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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force										Date: February 2018		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0305128F I Security and Investigative Activities							
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	-	0.405	0.415	0.418	0.000	0.418	0.425	0.433	0.442	0.450	Continuing	Continuing
671931: TECH SURVEIL COUNTER MEAS EQPT	-	0.405	0.415	0.418	0.000	0.418	0.425	0.433	0.442	0.450	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**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.

This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

BA7 - This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

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B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	0.405	0.415	0.421	0.000	0.421
Current President's Budget	0.405	0.415	0.418	0.000	0.418
Total Adjustments	0.000	0.000	-0.003	0.000	-0.003
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	-0.003	0.000	-0.003
C. Accomplishments/Planned Programs (\$ in Millions)					
	FY 2017	FY 2018	FY 2019		
Title: TSCM	0.405	0.415	0.418		
Description: These funds will support development of a suite of specialized law enforcement and counterintelligence restricted tools needed to exploit cyberspace, digital media storage and mobile audio/visual/data communications for the collection of evidence against a wide variety of serious offenses. They will develop next generation Technical Surveillance Countermeasures (TSCM) to defend against emerging foreign technical intelligence capabilities targeting sensitive protected information for exploitation. The concerted efforts of criminal, terrorist and foreign intelligence elements to evade law enforcement and compromise protected systems, all while remaining undetected using the latest technical advances available, require persistent development of tools to defeat their efforts.					
FY 2018 Plans:					
These funds continue to support the development of a suite of specialized law enforcement and counterintelligence restricted tools needed to exploit cyberspace, digital media storage and mobile audio/visual/data communications for the collection of evidence against a wide variety of serious offenses and develop next generation Technical Surveillance Countermeasures (TSCM) to defend against emerging foreign technical intelligence capabilities targeting sensitive protected information for exploitation.					
-\$240,000 for research and development of GOTS software for the live capture of digital information from the Air Force Network.					
-\$20,000 to research software defined radio software which integrates community standard radio software for incorporation into existing TSCM suites.					

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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
<p>-\$200,000 will go to the Naval Research Laboratory to support a joint project to detect and geo-locate foreign intelligence optical threats breaking ground on new capabilities for DoD.</p> <p><b><i>FY 2019 Plans:</i></b> These funds continue to support the development of a suite of specialized law enforcement and counterintelligence restricted tools needed to exploit cyberspace, digital media storage and mobile audio/visual/data communications for the collection of evidence against a wide variety of serious offenses and develop next generation Technical Surveillance Countermeasures (TSCM) to defend against emerging foreign technical intelligence capabilities targeting sensitive protected information for exploitation.</p> <p><b><i>FY 2018 to FY 2019 Increase/Decrease Statement:</i></b> Programmed growth due to standard inflation.</p>				
<b>Accomplishments/Planned Programs Subtotals</b>		0.405	0.415	0.418
<b>D. Other Program Funding Summary (\$ in Millions)</b>				
N/A				
<b>Remarks</b>				
<b>E. Acquisition Strategy</b>				
Market Research is accomplished jointly within the DoD, Counterintelligence, and Law Enforcement communities with the various government laboratories and major contractors to identify locations with the ability to develop investigative tools unique to our mission needs. These technologies, capabilities, and limitations of current and future investigative tools is sometimes highly sensitive or classified. Market Research also allows inter-agency coordination and deconfliction to occur, reducing or eliminating duplicitous development efforts. Annually, stakeholders meet to discuss initiatives, challenges and organizational goals to coordinate or consolidate requirements to increase efficiency. Once Market Research and any applicable coordination/deconfliction is completed, acquisition channels are analyzed and selected based on the ability to meet operational and technical security requirements.				
<b>F. Performance Metrics</b>				
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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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2019 Air Force												<b>Date:</b> February 2018			
<b>Appropriation/Budget Activity</b> 3600 / 7						<b>R-1 Program Element (Number/Name)</b> PE 0305128F / <i>Security and Investigative Activities</i>				<b>Project (Number/Name)</b> 671931 / <i>TECH SURVEIL COUNTER MEAS EQPT</i>					

  

<b>Product Development (\$ in Millions)</b>				<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>				
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>		<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
TSCM R/D #4	MIPR	HQ AFOSI : Quantico, VA	-	0.405	Dec 2016	0.415	Dec 2017	0.418		-		0.418	Continuing	Continuing	-	
<b>Subtotal</b>			-	0.405		0.415		0.418		-		0.418	Continuing	Continuing	N/A	

  

			<b>Prior Years</b>	<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			-	0.405		0.415		0.418		-		0.418	Continuing	Continuing	N/A

  

**Remarks**

Funds support AFOSI RDTE at the intelligence community's Interagency Test and Evaluation Lab at a secure location to identify, research, develop, test, and evaluate classified and unclassified technical surveillance and countermeasures solutions to emerging operational requirements in support of AFOSI services to protect Air Force and DoD resources.

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2019 Air Force			<b>Date:</b> February 2018		
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	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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
<b>Technical Surveillance Equipment Test &amp; Evaluation</b>																												
Continue Phase II TSCM LASER Project																												
Transition from Phase II TSCM LASER Project to Phase III																												
Complete Phase III (Final) TSCM LASER Project																												
Tech Service Ops Advanced Tool Development																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Air Force			Date: February 2018
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305128F / Security and Investigative Activities	Project (Number/Name) 671931 / TECH SURVEIL COUNTER MEAS EQPT	

## Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Technical Surveillance Equipment Test &amp; Evaluation</b>				
Continue Phase II TSCM LASER Project	1	2017	4	2017
Transition from Phase II TSCM LASER Project to Phase III	1	2018	4	2018
Complete Phase III (Final) TSCM LASER Project	1	2019	4	2020
Tech Service Ops Advanced Tool Development	1	2021	4	2023

### Note

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