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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 Program Element (Number/Name) PE 0603287F I Physical Security Equipment							
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	-	3.874	-	-	-	-	-	-	-	-	Continuing	Continuing
645121: Physical Security Equipment	-	3.874	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY15, Physical Security Equipment efforts were transferred from PE 0603287F, Physical Security Equipment, Project Number 645121 in BA04 to PE 0604287F, Physical Security Equipment, Project Number 645121 in BA05 in order to align funding into the correct Budget Activity of BA05.

A. Mission Description and Budget Item Justification

Integrated Base Defense Security Systems (IBDSS) develops, demonstrates, and tests Physical Security Equipment (PSE) systems to include Force Protection. This program supports the protection of tactical, fixed, and nuclear weapons systems, AF personnel and AF facilities. The PSE program is organized to provide PSE RDT&E for Air Force specific needs but as a complement to and in conjunction with the PSE RDT&E programs funded by the DOD Physical Security Enterprise and Analysis Group (PSEAG). As such this program will develop, demonstrate, and test PSE in the same manner and to the same standards and architecture as PSEAG funded projects to ensure interoperability with PSEAG developed PSE. In development of PSE, this RDT&E program includes spectrum planning for radio frequency (RF), communication security (cyber), and information assurance requirements. This Program Element also includes funding for Force Protection (FP) Commercial-Off-The-Shelf (FP COTS) market research, evaluation and testing. The FP COTS testing applies to all available technologies (delay, denial, detection, assessment, communication display, access control and power) which are considered effective for AF physical security use. This program supports the maintenance and test support at Site C-3 and the Cold Weather Test Site (CWTS), as annotated in DoD Directive 3200.11, listing the 46th Test Wing as a Major Range and Test facility, conducting developmental and operational testing as the primary mission.

This program is in Budget Activity 4, Advanced Component Development and Prototypes (ACD&P) because efforts are necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment.

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B. Program Change Summary (\$ in Millions)		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget		3.874	-	1.977	-	1.977
Current President's Budget		3.874	-	-	-	-
Total Adjustments		-	-	-1.977	-	-1.977
• Congressional General Reductions		-	-			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-	-			
• Other Adjustments		-	-	-1.977	-	-1.977
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2014	FY 2015	FY 2016
Title: Integrated Base Defense Security Systems				3.874	-	-
Description: Develops, demonstrates, and tests Physical Security Equipment (PSE) systems to include Force Protection. This continuing effort was previously named Physical Security Equipment and is not a New Start.						
FY 2014 Accomplishments:						
- Refine, research, and test technology for automated entry control systems.						
- Continue TASS P3I efforts including improvements to the annunciator.						
- Continue to manage, develop, evaluate, and test Delay/Denial products.						
- Develop internal delay, denial, and detection options for the Nuclear Storage environment.						
- Develop external delay, denial, and detection options for the Nuclear Storage environment.						
-- Delay advancements include semi-hardened transport containers for logistic movement of nuclear assets.						
-- Denial advancement includes prototypes for denial capability within protective aircraft shelters.						
-- Denial capability integration to improve life cycle cost and effectiveness for the Remote Target Engagement System (RTES)						
-- Analyses and maturity assessment of interruption methods to disable or mitigate adversary remote airborne platforms.						
- Force Protection Commercial Off The Shelf (COTS) evaluation and testing.						
- Continue to manage sensor and assessment product developments and tests; qualification testing to demonstrate sensor and integration maturity and effectiveness.						
- Market research, integration and evaluation of a portable detection system that can be deployed to meet the full detection and communication requirements for nuclear security.						
- Market research, integration and evaluation of a capability to detect						

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C. Accomplishments/Planned Programs (\$ in Millions)										FY 2014	FY 2015	FY 2016
personnel and vehicle movement through foliage that obscures line of sight technologies. - Continue to research technological advances at DoD, DoE, University Labs, DARPA, within industry, etc., with PSE utility. - Continue to prepare operational systems improvement plans; develop technology roadmap; update system architecture. - Continue to test, develop, and integrate equipment to improve security and access to facilities. - Conduct analyses to include the adversary needs assessment and System Effectiveness Assessment (SEA) of the Nuclear Environment. - Develop a Security Forces Management Information System (SFMIS) module. - Develop Physical Security Alarm Systems; develop, integrate and evaluate fusion and display capability to improve command, control and communication to include fusion of disparate sensor technologies and threat indicators; improve situational awareness and increase the decision support provided to security system operators; planned environments are in the missile field and for weapons storage where Base Defense Operations Center aggregates threat, sensor alarms, video and thermal assessment for developing response plans and priorities. - Support the maintenance and test support at Site C-3 and the Cold Weather Test Site (CWTS), as annotated in DoD Directive 3200.11, listing the 46TW as a Major Range and Test facility, conducting developmental and operational testing as the primary mission. - Refine, research, and test technology for Common Operational Picture systems.												
Accomplishments/Planned Programs Subtotals										3.874	-	-
D. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost	
• AFOP: BA03: Line Item #30: <i>Air Force Physical Security System</i>	32.089	-	-	-	-	-	-	-	-	Continuing	Continuing	
Remarks												
E. Acquisition Strategy												
COTS sub-systems, equipment and components are competitively acquired from industry after thorough market research. Equipment for testing is purchased via competitive Delivery Orders on Indefinite Delivery/Indefinite Quantity contract vehicles, direct purchase orders after competitive selection process, or other alternative competitive selection processes. For security systems COTS that are required to be qualified for nuclear security environments where industry COTS sources may not be mature, consideration is given to development of new items or modification of COTS through national laboratories; as competitive delivery order efforts on IDIQ contracts; or alternative competitive selection procedures as determined through acquisition strategy decisions.												

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F. Performance Metrics Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force												Date: February 2015			
Appropriation/Budget Activity 3600 / 4						R-1 Program Element (Number/Name) PE 0603287F / <i>Physical Security Equipment</i>				Project (Number/Name) 645121 / <i>Physical Security Equipment</i>					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
HQ ESC (Air Force)	Various	Various : Various,	-	3.470		-		-		-		-	Continuing	Continuing	-
Subtotal			-	3.470		-		-		-		-	-	-	-
Remarks															
The \$189K in the Product Development line is incorrect. The actual # is \$2.828M. This error is due to the incorrect # (\$476K) being shown in PRCP versus the correct overall FY12 amount of \$3.115M.															
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
HQ ESC (Air Force)	Various	Various : ,	-	0.404		-		-		-		-	Continuing	Continuing	-
Subtotal			-	0.404		-		-		-		-	-	-	-
Remarks															
The support funding is planned at the above amounts. If the support contracts are less, the available funds will be transitioned to the Product Development line.															
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
			Prior Years	FY 2014	FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals			-	3.874		-		-		-		-	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force							Date: February 2015			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)		Project (Number/Name)				
3600 / 4				PE 0603287F / Physical Security Equipment		645121 / Physical Security Equipment				
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks										

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force **Date:** February 2015

Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0603287F / <i>Physical Security Equipment</i>	Project (Number/Name) 645121 / <i>Physical Security Equipment</i>
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	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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 TASS P3I efforts including the annunciator																												
Portable Detection System (PDSNE)																												
Foliage Penetrating Radar																												
COTS Testing (WSTI/LRTI/Narrow beam line sensor/active denial, etc																												
Common Operational Picture																												
Develop Physical Security Alarm Systems																												
Conduct System Effectiveness Assessment of Nuclear Environment																												
Maintain C-3 and Cold Weather Test Site (RDT&E Testing Facility)																												
Develop Internal and External Delay/Denial/ Detection options for Nuclear Storage environment																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0603287F / Physical Security Equipment	Project (Number/Name) 645121 / Physical Security Equipment	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Continue TASS P3I efforts including the annunciator	1	2014	4	2014
Portable Detection System (PDSNE)	1	2014	4	2016
Foliage Penetrating Radar	1	2014	4	2016
COTS Testing (WSTI/LRTI/Narrow beam line sensor/active denial, etc	1	2014	4	2018
Common Operational Picture	1	2014	4	2015
Develop Physical Security Alarm Systems	1	2014	4	2014
Conduct System Effectiveness Assessment of Nuclear Environment	1	2014	4	2014
Maintain C-3 and Cold Weather Test Site (RDT&E Testing Facility)	1	2014	4	2015
Develop Internal and External Delay/Denial/Detection options for Nuclear Storage environment	1	2014	4	2015