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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force									DATE: February 2010		
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 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	20.407	47.276	42.255	0.000	42.255	37.140	30.472	29.863	29.066	Continuing	Continuing
675066: Anti-Tamper Technology Executive Agent	20.407	47.276	42.255	0.000	42.255	37.140	30.472	29.863	29.066	Continuing	Continuing

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 the technology development enhancement among the Services, DoD Agencies, and laboratories, and with industry. The DoD ATEA will not issue contracts for AT technology development but will plus-up existing Anti-Tamper technology projects to increase their technology readiness level. Priorities will be given to technologies that benefit the majority of the AT community. The Anti-Tamper technology enhancement 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 techical 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 advesary using state of the art reverse engineering tools. The goal of the reserach 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.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
3600: Research, Development, Test & Evaluation, Air Force		PE 0605024F: Anti-Tamper Technology Executive Agent			
BA 7: Operational Systems Development					
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.					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	20.407	47.276	0.000	0.000	0.000
Current President's Budget	20.407	47.276	42.255	0.000	42.255
Total Adjustments	0.000	0.000	42.255	0.000	42.255
• 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	0.000	0.000			
• Other Adjustments	0.000	0.000	42.255	0.000	42.255
Change Summary Explanation					
None					

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APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0605024F: <i>Anti-Tamper Technology Executive Agent</i>				PROJECT 675066: <i>Anti-Tamper Technology Executive Agent</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
675066: <i>Anti-Tamper Technology Executive Agent</i>	20.407	47.276	42.255	0.000	42.255	37.140	30.472	29.863	29.066	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force				DATE: February 2010	
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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.					
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: Advanced Anti-Tamper Technology Executive Agent activities including: AFRL/SNT Management, ATEA outsourcing, Anti-Tamper Verification and Validation, Assessments and technology devel...	20.407	47.276	42.255	0.000	42.255
FY 2009 Accomplishments: In FY 2009: Continuation of above activities.					
FY 2010 Plans: In FY 2010: Continuation of above activities.					
FY 2011 Base Plans: In FY2011: Continuation of above activities.					
FY 2011 OCO Plans: In FY 2011 OCO: Not Applicable.					
Accomplishments/Planned Programs Subtotals	20.407	47.276	42.255	0.000	42.255

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C. Other Program Funding Summary (\$ in Millions)											
			FY 2011	FY 2011	FY 2011					Cost To	
Line Item	FY 2009	FY 2010	Base	OCO	Total	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
• PE Not Provided (6491): <i>NONE</i>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
D. 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.											
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 2011 Air Force											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0605024F: <i>Anti-Tamper Technology Executive Agent</i>				PROJECT 675066: <i>Anti-Tamper Technology Executive Agent</i>					
Product Development (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
AFRL/SNT Management Program Oversight	TBD/TBD	TBD TBD	1.280	1.043	Mar 2010	1.500	Mar 2011	0.000		1.500	Continuing	Continuing	Continuing
Security/Infrastructure	TBD/TBD	TBD TBD	0.257	0.265	Mar 2010	1.000	Mar 2011	0.000		1.000	Continuing	Continuing	Continuing
Databases and websight	TBD/TBD	TBD TBD	0.460	0.701	Mar 2010	0.500	Mar 2011	0.000		0.500	Continuing	Continuing	0.000
Education and Outreach	TBD/TBD	TBD TBD	0.216	0.410	Mar 2010	0.300	Mar 2011	0.000		0.300	Continuing	Continuing	0.000
Subtotal			2.213	2.419		3.300		0.000		3.300			
Remarks													
Support (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
ATEA Other Outsource Conference outsource	TBD/TBD	TBD TBD	0.060	0.050	Apr 2010	0.200	Apr 2011	0.000		0.200	Continuing	Continuing	Continuing
AFRL/AT-SPI	Allot	TBD TBD	0.065	0.075	Apr 2010	0.010	Apr 2011	0.000		0.010	Continuing	Continuing	Continuing
AT Course	TBD/TBD	TBD TBD	0.125	0.055	Apr 2010	0.050	Apr 2011	0.000		0.050	Continuing	Continuing	Continuing

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Support (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
DAU Course	TBD/TBD	TBD TBD	0.068	0.065	Apr 2010	0.050	Apr 2011	0.000		0.050	Continuing	Continuing	Continuing
Course	TBD/TBD	TBD TBD	0.092	0.305	Mar 2010	0.250	Mar 2011	0.000		0.250	Continuing	Continuing	Continuing
Subtotal			0.410	0.550		0.560		0.000		0.560			
Remarks													
Test and Evaluation (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Anti-Tamper Verification & Validation Army	MIPR	TBD TBD	0.800	0.810	Mar 2010	0.700	Mar 2011	0.000		0.700	Continuing	Continuing	Continuing
Navy	MIPR	TBD TBD	0.800	0.810	Apr 2010	0.750	Apr 2011	0.000		0.750	Continuing	Continuing	Continuing
Air Force	MIPR	TBD TBD	0.800	0.810	Feb 2010	0.750	Feb 2011	0.000		0.750	Continuing	Continuing	Continuing
Sandia	MIPR	TBD TBD	0.648	0.720	Feb 2010	0.700	Feb 2011	0.000		0.700	Continuing	Continuing	Continuing
AT-SPI SW AT support	TBD/TBD	TBD TBD	0.324	0.354	Mar 2010	0.300	Mar 2011	0.000		0.300	Continuing	Continuing	Continuing

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Test and Evaluation (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	
AT-SPI IRCM AT Support	TBD/TBD	TBD TBD	0.000	0.000		3.800	May 2011	0.000		3.800	Continuing	Continuing	Continuing	
V&V Contingency	TBD/TBD	TBD TBD	0.975	0.100	Mar 2010	0.975	Mar 2011	0.000		0.975	Continuing	Continuing	Continuing	
Network Training	TBD/TBD	TBD TBD	0.000	0.056	May 2010	20.670	Mar 2011	0.000		20.670	Continuing	Continuing	Continuing	
Sandia V&V Training	MIPR	TBD TBD	0.000	0.680	May 2010	2.500	Mar 2011	0.000		2.500	Continuing	Continuing	Continuing	
Subtotal			4.347	4.340		31.145		0.000		31.145				
Remarks														
Management Services (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	
Anti-Tamper Assessments Air Force AT Field Agent (412 TW/ EWF)	MIPR	TBD TBD	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing	
AFRL/SND	TBD/TBD	TBD TBD	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing	
NAWC CRANE (Navy)	MIPR	TBD	0.425	0.975	Apr 2010	0.700	Apr 2011	0.000		0.700	Continuing	Continuing	Continuing	

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Management Services (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
		TBD											
Army AT Field Agent (Aviation & Missile Cmd/ Redstone)	MIPR	TBD TBD	0.000	0.560	Apr 2010	0.650	Apr 2011	0.000		0.650	Continuing	Continuing	Continuing
DoD Executive Agent Field Agent (AFRL/AT- SPI)	Allot	TBD TBD	0.000	0.000		0.900	Apr 2011	0.000		0.900	Continuing	Continuing	Continuing
Sandia National Lab	MIPR	TBD TBD	2.580	2.900	Mar 2010	5.000	Mar 2011	0.000		5.000	Continuing	Continuing	Continuing
Assessment Contract Activities	TBD/TBD	TBD TBD	0.083	1.225	Mar 2010	0.000		0.000		0.000	Continuing	Continuing	Continuing
Anti-Tamper Technology Development Enhancements AFRL/ AT-SPI	TBD/TBD	TBD TBD	5.000	0.000		0.000		0.000		0.000	0.000	5.000	0.000
Sandia National Lab (1)	MIPR	TBD TBD	5.349	0.000		0.000		0.000		0.000	0.000	5.349	0.000
Technology Contract Activities	TBD/TBD	TBD TBD	0.000	34.307		0.000		0.000		0.000	0.000	34.307	0.000
New Activity Funds	TBD/TBD	TBD TBD	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000
Subtotal			13.437	39.967		7.250		0.000		7.250			
Remarks													

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force							DATE: February 2010		
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Remarks Total Prior Years Cost may include only FY 2009 data.									

	Total Prior Years Cost	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	20.407	47.276	42.255	0.000	42.255			

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0605024F: <i>Anti-Tamper Technology Executive Agent</i>	PROJECT 675066: <i>Anti-Tamper Technology Executive Agent</i>

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0605024F: <i>Anti-Tamper Technology Executive Agent</i>	PROJECT 675066: <i>Anti-Tamper Technology Executive Agent</i>	

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
ATEA Field Office	1	2009	4	2010
Database and Website Updates & Maintenance	1	2009	4	2010
Education & Outreach	1	2009	4	2010
AT Conference	2	2009	3	2010
Program V&V Evaluations	1	2009	4	2010
Assessments	2	2009	3	2010
Anti-Tamper Technology Development Enhancement	1	2009	4	2010

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