

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force	DATE: April 2013
--	-------------------------

APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE							
3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>					PE 0603287F: <i>Physical Security Equipment</i>							
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	0.476	3.704	3.874	-	3.874	3.975	4.084	4.197	4.272	Continuing	Continuing
645121: <i>Physical Security Equipment</i>	-	0.476	3.704	3.874	-	3.874	3.975	4.084	4.197	4.272	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

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, demonstrate, and test 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 RF frequency and communication security (cyber) requirements. This Program Element also includes funding for Force Protection Commercial-Off-The-Shelf (FP COTS) evaluation and testing. The FP COTS testing applies to all available technologies, 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 46TW as a Major Range and Test facility, conducting developmental and operational testing as the primary mission.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force				DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 4: Advanced Component Development & Prototypes (ACD&P)		R-1 ITEM NOMENCLATURE PE 0603287F: Physical Security Equipment				
B. Program Change Summary (\$ in Millions)		FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget		3.586	3.704	3.874	-	3.874
Current President's Budget		0.476	3.704	3.874	-	3.874
Total Adjustments		-3.110	0.000	0.000	-	0.000
• Congressional General Reductions		-	0.000			
• Congressional Directed Reductions		-	0.000			
• Congressional Rescissions		0.000	0.000			
• Congressional Adds		-	0.000			
• Congressional Directed Transfers		-	0.000			
• Reprogrammings		0.000	0.000			
• SBIR/STTR Transfer		-0.110	0.000			
• Other Adjustments		-3.000	0.000	0.000	-	0.000
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2012	FY 2013	FY 2014
Title: PHYSICAL SECURITY EQUIPMENT				0.476	3.704	3.874
Description: FORCE PROTECTION/TACTICAL SECURITY EQUIPMENT - Develop, demonstrate, and test Physical Security Equipment (PSE) systems, to include Force Protection.						
FY 2012 Accomplishments: Refined, researched, and tested technology for automated entry control systems. - 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. - Developed a Security Forces Management Information System (SFMIS)module. - Conducted System Effectiveness Assessment (SEA) of the Nuclear Environment. - Continued Integrated Defense Command and Control Common Operating Picture (IDC2COP). - Developed Physical Security Alarm Systems. - Force Protection Commercial Off The Shelf (COTS) evaluation and testing. - Developed internal delay, denial, and detection options for the Nuclear Storage environment. - Developed external delay, denial, and detection options for the Nuclear Storage environment.						

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603287F: <i>Physical Security Equipment</i>		
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
- Supported 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. FY 2013 Plans: 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. - Continue to manage sensor and assessment product developments and tests. - 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. - Develop a Security Forces Management Information System (SFMIS)module - Conduct System Effectiveness Assessment (SEA) of the Nuclear Environment - Continue Integrated Defense Command and Control Common Operating Picture (IDC2COP). - Develop Physical Security Alarm Systems. - Force Protection Commercial Off The Shelf (COTS) evaluation and testing. - Develop internal delay, denial, and detection options for the Nuclear Storage environment. - Develop external delay, denial, and detection options for the Nuclear Storage environment. - 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 46TW as a Major Range and Test facility, conducting developmental and operational testing as the primary mission. FY 2014 Plans: FY 2014 Plans: - 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.				

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>					R-1 ITEM NOMENCLATURE PE 0603287F: <i>Physical Security Equipment</i>							
C. Accomplishments/Planned Programs (\$ in Millions)												
- 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 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 (SFMS) 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.										FY 2012	FY 2013	FY 2014
Accomplishments/Planned Programs Subtotals										0.476	3.704	3.874
D. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost	
• Not Applicable: N/A	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Remarks												
E. Acquisition Strategy												
Not Applicable												

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603287F: <i>Physical Security Equipment</i>
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.		

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 4: Advanced Component Development & Prototypes (ACD&P)						R-1 ITEM NOMENCLATURE PE 0603287F: Physical Security Equipment				PROJECT 645121: Physical Security Equipment					
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All 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,	-	0.189		3.304		3.470		-		3.470	Continuing	Continuing	
Subtotal			0.000	0.189		3.304		3.470		0.000		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 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All 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:,	-	0.287		0.400		0.404		-		0.404	Continuing	Continuing	
Subtotal			0.000	0.287		0.400		0.404		0.000		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 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All 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			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All 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			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force										DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603287F: Physical Security Equipment				PROJECT 645121: Physical Security Equipment					
	All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.476		3.704		3.874		0.000		3.874			

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Air Force

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

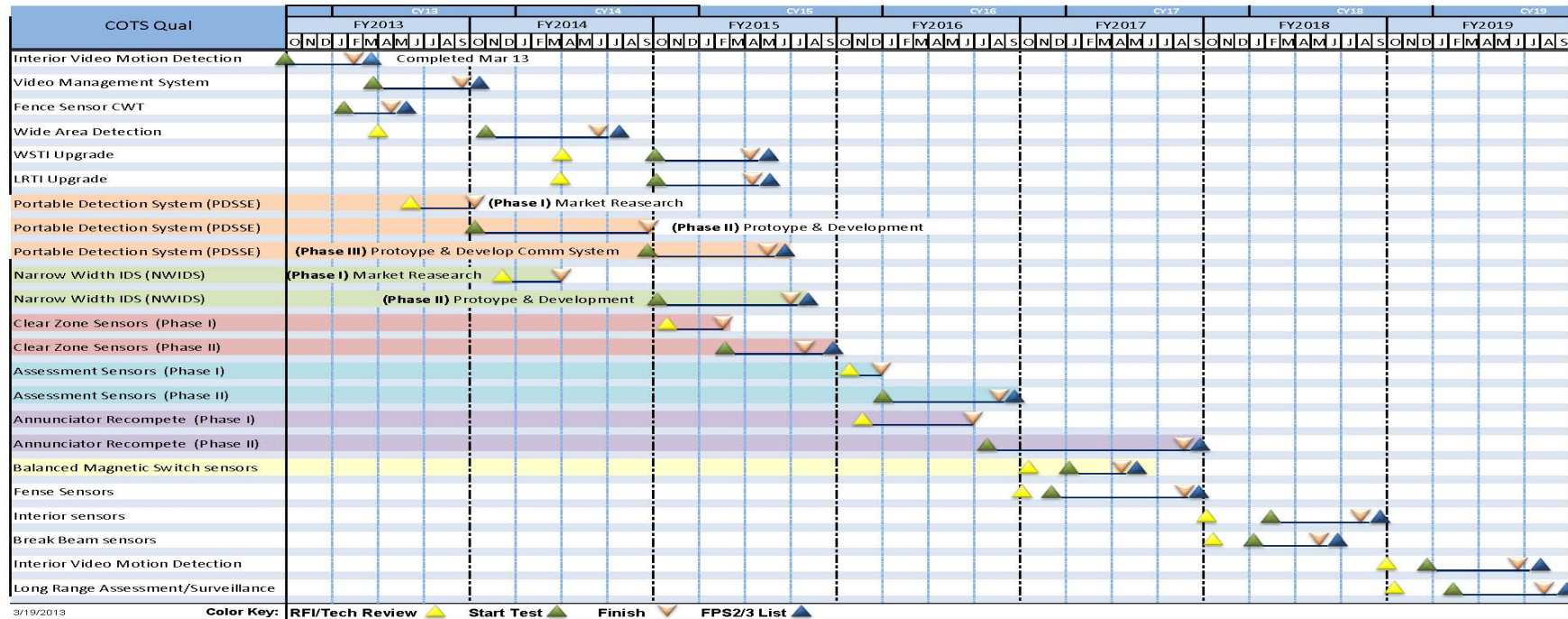
3600: Research, Development, Test & Evaluation, Air Force
BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603287F: Physical Security Equipment

PROJECT

645121: Physical Security Equipment



UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Air Force			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603287F: <i>Physical Security Equipment</i>	PROJECT 645121: <i>Physical Security Equipment</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Continue TASS P3I efforts including the annunciator	1	2012	4	2014
Portable Detection System (PDSNE)	1	2013	4	2016
Foliage Penetrating Radar	1	2013	4	2016
Conduct a Leap Ahead assessment of current PSE technology	1	2012	4	2012
COTS Testing (WSTI/LRTI/Narrow beam line sensor/active denial, etc	1	2012	4	2018
Develop SFMIS Module	1	2012	4	2013
Common Operational Picture	1	2012	4	2015
Develop Physical Security Alarm Systems	1	2012	4	2014
Conduct System Effectiveness Assessment of Nuclear Environment	1	2012	4	2014
Maintain C-3 and Cold Weather Test Site (RDT&E Testing Facility)	1	2012	4	2015
Develop Internal and External Delay/Denial/Detection options for Nuclear Storage environment	1	2012	4	2015