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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force **Date:** February 2015

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>					R-1 Program Element (Number/Name) PE 0603260F <i>I Intelligence Advanced Development</i>							
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	-	3.983	5.408	5.032	-	5.032	5.654	5.691	5.663	5.764	Continuing	Continuing
643479: <i>Advanced Sensor Exploitation</i>	-	0.335	-	-	-	-	-	-	-	-	-	0.335
643480: <i>Automated Imagery Exploitation</i>	-	2.020	-	-	-	-	-	-	-	-	-	2.020
643481: <i>Knowledge Based Tech For Intelligence</i>	-	0.858	-	-	-	-	-	-	-	-	-	0.858
643482: <i>Science & Tech Intelligence Methodology</i>	-	0.770	-	-	-	-	-	-	-	-	-	0.770
64536A: <i>INTELLIGENCE EXPLOITATION TOOLS (IET)</i>	-	-	4.298	3.991	-	3.991	4.487	4.519	4.496	4.576	Continuing	Continuing
64537A: <i>INTELLIGENCE ANALYSIS CAPABILITIES (IAC)</i>	-	-	1.110	1.041	-	1.041	1.167	1.172	1.167	1.188	Continuing	Continuing

Note

In FY 2015, PE 0603260F (BA5), Intelligence Advanced Development (IAD), Project Number 652053, National Air Intelligence Center efforts were transferred to PE 0603260F (BA4), Intelligence Advanced Development (IAD), Project Number 64537A, Intelligence Analysis Capabilities (IAC), in order to properly align efforts, increase management efficiency, and reduce administrative actions.

In FY 2015, PE 0603260F (BA4), Intelligence Advanced Development (IAD), Project Number 643479 (Advanced Sensor Exploitation), Project Number 643480 (Automated Imagery Exploitation), Project Number 643481 (Knowledge Based Tech for Intelligence), and Project Number 643482 (Science & Tech Intelligence Methodology), were transferred to PE 0603260F (BA4), Intelligence Advanced Development (IAD), Project Number 64536A, IET, in order to increase management efficiency, reduce administrative actions, and minimize effort duplication.

A. Mission Description and Budget Item Justification

Intelligence Advanced Development (IAD) develops and demonstrates technology required to support warfighter needs for timely all source intelligence information. IAD supports global awareness, consistent battlespace knowledge, precision information, and the execution of time critical missions. IAD projects provide better on-time information to the warfighter using new and existing data sources, streamlining data analysis, reducing footprint, extending life of sensors in place and enhancing performance. The Air Force Research Lab, Rome Research Site, Information and Intelligence Exploitation Division (AFRL/RIE), develops prototype applications for evaluation in a realistic operating environment. The programs are oriented toward specific shortfalls and deficiencies as documented by the Major Commands (MAJCOMS), unified commands, and intelligence organizations in their mission and functional area plans. This PE expedites technology transition from the laboratory

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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force **Date:** February 2015

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0603260F <i>I Intelligence Advanced Development</i>
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to operational users via rapid prototyping, focusing on technology insertion correcting AF intelligence deficiencies at the tactical and operational levels. This PE bridges the technology transition from Advanced Technology Demonstrations (ATDs) and Integrated Technology Thrust Programs (ITTPs) to current/new systems, and also supports associated Defense Technology Objectives (DTOs). IAD may also reallocate existing resources to support out-of-cycle new/updated warfighter requirements.

Requirements for this PE are identified and prioritized by the 25th Air Force (25 AF). Development of new/improved capabilities to meet these requirements is managed by AFRL/RIE. Prototype products, usually in the form of software, are provided to the users for operational environment evaluation.

This Program is in Budget Activity 4, Advanced Component Development and Prototypes (ACD&P) because efforts are necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment.

The FY2016 funding request was reduced by \$0.336 million to account for the availability of prior execution balances.

B. Program Change Summary (\$ in Millions)	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016 Base</u>	<u>FY 2016 OCO</u>	<u>FY 2016 Total</u>
Previous President's Budget	3.983	5.408	5.402	-	5.402
Current President's Budget	3.983	5.408	5.032	-	5.032
Total Adjustments	-	-	-0.370	-	-0.370
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	-0.370	-	-0.370

Change Summary Explanation

The FY2016 funding request was reduced by \$0.336M to account for the availability of prior execution balances.

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600 / 4					R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development				Project (Number/Name) 643479 / Advanced Sensor Exploitation			
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
643479: Advanced Sensor Exploitation	-	0.335	-	-	-	-	-	-	-	-	-	0.335
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note In FY 2015, PE 0603260F (BA4), Intelligence Advanced Development (IAD), Project Number 643479 (Advanced Sensor Exploitation), efforts were transferred to PE 0603260F, Intelligence Advanced Development (IAD), Project Number 64536A, Intelligence Exploitation Tools (IET), in order to increase management efficiency, reduce administrative actions, and minimize effort duplication.												
A. Mission Description and Budget Item Justification The project objectives are to develop, demonstrate and evaluate a near-real-time all source correlation/fusion capability by applying state-of-the-art data processing techniques for the receipt, correlation, templating, and analysis of battlefield information. Prototypes will be developed in an open systems architecture environment allowing for the greatest efficiency in terms of integrating or interfacing with other systems. There are Air Force, DoD, and Coalition requirements to correlate various sources of intelligence information [Communications Intelligence (COMINT), Electronic Intelligence (ELINT), Imagery Intelligence (IMINT) and Measurement and Signature Intelligence - (MASINT)] within seconds/minutes vs. hours/days with current manual and semi-automated methods. The project includes development of data correlation and predictive intelligence algorithms as well as target analysis and prioritization, air order of battle update, and tactical analysis techniques. This computerized approach will speed up the correlation of data from diverse sources of intelligence information, including COMINT, ELINT, IMINT and MASINT, providing faster situational awareness and threat assessment, and replacing manual systems with automated capabilities. Activities also include studies and analysis to support both current program planning and execution and future program planning.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2014	FY 2015	FY 2016	
Title: ELINT Synchronization									0.335	-	-	
Description: Risk reduction development initiative which automates analysis and screening of large volumes of collected but unscreened technical ELINT data. Effort will further the development of applications in signals characterization and database matching algorithms.												
FY 2014 Accomplishments: Initiated prototype development of a software capability providing automated screening of technical ELINT data through further development of applications in signals characterization and database matching algorithms.												
FY 2015 Plans: N/A												
Accomplishments/Planned Programs Subtotals									0.335	-	-	

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>	Project (Number/Name) 643479 / <i>Advanced Sensor Exploitation</i>	

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

Line Item	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
• None: N/A	-	-	-	-	-	-	-	-	-	-	-

Remarks

D. Acquisition Strategy

Requirements for new advanced sensor exploitation technologies are identified and prioritized by the 25th Air Force (25 AF). Development of new/improved capabilities to meet these requirements is managed by AF Research Laboratory (Rome Research Site). Prototype products (usually software), once evaluated by the users, are transitioned from the laboratory to the operational community in spirals. All contracts within this project are awarded after full and open competition.

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 2016 Air Force													Date: February 2015		
Appropriation/Budget Activity 3600 / 4						R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>						Project (Number/Name) 643479 / <i>Advanced Sensor Exploitation</i>			
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
ELINT Synchronization	MIPR	SRC : Dayton, OH	-	0.335	Nov 2013	-		-		-		-	-	0.335	-
Subtotal			-	0.335		-		-		-		-	-	0.335	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
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			-	0.335	-		-		-		-	-	0.335	-	
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force																Date: February 2015																											
Appropriation/Budget Activity 3600 / 4												R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>								Project (Number/Name) 643479 / <i>Advanced Sensor Exploitation</i>																							
												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				
ELINT Synchronization Development/Prototype																																											

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force		Date: February 2015
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>	Project (Number/Name) 643479 / <i>Advanced Sensor Exploitation</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
ELINT Synchronization Development/Prototype	1	2014	4	2014

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600 / 4					R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development				Project (Number/Name) 643480 / Automated Imagery Exploitation			
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
643480: Automated Imagery Exploitation	-	2.020	-	-	-	-	-	-	-	-	-	2.020
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note												
In FY 2015, PE 0603260F (BA4), Intelligence Advanced Development (IAD), Project Number 643480 (Automated Imagery Exploitation), was transferred to PE 0603260F (BA4), Intelligence Advanced Development (IAD), Project Number 64536A, IET, in order to increase management efficiency, reduce administrative actions, and minimize effort duplication.												
A. Mission Description and Budget Item Justification												
This project demonstrates and validates the capability to more accurately and quickly interpret digital imagery and video by developing/evaluating computer-assisted techniques to manipulate and overlay imagery, cartographic data, signals intelligence (SIGINT), and on-line intelligence data. The result of this effort will provide the operator precise target locations and identifications, precise target reference scenes, and more accurate damage assessments. Allows for easier supportability on low-cost, commercially-available computer workstations. Activities also include studies and analysis to support both current program planning and execution and future program planning.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2014	FY 2015	FY 2016	
Title: Digital Library Input Processing System (DLIPS)									1.090	-	-	
Description: Updates current DLIPS configuration (Text-to-Text translation only) to process foreign language audio or video input into English in support of open-source analysts.												
FY 2014 Accomplishments: Released DLIPS prototype 1.2, conducted user evaluation; incorporated user feedback and completed development of final prototype.												
FY 2015 Plans: N/A												
Title: Emitter Location Systems Modeling (ELSM)									0.340	-	-	
Description: Initiates enhancement of modeling capability of next generation US, Allied, and adversary RF emitters on the battlefield to allow for enhanced EW performance and vulnerability assessments.												
FY 2014 Accomplishments:												

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600 / 4				R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development				Project (Number/Name) 643480 / Automated Imagery Exploitation				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2014	FY 2015	FY 2016
Released ELSM prototype 1.1 to users for evaluation in realistic operating environment; incorporated user feedback and completed development of final prototype.												
FY 2015 Plans: N/A												
Title: Rapid Electronic Attack Assessment For Protection, Exploitation, and Reprogramming (REAPER) Description: Initiates capability to provide rapid assessment of adversary Electronic Attack (EA) signals, which supports pilot training and the development of EA protection and countermeasures systems.										0.340	-	-
FY 2014 Accomplishments: Released Rapid Electronic Attack Assessment for Protection, Exploitation and Reprogramming (REAPER) prototype 1.1 to users for evaluation in realistic operating environment; incorporated user feedback and completed development of final prototype.												
FY 2015 Plans: N/A												
Title: Electronics Exploitation Description: Develop a capability to enable the detection, geo-location, and tracking of complex wideband and low probability of intercept emitters; improve reporting timeliness and accuracy of worldwide Electronics Intelligence (ELINT) intercept data.										0.250	-	-
FY 2014 Accomplishments: Initiated prototype development of a capability to enable the detection, geo-location, and tracking of complex wideband and low probability of intercept emitters; improving reporting timeliness and accuracy of worldwide Electronics Intelligence (ELINT) intercept data.												
FY 2015 Plans: N/A												
Accomplishments/Planned Programs Subtotals										2.020	-	-
C. Other Program Funding Summary (\$ in Millions)												
Line Item	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 Cos	
• None: N/A	-	-	-	-	-	-	-	-	-	-	-	

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015	
Appropriation/Budget Activity 3600 / 4				R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>				Project (Number/Name) 643480 / <i>Automated Imagery Exploitation</i>			
C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2016</u>	<u>FY 2016</u>	<u>FY 2016</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Complete</u>	<u>Total Cost</u>
Remarks											
None											
D. Acquisition Strategy											
Requirements for new computer assisted techniques for interpretation of digital imagery and video are identified and prioritized by the 25th Air Force (25 AF). Development of new/improved capabilities to meet these requirements is managed by AF Research Laboratory (Rome Research Site). The prototype products (usually software), once evaluated by the users, are transitioned from the laboratory to operational community in spirals. All major contracts within this project are awarded after full and open competition.											
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 2016 Air Force												Date: February 2015			
Appropriation/Budget Activity 3600 / 4						R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development				Project (Number/Name) 643480 / Automated Imagery Exploitation					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Digital Library Input Processing System (DLIPS)	C/CPFF	Northrop Grumman : Beavercreek, OH	-	0.975	Oct 2013	-		-		-		-	-	0.975	4.900
Emitter Location Systems Modeling (ELSM)	C/CPFF	Information Systems Laboratory : San Diego, CA	-	0.300	Oct 2013	-		-		-		-	-	0.300	1.600
Rapid Electronic Attack Assessment For Protection, Exploitation, and Reprogramming (REAPER)	C/CPFF	SAIC : McLean, VA	-	0.300	Oct 2013	-		-		-		-	-	0.300	1.200
Electronics Exploitation	C/CPFF	L3 Communications : Greenville, TX	-	0.215	Oct 2013	-		-		-		-	-	0.215	-
Subtotal			-	1.790		-		-		-		-	-	1.790	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force												Date: February 2015			
Appropriation/Budget Activity 3600 / 4						R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>				Project (Number/Name) 643480 / <i>Automated Imagery Exploitation</i>					

Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
PMA	Various	AFRL - Information Directorate : Rome, NY	-	0.230	Oct 2013	-		-		-		-	-	0.230	-
Subtotal			-	0.230		-		-		-		-	-	0.230	-

	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	-	2.020	-	-	-	-	-	2.020	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force			Date: February 2015		
Appropriation/Budget Activity 3600 / 4		R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>			Project (Number/Name) 643480 / <i>Automated Imagery Exploitation</i>

	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
Digital Library Input Processing System (DLIPS) Development/Prototype																												
Emitter Location Systems Modeling (ELSM) Development/Prototype																												
Rapid Electronic Attack Assessment for Protection, Exploitation, and Reprogramming (REAAPER) Development/Prototype																												
Electronics Exploitation Development/Prototype																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>	Project (Number/Name) 643480 / <i>Automated Imagery Exploitation</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Digital Library Input Processing System (DLIPS) Development/Prototype	1	2014	4	2014
Emitter Location Systems Modeling (ELSM) Development/Prototype	1	2014	4	2014
Rapid Electronic Attack Assessment for Protection, Exploitation, and Reprogramming (REAPER) Development/Prototype	1	2014	4	2014
Electronics Exploitation Development/Prototype	1	2014	4	2014

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600 / 4					R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development				Project (Number/Name) 643481 / Knowledge Based Tech For Intelligence			
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
643481: Knowledge Based Tech For Intelligence	-	0.858	-	-	-	-	-	-	-	-	-	0.858
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note In FY 2015, PE 0603260F (BA4), Intelligence Advanced Development (IAD), Project Number 643481 (Knowledge Based Tech for Intelligence), was transferred to PE 0603260F (BA4), Intelligence Advanced Development (IAD), Project Number 64536A, IET, in order to increase management efficiency, reduce administrative actions, and minimize effort duplication.												
A. Mission Description and Budget Item Justification This project improves global awareness, dynamic planning, and execution by providing information repositories and inference engines (computer program) to exploit collected data for nine major commands and Air Force intelligence organizations. Development of analytical aids is based on artificial intelligence techniques. Increased timeliness, efficiency and effectiveness will provide enhanced warning time and accuracy, allowing national/military authorities a greater range of options to avert, diminish or control a crisis. Activities also include studies and analysis to support both current program planning and execution and future program planning.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2014	FY 2015	FY 2016	
Title: Multi-Source, Multi-Modal, Analytical Collect, Process, Exploit and Disseminate (MMACPED) System Description: Develop a framework designed to expose media tools, data, products, workflow and analytical services to the DoD and IC. FY 2014 Accomplishments: Initiated prototype development of MMACPED system. FY 2015 Plans: N/A									0.483	-	-	
Title: C2 Surrogate System Build Spec Description: Develop software to perform high fidelity analysis of threat designs and potential alternatives in the command and control of an Integrated Air Defense Systems (IADS), providing critical insight into the synergistic effects of combined systems and their vulnerabilities. FY 2014 Accomplishments:									0.375	-	-	

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Appropriation/Budget Activity 3600 / 4				R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>				Project (Number/Name) 643481 / <i>Knowledge Based Tech For Intelligence</i>				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2014	FY 2015	FY 2016
Initiated prototype development of software to perform high fidelity analysis of threat designs and potential alternatives in the command and control of an Integrated Air Defense Systems (IADS), providing critical insight into the synergistic effects of combined systems and their vulnerabilities.												
FY 2015 Plans: N/A												
Accomplishments/Planned Programs Subtotals										0.858	-	-
C. Other Program Funding Summary (\$ in Millions)												
Line Item	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	
• None: N/A	-	-	-	-	-	-	-	-	-	-	-	
Remarks None												
D. Acquisition Strategy Requirements for new/improved analytical aids to exploit collected intelligence data are identified and prioritized by the 25th Air Force (25 AF). Development of new/improved capabilities to meet these requirements is managed by AF Research Laboratory (Rome Research Site). Prototype products (usually software), once evaluated by the users, are transitioned from the laboratory to operational community in spirals. All major contracts within this project are awarded after full and open competition.												
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 2016 Air Force												Date: February 2015			
Appropriation/Budget Activity 3600 / 4						R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development				Project (Number/Name) 643481 / Knowledge Based Tech For Intelligence					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Multi-Source, Multi-Modal Analytical Collect, Process, Exploit and Disseminate (MMACPED) System	C/CPFF	Northrop Grumman : Beavercreek, OH	-	0.483	Oct 2013	-		-		-		-	-	0.483	-
C2 Surrogate System Build Spec	C/CPFF	Leidos : Beavercreek, OH	-	0.375	Oct 2013	-		-		-		-	-	0.375	-
Subtotal			-	0.858		-		-		-		-	-	0.858	-
Remarks Both are IDIQ															
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force											Date: February 2015		
Appropriation/Budget Activity 3600 / 4				R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development				Project (Number/Name) 643481 / Knowledge Based Tech For Intelligence					
	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	-	0.858		-		-		-		-	-	0.858	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force																				Date: February 2015					
Appropriation/Budget Activity 3600 / 4										R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development										Project (Number/Name) 643481 / Knowledge Based Tech For Intelligence					

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>	Project (Number/Name) 643481 / <i>Knowledge Based Tech For Intelligence</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Multi-Source, Multi-Modal Analytical Collect, Process, Exploit and Disseminate (MMACPED) System Development/Prototype	1	2014	4	2014
C2 Surrogate System Build Spec Development/Prototype	1	2014	4	2014

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600 / 4					R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development				Project (Number/Name) 643482 / Science & Tech Intelligence Methodology			
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
643482: Science & Tech Intelligence Methodology	-	0.770	-	-	-	-	-	-	-	-	-	0.770
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note In FY 2015, PE 0603260F (BA4), Intelligence Advanced Development (IAD), Project Number 643482 (Science & Tech Intelligence Methodology), was transferred to PE 0603260F (BA4), Intelligence Advanced Development (IAD), Project Number 64536A, IET, in order to increase management efficiency, reduce administrative actions, and minimize effort duplication.												
A. Mission Description and Budget Item Justification The project demonstrates and validates intelligence methodologies and techniques for operational employment of simulation models in support of the 25th Air Force (25 AF) requirements. The methods and techniques help the 25 AF improve analysis of current and future foreign weapon systems and prevent technological surprises to our warfighters with regard to the capabilities of these systems. Activities also include studies and analysis to support both current program planning and execution and future program planning.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2014	FY 2015	FY 2016	
Title: Enabling Discovery through Automated Content Extraction (EDACE) Description: Develop automated methods that aid in the systematic, continuous, and comprehensive assessment of technical concepts using information found in the published scientific, technical, and patent literature, message traffic, gray literature, and conference papers. FY 2014 Accomplishments: Initiated prototype development of automated methods that aid in the systematic, continuous, and comprehensive assessment of technical topic, concepts and emergence using information found in the published scientific, technical, and patent literature, message traffic, gray literature, and conference papers. FY 2015 Plans: N/A									0.770	-	-	
Accomplishments/Planned Programs Subtotals									0.770	-	-	

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015	
Appropriation/Budget Activity 3600 / 4				R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>				Project (Number/Name) 643482 / <i>Science & Tech Intelligence Methodology</i>			
C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2016</u>	<u>FY 2016</u>	<u>FY 2016</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Complete</u>	<u>Total Cost</u>
• None: N/A	-	-	-	-	-	-	-	-	-	-	-
Remarks											
D. Acquisition Strategy											
Requirements for new/improved techniques for operational employment of simulation models are identified and prioritized by the 25th Air Force (25 AF). Development of the new/improved capabilities to meet these requirements is managed by AF Research Laboratory (Rome Research Site). Prototype products (usually software), once evaluated by the users, are transitioned from the laboratory to operational community in spirals. All major contracts within this project are awarded after full and open competition.											
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 2016 Air Force												Date: February 2015			
Appropriation/Budget Activity 3600 / 4						R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development				Project (Number/Name) 643482 / Science & Tech Intelligence Methodology					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Enabling Discovery through Automated Content Extraction (EDACE)	C/CPFF	Raytheon : Cambridge, MA	-	0.460	Oct 2013	-		-		-		-	-	0.460	-
Subtotal			-	0.460		-		-		-		-	-	0.460	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
PMA	Various	AFRL - Information Directorate : Rome, NY	-	0.310	Oct 2013	-		-		-		-	-	0.310	-
Subtotal			-	0.310		-		-		-		-	-	0.310	-
			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			-	0.770		-		-		-		-	-	0.770	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force							Date: February 2015			
Appropriation/Budget Activity 3600 / 4				R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development			Project (Number/Name) 643482 / Science & Tech Intelligence Methodology			
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks										

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force																Date: February 2015			
Appropriation/Budget Activity 3600 / 4								R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development								Project (Number/Name) 643482 / Science & Tech Intelligence Methodology			

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>	Project (Number/Name) 643482 / <i>Science & Tech Intelligence Methodology</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Enabling Discovery through Automated Content Extraction (EDACE) Prototype Development	1	2014	4	2014

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600 / 4					R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development				Project (Number/Name) 64536A / INTELLIGENCE EXPLOITATION TOOLS (IET)			
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
64536A: INTELLIGENCE EXPLOITATION TOOLS (IET)	-	-	4.298	3.991	-	3.991	4.487	4.519	4.496	4.576	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2015, PE 0603260F (BA4), Intelligence Advanced Development (IAD), Project Number 643479 (Advanced Sensor Exploitation), Project Number 643480 (Automated Imagery Exploitation), Project Number 643481 (Knowledge Based Tech for Intelligence), and Project Number 643482 (Science & Tech Intelligence Methodology), were transferred to PE 0603260F (BA4), Intelligence Advanced Development (IAD), Project Number 64536A, IET, in order to increase management efficiency, reduce administrative actions, and minimize effort duplication.

A. Mission Description and Budget Item Justification

Intelligence Exploitation Tools (IET) prototyping encompasses several areas of intelligence exploitation including the advancement of all source correlation and fusion prototypes for the intelligence analyst, thus enhancing the overall situational awareness for Air Force, DoD, and Coalition groups which have requirements to correlate various sources of intelligence information, including COMINT, ELINT, IMINT, GEOINT, MASINT, MOVINT and others, in a timely manner.

This project also addresses the accurate and timely interpretation of digital imagery and video by developing and evaluating techniques to manipulate and overlay imagery, cartographic data, SIGINT, and digital intelligence data. Analytical cross domain tools, which provide enhanced warning and accuracy and allow national and military authorities a greater range of options to avert, diminish or control a crisis, are also developed in this project.

In addition, methods to improve analysis of current and future foreign weapon systems are explored in this project.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2014	FY 2015	FY 2016
Title: ELINT Synchronization	-	0.340	-
Description: Risk reduction development initiative which automates analysis and screening of large volumes of collected but unscreened technical ELINT data. Furthers development of applications in signals characterization and database matching algorithms.			
FY 2014 Accomplishments: FY14 funding in Project 643479.			
FY 2015 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force			Date: February 2015		
Appropriation/Budget Activity 3600 / 4		R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>	Project (Number/Name) 64536A / <i>INTELLIGENCE EXPLOITATION TOOLS (IET)</i>		
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2014	FY 2015	FY 2016
Continuing development of a software prototype that provides automated screening of technical ELINT data through further development of applications in signals characterization and database matching algorithms, releasing first prototype, conducting user assessment, completing development of final prototype, and releasing final prototype.					
FY 2016 Plans: N/A					
Title: Private Assistant for Individual Relegation (PAIR) Description: Develops software focused on improving the way computers and application services supports intelligence analysts through the use of cognitive systems. FY 2014 Accomplishments: N/A FY 2015 Plans: Starting development of Private Assistance for Individual Relegation (PAIR) prototype. FY 2016 Plans: Will deliver first prototype, initiate user assessment of prototype, and initiate development of next prototype.			-	0.525	0.528
Title: Electronics Exploitation Description: Develop a capability to enable the detection, geo-location, and tracking of complex wideband and low probability of intercept emitters; improve reporting timeliness and accuracy of worldwide Electronics Intelligence (ELINT) intercept data. FY 2014 Accomplishments: FY14 funding in Project 643480. FY 2015 Plans: Delivering 1st Electronics Exploitation prototype, conducting user assessment, and initiating development of next prototype. FY 2016 Plans: Will complete user assessment and initiate development of next prototype.			-	0.430	0.417
Title: Feature and Pattern Recognition and Parsing to Text-Foreign Audio Video Operations (FAVOR) II Description: Develops capability to enable the intelligence analyst to conduct search and discovery either by visual pattern recognition/feature extraction or text-based using queries. This effort will create structured content from the recognition of objects, features and patterns contained within images/video.			-	0.588	0.576

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force			Date: February 2015		
Appropriation/Budget Activity 3600 / 4		R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development	Project (Number/Name) 64536A / INTELLIGENCE EXPLOITATION TOOLS (IET)		
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2014	FY 2015	FY 2016
FY 2014 Accomplishments: N/A					
FY 2015 Plans: Starting the development of the FAVOR II prototype.					
FY 2016 Plans: Will release the first prototype, initiate user assessment, and initiate development of next prototype.					
Title: Increased SIGINT On-board Analysis (ISOBA) Description: Expands software currently deployed on RIVET JOINT processor to enable collecting current and future SIGINT metadata.			-	0.440	0.613
FY 2014 Accomplishments: N/A					
FY 2015 Plans: Starting development of ISOBA prototype.					
FY 2016 Plans: Will release first prototype, initiate user assessment, and initiate development of next prototype.					
Title: Multi-Source, Multi-Modal, Analytical Collect, Process, Exploit and Disseminate (MMACPED) System Description: Develop a framework designed to expose media tools, data, products, workflow and analytical services to the DoD and IC.			-	0.575	0.596
FY 2014 Accomplishments: FY14 funding in Project 643481.					
FY 2015 Plans: Delivering first prototype of MMACPED prototype, initiating user assessment, and initiating development of next prototype.					
FY 2016 Plans: Will complete user assessment and continue development of next prototype.					
Title: Global Architecture for Mission Reporting and Analysis (GAMRA)			-	0.460	0.665

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force		Date: February 2015		
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development	Project (Number/Name) 64536A / INTELLIGENCE EXPLOITATION TOOLS (IET)		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016
<p>Description: Develops capability for qualitative mission assessment and lays a framework for integrating future ISR and combat mission capabilities into the assessment framework.</p> <p>FY 2014 Accomplishments: N/A</p> <p>FY 2015 Plans: Starting development of Global Architecture for Mission Reporting and Analysis (GAMRA) prototype.</p> <p>FY 2016 Plans: Will release first prototype, conduct user assessment, and initiate development of next prototype.</p>				
<p>Title: C2 Surrogate System Build Spec</p> <p>Description: Develop software to perform high fidelity analysis of threat designs and potential alternatives in the command and control of an Integrated Air Defense Systems (IADS), providing critical insight into the synergistic effects of combined systems and their vulnerabilities.</p> <p>FY 2014 Accomplishments: FY14 funding in Project 643481.</p> <p>FY 2015 Plans: Releasing prototype, conducting user assessment, and completing final prototype.</p> <p>FY 2016 Plans: FY16 plans no funds requested in FY16.</p>		-	0.390	-
<p>Title: Enabling Discovery through Automated Content Extraction (EDACE)</p> <p>Description: Develop automated methods that aid in the systematic, continuous, and comprehensive assessment of technical topic, concepts and emergence using information found in the published scientific, technical, and patent literature, message traffic, gray literature, conference papers, etc.</p> <p>FY 2014 Accomplishments: FY14 funding in Project 643482.</p> <p>FY 2015 Plans: Releasing first prototype of EDACE prototype, initiating user assessment, and initiating development of next prototype.</p> <p>FY 2016 Plans:</p>		-	0.550	0.596

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600 / 4				R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>				Project (Number/Name) 64536A / <i>INTELLIGENCE EXPLOITATION TOOLS (IET)</i>				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2014	FY 2015	FY 2016
Will complete user assessment and continue developing next prototype.												
Accomplishments/Planned Programs Subtotals										-	4.298	3.991
C. Other Program Funding Summary (\$ in Millions)												
<u>Line Item</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u> <u>Base</u>	<u>FY 2016</u> <u>OCO</u>	<u>FY 2016</u> <u>Total</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Cost To Complete</u>	<u>Total Cost</u>	
• N/A: N/A	-	-	-	-	-	-	-	-	-	-	-	
Remarks												
D. Acquisition Strategy												
Requirements for new/improved techniques for operational employment of simulation models are identified and prioritized by the 25th Air Force (25 AF). Development of the new/improved capabilities to meet these requirements is managed by AF Research Laboratory (Rome Research Site). Prototype products (usually software), once evaluated by the users, are transitioned from the laboratory to operational community in spirals. All major contracts within this project are awarded after full and open competition.												
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 2016 Air Force												Date: February 2015			
Appropriation/Budget Activity 3600 / 4						R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development				Project (Number/Name) 64536A / INTELLIGENCE EXPLOITATION TOOLS (IET)					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
ELINT Synchronization	MIPR	SRC : Dayton, OH	-	-		0.300	Oct 2014	-		-		-	-	0.300	-
Feature and Pattern Recognition and Parsing to Text-Foreign Audio Video Operations (FAVOR II)	C/CPFF	Northrop Grumman : Dayton, OH	-	-		0.535	Apr 2015	0.560	Nov 2015	-		0.560	-	1.095	-
Enabling Discovery through Automated Content Extraction (EDACE)	C/CPFF	Raytheon : Cambridge, MA	-	-		0.500	Oct 2014	0.580	Oct 2015	-		0.580	-	1.080	-
Electronics Exploitation	C/CPFF	L3 Communications : Greenville, TX	-	-		0.385	Oct 2014	0.400	Oct 2015	-		0.400	-	0.785	-
Increased SIGINT On-Board Analysis (ISOBA)	C/CPFF	AIS : Rome, NY	-	-		0.400	Mar 2015	0.600	Oct 2015	-		0.600	-	1.000	-
Multi-Source, Multi-Modal, Analytical Collect, Process, Exploit and Disseminate (MMACPED) System	C/CPFF	Northrop Grumman : Beavercreek, OH	-	-		0.525	Oct 2014	0.580	Oct 2015	-		0.580	-	1.105	-
C2 Surrogate System Build Spec	C/CPFF	Leidos : Beavercreek, OH	-	-		0.345	Oct 2014	-		-		-	-	0.345	-
Global Architecture for Mission Reporting and Analysis (GAMRA)	C/CPFF	TBD : TBD,	-	-		0.425	Jun 2015	0.650	Oct 2015	-		0.650	-	1.075	-
Private Assistant for Individual Relegation (PAIR)	C/CPFF	Securburation/ Aptima : Various,	-	-		0.480	Apr 2015	0.510	Oct 2015	-		0.510	-	0.990	-
Subtotal			-	-		3.895		3.880		-		3.880	-	7.775	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force													Date: February 2015		
Appropriation/Budget Activity 3600 / 4					R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>					Project (Number/Name) 64536A / <i>INTELLIGENCE EXPLOITATION TOOLS (IET)</i>					

Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-

Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
PMA	Various	AFRL - Information Directorate : Rome, NY	-	-		0.403	Oct 2014	0.111	Oct 2015	-		0.111	-	0.514	-
Subtotal			-	-		0.403		0.111		-		0.111	-	0.514	-

			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			-	-	4.298	3.991	-	3.991	-	8.289	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force

Date: February 2015

Appropriation/Budget Activity

3600 / 4

R-1 Program Element (Number/Name)

PE 0603260F / Intelligence Advanced Development

Project (Number/Name)

64536A / INTELLIGENCE EXPLOITATION TOOLS (IET)

	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
ELINT Synchronization - FY14 Schedule is shown in PE 0603260F, Project 643479																												
ELINT Synchronization Development/Prototype																												
PAIR Development/Prototype																												
Electronics Exploitation - FY14 Schedule is shown in PE 0603260F, Project 643480																												
Electronics Exploitation Development/Prototype																												
FAVOR II Development/Prototype																												
ISOBA Development/Prototype																												
MMACPED - FY14 Schedule is shown in PE 0603260F, Project 643481																												
MMACPED Development/Prototype																												
GAMRA - Development/Prototype																												
C2 Surrogate System Build Spec - FY14 Schedule is shown in PE 0603260F, Project 643481																												
C2 Surrogate System Build Spec Development/Prototype																												
EDACE - FY14 Schedule is shown in PE 0603260F, Project 643482																												
EDACE Development/Prototype																												
FY17 IET Requirements Data Call																												
FY17 IET New Start(s) Development/Prototype																												
FY19 IET Requirements Data Call																												
FY19 IET New Start(s) Development/Prototype																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>	Project (Number/Name) 64536A / <i>INTELLIGENCE EXPLOITATION TOOLS (IET)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
ELINT Synchronization - FY14 Schedule is shown in PE 0603260F, Project 643479	1	2014	4	2014
ELINT Synchronization Development/Prototype	1	2015	4	2015
PAIR Development/Prototype	1	2015	4	2018
Electronics Exploitation - FY14 Schedule is shown in PE 0603260F, Project 643480	1	2014	4	2014
Electronics Exploitation Development/Prototype	1	2015	4	2018
FAVOR II Development/Prototype	1	2015	4	2018
ISOBA Development/Prototype	1	2015	4	2017
MMACPED - FY14 Schedule is shown in PE 0603260F, Project 643481	1	2014	4	2014
MMACPED Development/Prototype	1	2015	4	2018
GAMRA - Development/Prototype	1	2015	4	2017
C2 Surrogate System Build Spec - FY14 Schedule is shown in PE 0603260F, Project 643481	1	2014	4	2014
C2 Surrogate System Build Spec Development/Prototype	1	2015	4	2015
EDACE - FY14 Schedule is shown in PE 0603260F, Project 643482	1	2014	4	2014
EDACE Development/Prototype	1	2015	4	2018
FY17 IET Requirements Data Call	2	2015	2	2015
FY17 IET New Start(s) Development/Prototype	1	2017	4	2020
FY19 IET Requirements Data Call	2	2017	2	2017
FY19 IET New Start(s) Development/Prototype	1	2019	4	2020

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600 / 4					R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development				Project (Number/Name) 64537A / INTELLIGENCE ANALYSIS CAPABILITIES (IAC)			
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
64537A: INTELLIGENCE ANALYSIS CAPABILITIES (IAC)	-	-	1.110	1.041	-	1.041	1.167	1.172	1.167	1.188	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note												
In FY 2015, PE 0603260F (BA5), Intelligence Advanced Development (IAD), Project Number 652053, National Air Intelligence Center efforts were transferred to PE 0603260F (BA4), Intelligence Advanced Development (IAD), Project Number 64537A, Intelligence Analysis Capabilities (IAC), in order to properly align efforts, increase management efficiency, and reduce administrative actions.												
A. Mission Description and Budget Item Justification												
Intelligence Analysis Capabilities (IAC) provides continuing development and upgrades of threat analysis capabilities to produce integrated, predictive air and space intelligence to enable military operations, force modernization decisions, and policy making. Products from IAC allow the Intelligence Analyst to accelerate and increase the accuracy of threat estimates and system descriptions to deployed operational forces. IAC tools and algorithms provide NASIC and the 453rd EWS with the ability to produce accurate, predictive, relevant, and timely intelligence that supports client processes, operational planning, and mission execution. IAC develops new and upgraded analysis, modeling and simulation tools focused on intelligence production supporting AF operational and developmental all source analysis functions.												
Each of the development projects within the IAC program portfolio transition technologies to the operational communities through the incremental release of upgraded versions over a period of years as development projects progress towards the final configuration. IAC may reallocate existing resources to support out-of-cycle new/updated warfighter requirements.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2014	FY 2015	FY 2016	
Title: Space, Air, and Terrestrial Modeling & Simulation (SATM&S) Initiative									-	0.337	0.335	
Description: Initiates SATM&S to add a space communications modeling capability to the previously fielded terrestrial communications focused TEL-SCOPE tool. This effort will complete modeling of an adversary's total Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) system and assist nomination of terrestrial and space targets.												
FY 2014 Accomplishments: FY14 funding in PE 0603260F (BA5), Project 652053.												
FY 2015 Plans: Releasing first prototype and initiating development of 2nd prototype.												
FY 2016 Plans:												

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force							Date: February 2015		
Appropriation/Budget Activity 3600 / 4				R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>			Project (Number/Name) 64537A / <i>INTELLIGENCE ANALYSIS CAPABILITIES (IAC)</i>		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016
Will release second prototype and initiate development of 3rd prototype.			
Title: Activity Based Intelligence Indication & Warning (ABI I&W) Description: Develop a robust prototype of an enterprise level solution (tools and procedures) that will allow the intelligence analyst to perform predictive intelligence analysis on new areas of interest. FY 2014 Accomplishments: N/A FY 2015 Plans: Starting development of first prototype. FY 2016 Plans: Will release first prototype and start development of second prototype.	-	0.773	0.706
Accomplishments/Planned Programs Subtotals	-	1.110	1.041

C. Other Program Funding Summary (\$ in Millions)											
Line Item	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
• RDTE: BA05: PE 0603260F: <i>Intelligence Advanced Development</i>	0.977	-	-	-	-	-	-	-	-	-	-
Remarks											
D. Acquisition Strategy											
Requirements of new/upgraded intelligence analysis tools are identified and prioritized by the 25th Air Force (25 AF). Development of capabilities to meet these requirements is managed by the Air Force Research Laboratory (Rome Research Site). Prototype products (usually software), once evaluated by the users, are fielded in incremental capability spirals. All major contracts within this project are awarded after full and open competition.											
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 2016 Air Force												Date: February 2015			
Appropriation/Budget Activity 3600 / 4						R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>						Project (Number/Name) 64537A / <i>INTELLIGENCE ANALYSIS CAPABILITIES (IAC)</i>			
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Space, Air, and Terrestrial Modeling & Simulation Initiative	C/CPFF	Northrop Grumman Mission Systems : Beavercreek, OH	-	-		0.300	Oct 2014	0.300	Oct 2015	-		0.300	-	0.600	-
Activity Based Intelligence Indication & Warning	C/CPFF	CUBRC : Buffalo, NY	-	-		0.700	Nov 2014	0.643	Oct 2015	-		0.643	-	1.343	-
Subtotal			-	-		1.000		0.943		-		0.943	-	1.943	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
PMA	Various	AFRL - Information Directorate : Rome, NY	-	-		0.110	Oct 2014	0.098	Oct 2015	-		0.098	-	0.208	-
Subtotal			-	-		0.110		0.098		-		0.098	-	0.208	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force											Date: February 2015						
Appropriation/Budget Activity 3600 / 4					R-1 Program Element (Number/Name) PE 0603260F / Intelligence Advanced Development				Project (Number/Name) 64537A / INTELLIGENCE ANALYSIS CAPABILITIES (IAC)								
					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					-	-		1.110		1.041		-		1.041	-	2.151	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force

Date: February 2015

Appropriation/Budget Activity

3600 / 4

R-1 Program Element (Number/Name)

PE 0603260F / Intelligence Advanced
Development

Project (Number/Name)

64537A / INTELLIGENCE ANALYSIS
CAPABILITIES (IAC)

	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
Space, Air, Terrestrial Modeling and Simulation - FY14 Schedule is shown in PE 0603260F, Project 652053																												
Space, Air, Terrestrial Modeling and Simulation Development/Prototype																												
Activity Based Intelligence Indication and Warning Development/Prototype																												
FY17 IAC Requirements Data Call																												
FY17 IAC New Start(s) Development/Prototype																												
FY19 IAC Requirements Data Call																												
FY19 IAC New Start(s) Development/Prototype																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0603260F / <i>Intelligence Advanced Development</i>	Project (Number/Name) 64537A / <i>INTELLIGENCE ANALYSIS CAPABILITIES (IAC)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Space, Air, Terrestrial Modeling and Simulation - FY14 Schedule is shown in PE 0603260F, Project 652053	1	2014	4	2014
Space, Air, Terrestrial Modeling and Simulation Development/Prototype	1	2015	4	2018
Activity Based Intelligence Indication and Warning Development/Prototype	1	2015	4	2017
FY17 IAC Requirements Data Call	2	2015	2	2015
FY17 IAC New Start(s) Development/Prototype	1	2017	4	2020
FY19 IAC Requirements Data Call	2	2017	2	2017
FY19 IAC New Start(s) Development/Prototype	1	2019	4	2020