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* / BA 7: *Operational Systems Development*						R-1 Program Element (Number/Name) PE 0605024F / *Anti-Tamper Technology Executive Agency*						

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	-	25.733	34.815	26.718	-	26.718	29.871	29.776	29.123	29.644	Continuing	Continuing
675066: *Anti-Tamper Technology Executive Agent*	-	25.733	34.815	26.718	-	26.718	29.871	29.776	29.123	29.644	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Program MDAP/MAIS Code: Project MDAP/MAIS Code(s): N42

A. Mission Description and Budget Item Justification

The Air Force is the DoD Anti-Tamper Executive Agent (ATEA). The ATEA is responsible for developing and implementing Anti-Tamper (AT) policy, coordinating and providing financial support for AT technology development and evaluations, hardware/software vulnerability assessments, laboratory infrastructure, establishing and maintaining a data bank/library of Anti-Tamper technologies, providing proper security mechanisms, providing outreach and education to the AT Community, and conducting effective validation and evaluations of AT implementations. The purpose of AT is to protect critical program information (CPI) in U.S. weapon systems that may be sold to foreign governments or that could possibly fall into enemy hands. AT protections will permit the U.S. to preserve its technological advantage of critical weapons systems while supporting the warfighters mission requirements. Furthermore, AT will add longevity to DoD critical technologies by deterring efforts to reverse engineer or develop weapon countermeasures against the system or system component.

The DoD ATEA will coordinate technology development and enhancement efforts among the DoD Services/Agencies, National Laboratories, and industry. The DoD ATEA acquisition strategy is to fund development of new AT technology, as well as enhancing existing AT technology efforts to increase the technology readiness level (TRL). The AT technology development and enhancement efforts will occur in multiple areas, including the following: Advanced sensor hardware, secure processing, crypto-analysis, tamper penalties, and power solutions. Emerging research in the areas of materials, cryptography and electronic circuits has the potential to bring new AT capabilities that have reduced power needs and smaller form factor. The goal of the research is to mature promising technologies to the point that they can be transitioned to a program office or industry for implementation in our weapons systems. Priorities will be given to those technologies that most benefit the DoD AT community.

All DoD acquisition programs, Foreign Military Sales, and Direct Commercial Sales with CPI and/or resident critical program information (RCPI) require a validated AT Plan. The AT program includes resources required for the subject matter experts (SMEs) to review AT Plans and conduct AT validation, and perform AT assessments of both commercial off the shelf and government of the shelf products. To maintain its advantage, the AT program continues to improve its AT hardware/software assessment capabilities. These capabilities include the acquisition of specialized equipment, maintenance and/or renovations to support the integration of this equipment, and modifications to new and/or existing laboratory facilities to meet equipment and security requirements.

This program is in Budget Activity 07, Operational System Development, because it includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding.

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 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0605024F *I Anti-Tamper Technology Executive Agency*	

The FY2016 funding request was reduced by $3.000 million to account for the availability of prior execution balances.

B. Program Change Summary ($ in Millions)	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016 Total**
Previous President's Budget	26.541	34.815	29.895	-	29.895
Current President's Budget	25.733	34.815	26.718	-	26.718
Total Adjustments	-0.808	-	-3.177	-	-3.177
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.808	-			
• Other Adjustments	-	-	-3.177	-	-3.177

Change Summary Explanation
FY14: SBIR Adjustment.
FY15: FY16 Reduction due under execution with a payback in FY17 and FY18.

C. Accomplishments/Planned Programs ($ in Millions)	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016 Total**
Title: Anti-Tamper Technology	22.176	29.732	21.618	-	21.618

Description: Continue AT technology development and evaluations, hardware/software vulnerability assessments, laboratory infrastructure, alternate power sources, provide outreach and education to the AT Community, conduct effective validation and evaluation of AT implementation as well as implementation of AT policy.

FY 2014 Accomplishments:
AT Policy and Guidance: Published new AT Guidelines.
Ed/Outreach: Trained over 1000 members of the AT Community.
Technology Development: Completed limited efforts due to funding.
Assessments: Completed numerous assessments on COTS/GOTS parts in support of DoD and Industry.

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 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0605024F *I Anti-Tamper Technology Executive Agency*	

C. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Evaluations: Provided funding to the Services that enabled them to evaluate AT implentations on their programs. ***FY 2015 Plans:*** - Continue AT technology development and evaluations, hardware/software vulnerability assessments, laboratory infrastructure, alternate power sources, conduct effective validation and evaluation of AT implementation. - Continue to train and implement AT policy within the AT Community. ***FY 2016 Base Plans:*** - Continue AT technology development and evaluations, hardware/software vulnerability assessments, laboratory infrastructure, alternate power sources, conduct effective validation and evaluation of AT implementation. - Continue to train and implement AT policy within the AT Community. ***FY 2016 OCO Plans:*** N/A					
Title: Program Management Support ***Description:*** Includes civilian pay, A&AS, outreach and education, travel, supplies, and AFLCMC/WWG support ***FY 2014 Accomplishments:*** Supported program office efforst, including civilian pay, A&AS, outreach and education, travel, and supplies. ***FY 2015 Plans:*** Support program office efforst, including civilian pay, A&AS, outreach and education, travel, and supplies. ***FY 2016 Base Plans:*** Support program office efforst, including civilian pay, A&AS, outreach and education, travel, and supplies. ***FY 2016 OCO Plans:*** N/A	3.557	5.083	5.100	-	5.100
Accomplishments/Planned Programs Subtotals	25.733	34.815	26.718	-	26.718

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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 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0605024F *I Anti-Tamper Technology Executive Agency*

D. Other Program Funding Summary ($ in Millions)

 N/A

Remarks

E. Acquisition Strategy

 The DoD ATEA acquisition strategy is to fund development and assessments of new AT technology, as well as enhance existing AT technology efforts by increasing TRL. The AT technology development and enhancement efforts will occur in multiple areas, including the following: Advanced sensor hardware, secure processing, crypto-analysis, tamper penalties, and power solutions. Emerging research in the areas of materials, cryptography and electronic circuits has the potential to bring new AT capabilities that have reduced power needs and smaller form factor. The goal of the research is to mature promising technologies to the point that they can be transitioned to a program office or industry for implementation in our weapons systems. Priorities will be given to those technologies that most benefit the DoD AT community.

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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force														Date: February 2015		
Appropriation/Budget Activity 3600 I 7								**R-1 Program Element (Number/Name)** PE 0605024F I *Anti-Tamper Technology Executive Agency*						**Project (Number/Name)** 675066 I *Anti-Tamper Technology Executive Agent*		

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Office	Various	Not specified. : ,	-	3.557		5.083		5.100		-		5.100	Continuing	Continuing	-
Subtotal			-	3.557		5.083		5.100		-		5.100	-	-	-

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
R&D	Various	Not specified. : ,	-	22.176		29.732		21.618		-		21.618	Continuing	Continuing	-
Subtotal			-	22.176		29.732		21.618		-		21.618	-	-	-

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			-	-		-		-		-		-	-	-	-

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
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	-	25.733		34.815		26.718		-		26.718	-	-	-

Remarks

Additional funding breakout and award dates are classified per the Anti-Tamper Security Classification Guide. Please contact the ATEA if addtional information is required.

Exhibit R-4, **RDT&E Schedule Profile:** PB 2016 Air Force		**Date:** February 2015
Appropriation/Budget Activity 3600 *I* 7	**R-1 Program Element (Number/Name)** PE 0605024F *I Anti-Tamper Technology Executive Agency*	**Project (Number/Name)** 675066 *I Anti-Tamper Technology Executive Agent*

	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
ATEA Program Office																												
AT RDT&E																												

Exhibit R-4A, **RDT&E Schedule Details:** PB 2016 Air Force		**Date:** February 2015
Appropriation/Budget Activity 3600 *I* 7	**R-1 Program Element (Number/Name)** PE 0605024F *I Anti-Tamper Technology Executive Agency*	**Project (Number/Name)** 675066 *I Anti-Tamper Technology Executive Agent*

Schedule Details

Events	Start		End	
	Quarter	**Year**	**Quarter**	**Year**
ATEA Program Office	1	2014	4	2020
AT RDT&E	1	2014	4	2020