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

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

3600: Research, Development, Test & Evaluation, Air Force

PE 0603287F: Physical Security Equipment

BA 4: Advanced Component Development & Prototypes (ACD&P)

,	•	• • •	'									
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: Physical Security Equipment	-	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

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.

PE 0603287F: Physical Security Equipment

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

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Fo	orce			DATE:	: April 2013	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force 3A 4: Advanced Component Development & Prototypes (ACD&F		R-1 ITEM NOME PE 0603287F: <i>P</i>	ENCLATURE Physical Security Equipm			
3. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 T	<u> Total</u>
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
·				FY 2012	FY 2013	FY 201
C. Accomplishments/Planned Programs (\$ in Millions) Title: PHYSICAL SECURITY EQUIPMENT Description: FORCE PROTECTION/TACTICAL SECURITY EQUIPMENT Equipment (PSE) systems, to include Force Protection.	UIPMENT - De	evelop, demonstra	ate, and test Physical Se	FY 2012 0.476 ecurity	FY 2013 3.704	FY 201 4

PE 0603287F: *Physical Security Equipment* Air Force

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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	,		
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 Weath 3200.11, listing the 46TW as a Major Range and Test facility, conducting devergishing.				
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 test. - Continue to research technological advances at DoD, DoE, University Labs, - Continue to prepare operational systems improvement plans; develop technological equipment to improve security and a pevelop a Security Forces Management Information System (SFMIS)module. - Conduct System Effectiveness Assessment (SEA) of the Nuclear Environme. - Continue Integrated Defense Command and Control Common Operating Picture 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. - Develop external delay, denial, and detection options for the Nuclear Storage. - Supports the maintenance and test support at Site C-3 and the Cold Weather 3200.11, listing the 46TW as a Major Range and Test facility, conducting devermission.	DARPA, within industry, etc., with PSE utility. cology roadmap, update system architecture. access to facilities. e ent cture (IDC2COP). e environment. e environment. er Test Site (CWTS), as annotated in DoD Directive			
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. Develop external delay, denial, and detection options for the Nuclear Storage. Delay advancements include semi-hardened transport containers for logistic. Denial advancement includes prototypes for denial capability within protecti. Denial capability integration to improve life cycle cost and effectiveness for t. Analyses and maturity assessment of interruption methods to disable or mit. Force Protection Commercial Off The Shelf (COTS) evaluation and testing.	e environment. c movement of nuclear assets. ve aircraft shelters. the Remote Target Engagement System (RTES)			

PE 0603287F: *Physical Security Equipment* Air Force

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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force DATE: April 2013 APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE 3600: Research, Development, Test & Evaluation, Air Force PE 0603287F: Physical Security Equipment BA 4: Advanced Component Development & Prototypes (ACD&P) C. Accomplishments/Planned Programs (\$ in Millions) FY 2012 FY 2013 FY 2014 - Continue to manage sensor and assessment product developments and tests; qualification testing to demonstrate sensor and integration maturity and effectivess. - 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 (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** 0.476 3.704 3.874 D. Other Program Funding Summary (\$ in Millions) **Cost To** FY 2014 FY 2014 FY 2014 Line Item FY 2018 Complete Total Cost FY 2012 FY 2013 Base OCO Total FY 2015 FY 2016 FY 2017 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

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Air Force

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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 3A 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603287F: Physical Security Equipment	
F. Performance Metrics Please refer to the Performance Base Budget Overview Book for informance performance goals and most importantly, how they contribute to	mation on how Air Force resources are applied and how our mission.	those resources are contributing to Air

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force

R-1 ITEM NOMENCLATURE

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force

BA 4: Advanced Component Development & Prototypes (ACD&P)

PROJECT

PE 0603287F: Physical Security Equipment 645121: Physical Security Equipment

Product Developmen	nt (\$ in Mi	illions)		FY 2	2012	FY 2	2013	FY 2 Ba		FY 2		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	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 Million	s)			FY 2	2012	FY 2	2013		2014 ise	FY 2		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	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 Milli	ons)		FY 2	2012	FY 2	2013	1	2014 ase	FY 2		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 Service	es (\$ in M	illions)		FY 2	2012	FY 2	2013		2014 ase	FY 2		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

PE 0603287F: Physical Security Equipment

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2	2014 Air Force				DATE	: April 201	13	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation,	Air Force	R-1 ITEM NOM I PE 0603287F: <i>F</i>	ENCLATURE Physical Security Eq	PROJE (645121:		Security I	Equipmen	t
BA 4: Advanced Component Development & Proto	types (ACD&P)							
								Target

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	1	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.476	3.704	3.874	0.000	3.874			

Remarks

PE 0603287F: Physical Security Equipment

Air Force

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

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

3600: Research, Development, Test & Evaluation, Air Force BA 4: Advanced Component Development & Prototypes (ACD&P) PE 0603287F: Physical Security Equipment | 645121: Physical Security Equipment

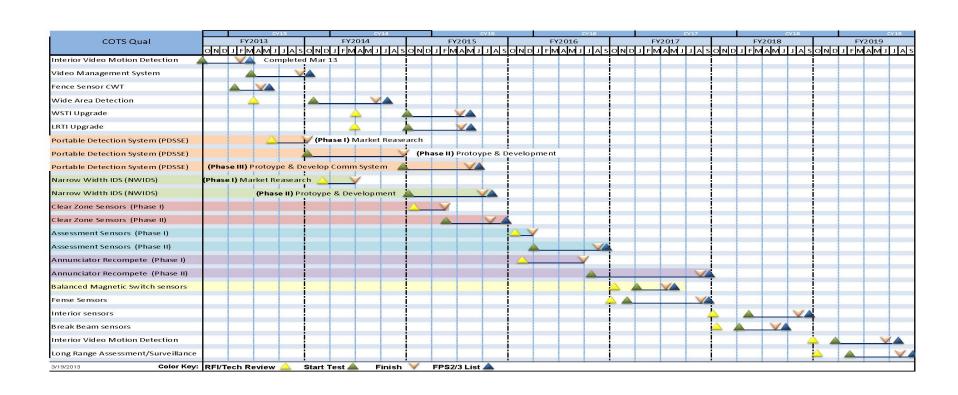


Exhibit R-4A, RDT&E Schedule Details: PB 2014 Air Force

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

3600: Research, Development, Test & Evaluation, Air Force PE 0603287F: Physical Security Equipment 645121: Physical Security Equipment

BA 4: Advanced Component Development & Prototypes (ACD&P)

Schedule Details

	St	art	E	nd
Events	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

PE 0603287F: *Physical Security Equipment* Air Force

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