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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0605024F: Anti-Tamper Technology Executive Agent							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	40.936	35.245	17.037	-	17.037	37.740	34.440	29.906	30.301	Continuing	Continuing
675066: Anti-Tamper Technology Executive Agent	40.936	35.245	17.037	-	17.037	37.740	34.440	29.906	30.301	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Air Force is the DoD Anti-Tamper Executive Agent (ATEA). The ATEA is responsible for implementing Anti-Tamper (AT) policy, coordinating and providing financial support for AT technology development, establishing and maintaining a data bank/library, providing proper security mechanisms, conducting effective validation and assessing AT implementations. The purpose of developing AT techniques is to protect critical technologies in U.S. weapon systems that may be sold to foreign governments or that could possibly fall into enemy hands. AT technology will permit the U.S. to preserve its critical weapons systems lead while also satisfying customer needs. Furthermore, AT will add longevity to critical technologies by deterring efforts to reverse engineer or develop weapon countermeasures against a system or system component. As the DoD Anti-Tamper Executive Agent, the Air Force will coordinate technology development and enhancement efforts among the Services, DoD Agencies, and laboratories, and with industry. The DoD ATEA will issue contracts for AT technology development as well as plus-up existing AT technology efforts to increase the technology readiness level. Priorities will be given to technologies that benefit the majority of the AT community. The Anti-Tamper technology development and enhancement efforts will occur in the following areas: advanced sensor hardware, generic electronic hardware, signature control, access detection & denial, software, and effectiveness. The program management activities will coordinate the technology development and establish the Anti-Tamper data bank/library. Anti-Tamper validation is a significant responsibility assigned to the Air Force. All DoD acquisition programs, Foreign Military Sales, and Direct Commercial Sales with critical technology/critical information are required to have an Anti-Tamper plan with appropriate validation. The resources required to review Anti-Tamper plans and conduct Anti-Tamper validation began to increase in late FY03. Based on Anti-Tamper validation requirement projections, the number of Anti-Tamper experts needs to expand. Beginning in FY09 additional funding has been dedicated to the technical development of new AT capabilities. Emerging research in the areas of materials, cryptography and electronic circuits has the potential to bring new AT capabilities that have reduced power needs, a smaller form factor, and less detectability by nation class adversary using state of the art reverse engineering tools. The goal of the research is to mature promising technologies to the point that they can be transitioned to a program office or industry prime for implementation in our weapons systems. 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.

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B. Program Change Summary (\$ in Millions)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget		42.255	35.467	30.338	-	30.338
Current President's Budget		40.936	35.245	17.037	-	17.037
Total Adjustments		-1.319	-0.222	-13.301	-	-13.301
• Congressional General Reductions		-	-			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-1.051	-			
• Other Adjustments		-0.268	-0.222	-13.301	-	-13.301
Change Summary Explanation						
FY11 Congressional General Reduction of 0.268M in Other Adjustment row.						
FY12 Congressional General Reduction (FFRDC, Sec. 8023) of 0.222M.						
FY13 funding decrease is due to higher Department of Defense priorities.						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2011	FY 2012	FY 2013
Title: Anti-Tamper Technology				40.936	35.245	17.037
Description: Advanced Anti-Tamper Technology Executive Agent activities including: AFRL/RYW Management, ATEA outsourcing, Anti-Tamper Verification and Validation, Assessments and technology development						
FY 2011 Accomplishments: Continue advanced Anti-Tamper Technology Executive Agent activities including: AFRL/RYW Management, ATEA outsourcing, Anti-Tamper Verification and Validation, Assessments and Technology Development.						
FY 2012 Plans: Continue advanced Anti-Tamper Technology Executive Agent activities including: AFRL/RYW Management, ATEA outsourcing, Anti-Tamper Verification and Validation, Assessments and Technology Development.						
FY 2013 Plans:						

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C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Continue advanced Anti-Tamper Technology Executive Agent activities including: AFRL/RYW Management, ATEA outsourcing, Anti-Tamper Verification and Validation, Assessments and Technology Development.			
Accomplishments/Planned Programs Subtotals	40.936	35.245	17.037

D. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u> <u>Base</u>	<u>FY 2013</u> <u>OCO</u>	<u>FY 2013</u> <u>Total</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• NONE: N/A	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

E. Acquisition Strategy

The DoD ATEA technology development enhancement funding will be used to support existing AT technology development contracts. This funding will be used to increase the technology readiness level for that particular AT technology so as to reduce the risk to programs wanting to implement this AT technology. The DoD ATEA conducts yearly evaluations of technologies, provided by the AT Tri-Service 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.

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Air Force		DATE: February 2012
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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Air Force			DATE: February 2012
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
ATEA Field Office	1	2011	4	2015
Database and Website Updates & Maintenance	1	2011	4	2015
Education & Outreach	1	2011	4	2015
AT Conference	1	2011	3	2015
Program V&V Evaluations	1	2011	4	2015
Assessments	1	2011	3	2015
Anti-Tamper Technology Development Enhancement	1	2011	4	2015