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

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

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

PE 0305128F: Security And Investigative Activities

BA 7: Operational Systems Development

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	1.962	0.742	0.469	0.000	0.469	0.464	0.471	0.479	0.486	Continuing	Continuing
671931: TECH SURVEIL COUNTER MEAS EQPT	1.962	0.742	0.469	0.000	0.469	0.464	0.471	0.479	0.486	Continuing	Continuing

### A. Mission Description and Budget Item Justification

Air Force Office of Special Investigations (AFOSI) conducts specialized investigative activities and force protection support for Air Force (AF) commanders worldwide. This assists AF commanders in protecting their people and resources. AFOSI's mission includes investigating criminal matters affecting AF personnel, contract fraud and economic crimes involving AF weapons systems and spare parts, the investigation of environmental crime, counterdrugs, computer intrusion detection and forensic media analysis of computer crimes. This element supports Technical Surveillance Countermeasures (TSCM), Computer Crime Investigations (CCI), and technical support to criminal and counterintelligence investigations and operations conducted by AFOSI. AFOSI's TSCM mission conducts counterintelligence investigations for both AF and DoD facilities and programs in order to deter and detect technical surveillance operations conducted by Foreign Intelligence Services to compromise classified or sensitive information. The purpose of CCI research is to improve AF and DoD Information Operations capability by enhancing AFOSI's ability to deter or prevent spies, hackers, or saboteurs from manipulating, damaging, or stealing sensitive war fighting data or systems. Failing that, to investigate, identify, and prosecute those who do. While most research to meet operational requirements is Operational System Development, there is also research in the category of Engineering and Manufacturing Development due to a need for modifications to present technology.

The equipment required to provide technical support to investigations is unique and complex. This equipment must be continually updated to provide state-of-the-art capabilities to detect and neutralize criminal activities targeted against the AF and DoD. In an era of advancing technology, reduced manning, and increasingly high level fraud, environmental crime and computer crime investigations, technical investigative equipment must be continuously updated to enable AFOSI special agents to have the most cost effective and best possible means of thwarting criminal acts. The evolution of a new wave of computer crimes has made AFOSI responsible for the collection, investigative analysis, national level law enforcement coordination, and dissemination of hacker activity and intrusion incidents for the Air Force. AFOSI's computer crime equipment must stay on the leading edge of technology to collect criminal information as well as pursue and apprehend criminals through a global medium. AFOSI must continually update its existing high tech computer surveillance equipment to support ongoing and future investigative operations to identify hackers and hacker groups, as well as potential hostile government activities targeting Air Force communication and control systems.

Critical Infrastructure Protection identifies weaknesses in the Air Force Critical infrastructure, highlights critical countermeasures and acquires and deploys cost-effective solutions. The intent is to provide an Air Force-wide review of current infrastructure vulnerabilities; prioritize AF protection planning and integrate with existing programs; identify gaps based on AF needs; direct studies to refine AF requirements.

#### **UNCLASSIFIED**

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 0305128F: Security And Investigative Activities

BA 7: Operational Systems Development

This program is in Budget Activity 7, Operational System Development, because its products are primarily for use in investigative activity of an operational nature.

### B. Program Change Summary (\$ in Millions)

	FY 2009	FY 2010	<u>FY 2011 Base</u>	FY 2011 OCO	<u>FY 2011 Total</u>
Previous President's Budget	0.784	0.755	0.000	0.000	0.000
Current President's Budget	1.962	0.742	0.469	0.000	0.469
Total Adjustments	1.178	-0.013	0.469	0.000	0.469
<ul> <li>Congressional General Reductions</li> </ul>		0.000			
<ul> <li>Congressional Directed Reductions</li> </ul>		0.000			
<ul> <li>Congressional Rescissions</li> </ul>	0.000	0.000			
<ul> <li>Congressional Adds</li> </ul>		0.000			
<ul> <li>Congressional Directed Transfers</li> </ul>		0.000			
<ul> <li>Reprogrammings</li> </ul>	0.000	0.000			
<ul> <li>SBIR/STTR Transfer</li> </ul>	0.000	0.000			
<ul> <li>Other Adjustments</li> </ul>	1.178	-0.013	0.469	0.000	0.469

## **Change Summary Explanation**

FY11: The FY2010 President's Budget submital did not reflect FY2011 through FY2015 funding. Therefore, explanation of changes between the two budget positions cannot be made in a relevant manner.

Exhibit R-2A, RDT&E Project Just	stification: Pl	3 2011 Air F	orce						<b>DATE</b> : Feb	ruary 2010			
APPROPRIATION/BUDGET ACT 3600: Research, Development, Te BA 7: Operational Systems Develo	st & Evaluatio	n, Air Force			IOMENCLA 8F: Security	TURE And Investig	gative	PROJECT 671931: TECH SURVEIL COUNTER M EQPT					
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		
671931: TECH SURVEIL COUNTER MEAS EQPT	1.962	0.742	0.469	0.000	0.469	0.464	0.471	0.479	0.486	Continuing	Continuing		
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0				

### A. Mission Description and Budget Item Justification

Air Force Office of Special Investigations (AFOSI) conducts specialized investigative activities and force protection support for Air Force (AF) commanders worldwide. This assists AF commanders in protecting their people and resources. AFOSI's mission includes investigating criminal matters affecting AF personnel, contract fraud and economic crimes involving AF weapons systems and spare parts, the investigation of environmental crime, counterdrugs, computer intrusion detection and forensic media analysis of computer crimes. This element supports Technical Surveillance Countermeasures (TSCM), Computer Crime Investigations (CCI), and technical support to criminal and counterintelligence investigations and operations conducted by AFOSI. AFOSI's TSCM mission conducts counterintelligence investigations for both AF and DoD facilities and programs in order to deter and detect technical surveillance operations conducted by Foreign Intelligence Services to compromise classified or sensitive information. The purpose of CCI research is to improve AF and DoD Information Operations capability by enhancing AFOSI's ability to deter or prevent spies, hackers, or saboteurs from manipulating, damaging, or stealing sensitive war fighting data or systems. Failing that, to investigate, identify, and prosecute those who do. While most research to meet operational requirements is Operational System Development, there is also research in the category of Engineering and Manufacturing Development due to a need for modifications to present technology.

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		_	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
3600: Research, Development, Test & Evaluation, Air Force	PE 0305128F: Security And Investigative	671931: <i>TE</i>	ECH SURVEIL COUNTER MEAS
BA 7: Operational Systems Development	Activities	EQPT	

This program is in Budget Activity 7, Operational System Development, because its products are primarily for use in investigative activity of an operational nature.

# **B.** Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: Next Generation Technical Surveillance Countermeasures (TSCM) receiver	1.448	0.270	0.269	0.000	0.269
FY 2009 Accomplishments: In FY09: N/A					
FY 2010 Plans: In FY10: N/A					
FY 2011 Base Plans: In FY11: N/A					
FY 2011 OCO Plans: In FY11 OCO: N/A					
MAJOR THRUST: Continue development of Computer Crimes Investigative (CCI) Equipment & Software	0.273	0.250	0.200	0.000	0.20
FY 2009 Accomplishments: In FY09: N/A					
FY 2010 Plans: In FY10: N/A					
FY 2011 Base Plans: In FY11: N/A					

Exhibit R-2A, RDT&E Project Jus	stification: PB	2011 Air Fo	rce						DATE: Feb	ruary 2010						
3600: Research, Development, Tes	PPROPRIATION/BUDGET ACTIVITY  00: Research, Development, Test & Evaluation, Air Force A 7: Operational Systems Development  R-1 ITEM NOMENCLATURE  PE 0305128F: Security And Investig  Activities									PROJECT 671931: TECH SURVEIL COUNTER MEA						
B. Accomplishments/Planned Pr	ogram (\$ in M	lillions)	'													
	,	·					FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total					
FY 2011 OCO Plans: In FY11 OCO: N/A																
MAJOR THRUST: Next Generatio	n TSCM receiv	er continuin	g developme	ent			0.241	0.222	0.000	0.000	0.00					
FY 2009 Accomplishments: In FY09: N/A																
FY 2010 Plans: In FY10: N/A																
<i>FY 2011 Base Plans:</i> In FY11: N/A																
FY 2011 OCO Plans: In FY11 OCO: N/A																
			Accomplish	ments/Plann	ed Program	s Subtotals	1.962	0.742	0.469	0.000	0.469					
C. Other Program Funding Sumn	mary (\$ in Mill	ions)														
			FY 2011	FY 2011	FY 2011					Cost To						
<u>Line Item</u>	FY 2009	FY 2010	Base	000	<u>Total</u>	FY 2012	FY 2013	FY 2014		<b>Complete</b>						
PE Not Provided (16904):     Other Procurement/Technical     Surveillance Countermeasures	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00					
Equipment 3080/WSC 846030		0.265	0.270	0.000	0.270	0.285	0.287	0.280	0.280	0.000	0.00					

**UNCLASSIFIED** 

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

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force
BA 7: Operational Systems Development

Activities

DATE: February 2010

R-1 ITEM NOMENCLATURE
PE 0305128F: Security And Investigative Activities

Activities

EQPT

### C. Other Program Funding Summary (\$ in Millions)

<u>FY 2011 FY 2011 FY 2011</u> <u>Cost To</u>

<u>Line Item</u> <u>FY 2009 FY 2010 Base OCO Total FY 2012 FY 2013 FY 2014 FY 2015 Complete Total Cost To</u>

• PE Not Provided (16916): Other Procurement/Heavily Armored Vehicle 3080/WSC 821700

### D. Acquisition Strategy

Market Research is accomplished jointly within the DoD, Counterintelligence, and Law Enforcement communities with the various government laboratories and major defense contractors to identify locations with the ability to develop investigative tools unique to our mission needs, these technologies, capabilities, and limitiations of current and future investigative tools is sometimes highly sensitive or classified.

#### 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.

Exhibit R-3, RDT&E Project Cost Analysis: 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 0305128F: Security And Investigative

Activities

**PROJECT** 

671931: TECH SURVEIL COUNTER MEAS

**EQPT** 

## **Product Development (\$ in Millions)**

				FY 2010		FY 2 Ba		FY 2	-	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
Sandia Natl Lab	MIPR	TBD TBD	0.386	0.400	Mar 2010	0.108	Mar 2011	0.000		0.108	Continuing	Continuing	Continuing
AFWIC	MIPR	TBD TBD	1.378	0.220	Mar 2010	0.218	Mar 2011	0.000		0.218	Continuing	Continuing	Continuing
Other Agency	MIPR	TBD TBD	0.198	0.122	Apr 2010	0.143	Mar 2011	0.000		0.143	Continuing	Continuing	Continuing
		Subtotal	1.962	0.742		0.469		0.000		0.469			

#### Remarks

	Total Prior Years Cost	FY 2	2010		2011 ase	FY 2	2011 CO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	1.962	0.742		0.469		0.000		0.469			

#### Remarks

Total Prior Years Cost may include only FY 2009 data.

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Research, Devel Operational Syst					ation,	Air F	orce				PE 03 Activit	30512 ties	8F: S	Securi	ty An	d Inv	estig	ative			1931 Q <i>PT</i>	: TEC	H S	URV	/EIL COUNTER MEA				
Fiscal Year		FY	08			FY	709			FY	10			FY	12			FYI	13		P	FY1	4			FY	Y15		
	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	
CCI Software Items		*	-	]				]				]									]	Z			[	Z 1			
TSCM Receiver			10			7								Ē	102		1						A		[				

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
3600: Research, Development, Test & Evaluation, Air Force	PE 0305128F: Security And Investigative	671931: <i>TE</i>	CH SURVEIL COUNTER MEAS
BA 7: Operational Systems Development	Activities	EQPT	

# Schedule Details

	St	art	E	nd
Event	Quarter	Year	Quarter	Year
TSCM Receiver	2	2009	4	2010
CCI Software/Equipment	2	2009	4	2010