuclear and Conventional Physical Security Equipment. Please see PE 603161D8Z for FY 2007 plans.

(U) LOCKS, SAFES, VAULTS

In FY 2006, Project Number 0603287F - Physical Security Equipment efforts transferred to PE 603161D8Z - Nuclear and Conventional Physical Security Equipment. Please see PE 603161D8Z for FY 2008 plans.

(U) LOCKS, SAFES, VAULTS

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(U) **B. Accomplishments/Planned Program (\$ in Millions)**

FY 2007

FY 2008

FY 2009

In FY 2006, Project Number 0603287F - Physical Security Equipment efforts transferred to PE 603161D8Z - Nuclear and Conventional Physical Security Equipment. Please see PE 603161D8Z for FY 2009 plans.

(U) COMMERCIAL-OFF-THE-SHELF TESTING

- Delivered FPED V After Action Report
- Distributed FPED V CDs
- Launched FPED VI on-line registration
- Prepared to execute FPED VI.
- Continued to seek near-term (commercial) solutions for immediate force protection needs.

(U) COMMERCIAL-OFF-THE-SHELF TESTING

In FY 2006, Project Number 0603287F - Physical Security Equipment efforts transferred to PE 603161D8Z - Nuclear and Conventional Physical Security Equipment. Please see PE 603161D8Z for FY 2007 plans.

(U) COMMERCIAL-OFF-THE-SHELF TESTING

In FY 2006, Project Number 0603287F - Physical Security Equipment efforts transferred to PE 603161D8Z - Nuclear and Conventional Physical Security Equipment. Please see PE 603161D8Z for FY 2008 plans.

(U) COMMERCIAL-OFF-THE-SHELF TESTING

In FY 2006, Project Number 0603287F - Physical Security Equipment efforts transferred to PE 603161D8Z - Nuclear and Conventional Physical Security Equipment. Please see PE 603161D8Z for FY 2009 plans.

(U) Total Cost

1.248

2.847

0.477

(U) **C. Other Program Funding Summary (\$ in Millions)**

FY 2007

FY 2008

FY 2009

FY 2010

FY 2011

FY 2012

FY 2013

Cost to

Total Cost

Actual

Estimate

Estimate

Estimate

Estimate

Estimate

Estimate

Complete

(U) Not Applicable

(U) **D. Acquisition Strategy**

Not Applicable

Exhibit R-3, RDT&E Project Cost Analysis

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(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior to FY 2007 Cost</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Product Development</u>												
HQ ESC (Air Force)	PO			1.248	Nov-07	2.847		0.477		Continuing	TBD	TBD
PM-PSE (US Army)	MIPR									Continuing	TBD	TBD
CNO-N34 (US Navy)	MIPR									Continuing	TBD	TBD
DTRA	MIPR									Continuing	TBD	TBD
Subtotal Product Development			0.000	1.248		2.847		0.477		Continuing	TBD	TBD
Remarks:												
(U) <u>Support</u>												
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) <u>Test & Evaluation</u>												
Subtotal Test & Evaluation			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) <u>Management</u>												
Program Office Support										Continuing	TBD	TBD
Subtotal Management			0.000	0.000		0.000		0.000		Continuing	TBD	TBD
Remarks:												
(U) <u>Not Applicable</u>												
(U) Total Cost			0.000	1.248		2.847		0.477		Continuing	TBD	TBD
Remarks:												

Exhibit R-4, RDT&E Schedule Profile

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04 Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE
0603287F Physical Security
Equipment

PROJECT NUMBER AND TITLE
5121 Physical Security Equipment

Exhibit R-4, Schedule Profile																	Date: January 2006																																	
BUDGET ACTIVITY 04 Advanced Component Development and Prototypes (ACD&P)																	PE NUMBER AND TITLE PE0603287F Physical Security Equipment																	PROJECT NUMBER AND NAME 5121 Physical Security Equipment																
Fiscal Year	2003				2004				2005				2006				2007				2008				2009				2010				2011																	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4														
Award IRMD SDD contract													▲																																					
Continue TASS P3I efforts including the annunciator													▲																																					
Continue Imagery improvements for the FPASS.														▲																																				
Begin Smart Gate P3I										▲																																								
Design MPP modular architecture											▲																																							

Exhibit R-4, RDT&E Schedule Profile

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PROJECT NUMBER AND TITLE

5121 Physical Security Equipment

Exhibit R-4, Schedule Profile

Date: January 2006

BUDGET ACTIVITY

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PE0603287F Physical Security Equipment

PROJECT NUMBER AND NAME

5121 Physical Security Equipment

Fiscal Year	2003				2004				2005				2006				2007				2008				2009				2010				2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Initiate LRIP of the Laser IMS Handheld Explosive Detector.								▲																												
Award development contract for Video/Radar Concealed Bomb Detection.												▲																								
Develop Test for Hybrid System																▲																				

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04 Advanced Component Development and Prototypes (ACD&P)

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PROJECT NUMBER AND TITLE

5121 Physical Security Equipment

Exhibit R-4, Schedule Profile

Date: January 2006

BUDGET ACTIVITY

04 Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

PE0603287F Physical Security Equipment

PROJECT NUMBER AND NAME

5121 Physical Security Equipment

Fiscal Year	2003				2004				2005				2006				2007				2008				2009				2010				2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Continue evaluating Lock technology and attack																▲																				
Begin upgrade of																▲																				
Executed FPED V												▲																								
Integrate biometric technology with high security lock technology																▲																				

Exhibit R-4, RDT&E Schedule Profile

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04 Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE
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Equipment

PROJECT NUMBER AND TITLE
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Exhibit R-4, Schedule Profile																				Date: January 2006																
BUDGET ACTIVITY 04 Advanced Component Development and Prototypes (ACD&P)										PE NUMBER AND TITLE PE0603287F Physical Security Equipment										PROJECT NUMBER AND NAME 5121 Physical Security Equipment																
Fiscal Year	2003				2004				2005				2006				2007				2008				2009				2010				2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Market Survey for TVSS																																				
TVSS Prototype Design, Fabrication, & Integration																																				
PAS Market Survey and Investigation																																				

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Exhibit R-4, Schedule Profile																				Date: January 2006																
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Fiscal Year	2003				2004				2005				2006				2007				2008				2009				2010				2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Refine MMW technology to counter standoff and suicide bomber threats											▲																									
C3 integration of Pierside and Shipboard Security Systems															▲																					
Initiate LRIP of Laser IMS HH ED											▲																									

Exhibit R-4a, RDT&E Schedule Detail

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(U) Schedule Profile	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Conduct market survey for the TVSS	1-4Q		
(U) TVSS Prototype Design, Fabrication, & Integration		2Q	
(U) PAS Market Survey and Investigation		2Q	3Q
(U) Continue TASS P3I efforts including the annunciator			3Q
(U) Conduct a Leap Ahead assessment of current PSE technology	3Q		
(U) Follow-on Early User Appraisal for MDARS			1-4Q
(U) Buy Equipment to build a Hybrid Image/Trace EDE system		2-3Q	
(U) C3 integration of Pierside and Shipboard Security Systems	3-4Q	1-2Q	