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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force **DATE:** February 2011

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)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	3.483	3.576	3.586	-	3.586	3.749	3.927	4.006	4.076	Continuing	Continuing
645121: <i>Physical Security Equipment</i>	3.483	3.576	3.586	-	3.586	3.749	3.927	4.006	4.076	Continuing	Continuing

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 Equipment Action 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.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	3.615	3.576	3.755	-	3.755
Current President's Budget	3.483	3.576	3.586	-	3.586
Total Adjustments	-0.132	-	-0.169	-	-0.169
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.132	-			
• Other Adjustments	-	-	-0.169	-	-0.169

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force									DATE: February 2011		
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			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
645121: Physical Security Equipment	3.483	3.576	3.586	-	3.586	3.749	3.927	4.006	4.076	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

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 Equipment Action 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.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: PHYSICAL SECURITY EQUIPMENT	3.483	3.576	3.586	-	3.586
Description: FORCE PROTECTION/TACTICAL SECURITY EQUIPMENT - Develop, demonstrate, and test physical security equipment (PSE) systems, to include Force Protection.					
FY 2010 Accomplishments: Refined, research, and test 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. - Began to develop the XML Wide Area Sensor.					
FY 2011 Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force			DATE: February 2011					
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				
B. Accomplishments/Planned Programs (\$ in Millions)				FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
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 denial options for the Nuclear Storage environment FY 2012 Base 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								

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force				DATE: February 2011	
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>	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
- Develop internal denial options for the Nuclear Storage environment					
<i>FY 2012 OCO Plans:</i> Not applicable					
Accomplishments/Planned Programs Subtotals	3.483	3.576	3.586	-	3.586

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• Activity Not Provided: <i>Not Applicable</i>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

D. Acquisition Strategy Not Applicable
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E. 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 2012 Air Force											DATE: February 2011		
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 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	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,	3.152	3.106		3.271		-		3.271	1.200	10.729	TBD
Subtotal			3.152	3.106		3.271		-		3.271	1.200	10.729	
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	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:,	0.331	0.470		0.315		-		0.315	0.000	1.116	0.000
Subtotal			0.331	0.470		0.315		-		0.315	0.000	1.116	0.000
Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	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
Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	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
			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			3.483	3.576		3.586		-		3.586	1.200	11.845	
Remarks													

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011
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>

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011
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>

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Air Force			DATE: February 2011
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	3	2010	4	2010
Conduct a Leap Ahead assessment of current PSE technology	1	2010	4	2010
COTS Testing	1	2010	4	2012
Develop SFMIS Module	2	2011	4	2011
IDC2COP Integration	1	2010	4	2011
Develop Physical Security Alarm Systems	1	2011	4	2011
Conduct System Effectiveness Assessment of Nuclear Environment	2	2011	4	2011
Develop Internal Denial options for Nuclear Storage environment	1	2011	4	2011

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