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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>				PE 0604750F: <i>Intelligence Equipment</i>							
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	1.489	1.364	0.995	-	0.995	0.801	0.977	1.116	1.112	Continuing	Continuing
652053: <i>National Air Intel Center</i>	1.489	1.364	0.995	-	0.995	0.801	0.977	1.116	1.112	Continuing	Continuing

A. Mission Description and Budget Item Justification

Intelligence Equipment (IE) Program Element (PE) performs the engineering development of software, and/or automated information operations techniques to streamline the processing, integration, exploitation, display, and dissemination of strategic and tactical intelligence information. IE 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 policymaking. IE accelerates and increases the accuracy of threat estimates and system descriptions to deployed operational forces. IE also provides clients with accurate, predictive, relevant, and timely intelligence that will support client processes, operational planning, and mission execution. IE is the only Air Force program developing new or upgraded analysis, modeling and simulation tools focused on intelligence production in support of Air Force operational and developmental functions. Each of the development projects within the IE program portfolio transition technologies to the operational communities through the incremental release of upgraded versions over a period of years as the development projects progress towards the final configuration. IE may reallocate existing resources to support out-of-cycle new/updated warfighter requirements. Requirements for this PE are gathered and prioritized by the Air Force Intelligence, Surveillance, and Reconnaissance Agency (AF ISR Agency). Development of new/improved capabilities to meet the requirements is managed by AFRL/RIEH. Activities also include studies and analysis to support both current program planning and execution and future program planning.

This program is in Budget Activity 5, System Development and Demonstration (SDD) because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	1.495	1.364	0.998	-	0.998
Current President's Budget	1.489	1.364	0.995	-	0.995
Total Adjustments	-0.006	-	-0.003	-	-0.003
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-0.006	-	-0.003	-	-0.003

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604750F: Intelligence Equipment				PROJECT 652053: National Air Intel Center			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
652053: National Air Intel Center	1.489	1.364	0.995	-	0.995	0.801	0.977	1.116	1.112	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
Intelligence Equipment (IE) Program Element (PE) performs the engineering development of software, and/or automated information operations techniques to streamline the processing, integration, exploitation, display, and dissemination of strategic and tactical intelligence information. IE 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 policymaking. IE accelerates and increases the accuracy of threat estimates and system descriptions to deployed operational forces. IE also provides clients with accurate, predictive, relevant, and timely intelligence that will support client processes, operational planning, and mission execution. IE is the only Air Force program developing new or upgraded analysis, modeling and simulation tools focused on intelligence production in support of Air Force operational and developmental functions. Each of the development projects within the IE program portfolio transition technologies to the operational communities through the incremental release of upgraded versions over a period of years as the development projects progress towards the final configuration. IE may reallocate existing resources to support out-of-cycle new/updated warfighter requirements. Requirements for this PE are gathered and prioritized by the Air Force Intelligence, Surveillance, and Reconnaissance Agency (AF ISR Agency). Development of new/improved capabilities to meet the requirements is managed by AFRL/RIEH. Activities also include studies and analysis to support both current program planning and execution and future program planning.											
This program is in Budget Activity 5, System Development and Demonstration (SDD) because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production.											
B. Accomplishments/Planned Programs (\$ in Millions)							FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: RF Detection & Analysis Capabilities							0.277	-	-	-	-
Description: Completes capability to geo-locate emitters associated w/advanced bi-static and passive radar systems.											
FY 2010 Accomplishments: Completed capability to geo-locate emitters associated w/advanced bi-static and passive radar systems.											
FY 2011 Plans:											
FY 2012 Base Plans:											
FY 2012 OCO Plans:											
Title: EW Flagging							0.581	0.753	0.386	-	0.386

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force			DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604750F: Intelligence Equipment		PROJECT 652053: National Air Intel Center		
B. Accomplishments/Planned Programs (\$ in Millions)						
		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
<p>Description: Continues enhancement of capability to automatically assess and "flag" threat systems that fall outside the detection capability of US DoD airborne self-protection systems (Radar Warning Receivers and Electronic Surveillance Measures).</p> <p>FY 2010 Accomplishments: Continue enhancement of capability to automatically assess and "flag" threat systems that fall outside the detection capability of US DoD airborne self-protection systems (Radar Warning Receivers and Electronic Surveillance Measures).</p> <p>FY 2011 Plans: Continue enhancement of capability to automatically assess and "flag" threat systems that fall outside the detection capability of US DoD airborne self-protection systems (Radar Warning Receivers and Electronic Surveillance Measures).</p> <p>FY 2012 Base Plans: Continue enhancement of capability to automatically assess and "flag" threat systems that fall outside the detection capability of US DoD airborne self-protection systems (Radar Warning Receivers and Electronic Surveillance Measures).</p> <p>FY 2012 OCO Plans: Continue enhancement of capability to automatically assess and "flag" threat systems that fall outside the detection capability of US DoD airborne self-protection systems (Radar Warning Receivers and Electronic Surveillance Measures).</p>						
<p>Title: Project Theo</p> <p>Description: Continues capability to query and retrieve information across all available National Air & Space Intelligence Center (NASIC) Corporate Object Repositories (COR), metadata and their supported features; thereby, assisting the Intel Analyst in identifying intelligence gaps and allowing the analyst to nominate intel collection in those areas.</p> <p>FY 2010 Accomplishments: Continue capability to query and retrieve information across all available National Air & Space Intelligence Center (NASIC) Corporate Object Repositories (COR), metadata and their supported features; thereby, assisting</p>		0.470	0.081	0.081	-	0.081

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APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604750F: Intelligence Equipment		PROJECT 652053: National Air Intel Center				
B. Accomplishments/Planned Programs (\$ in Millions)				FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
the Intel Analyst in identifying intelligence gaps and allowing the analyst to nominate intel collection in those areas. FY 2011 Plans: Continue capability to query and retrieve information across all available National Air & Space Intelligence Center (NASIC) Corporate Object Repositories (COR), metadata and their supported features; thereby, assisting the Intel Analyst in identifying intelligence gaps and allowing the analyst to nominate intel collection in those areas. FY 2012 Base Plans: Continue capability to query and retrieve information across all available National Air & Space Intelligence Center (NASIC) Corporate Object Repositories (COR), metadata and their supported features; thereby, assisting the Intel Analyst in identifying intelligence gaps and allowing the analyst to nominate intel collection in those areas. FY 2012 OCO Plans: Continue capability to query and retrieve information across all available National Air & Space Intelligence Center (NASIC) Corporate Object Repositories (COR), metadata and their supported features; thereby, assisting the Intel Analyst in identifying intelligence gaps and allowing the analyst to nominate intel collection in those areas.								
Title: High Performance Aero Vehicle Modeler Description: Continues update of the tool, with a focus on modeling previously unknown airframes, that provides detailed engineering assessments of threat aircraft performance and characteristics. FY 2010 Accomplishments: Continue update of the tool, with a focus on modeling previously unknown airframes, that provides detailed engineering assessments of threat aircraft performance and characteristics. FY 2011 Plans: Continue update of the tool, with a focus on modeling previously unknown airframes, that provides detailed engineering assessments of threat aircraft performance and characteristics. FY 2012 Base Plans:				0.161	0.530	0.528	-	0.528

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force				DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>		R-1 ITEM NOMENCLATURE PE 0604750F: <i>Intelligence Equipment</i>		PROJECT 652053: <i>National Air Intel Center</i>	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Continue update of the tool, with a focus on modeling previously unknown airframes, that provides detailed engineering assessments of threat aircraft performance and characteristics.					
<i>FY 2012 OCO Plans:</i> Continue update of the tool, with a focus on modeling previously unknown airframes, that provides detailed engineering assessments of threat aircraft performance and characteristics.					
Accomplishments/Planned Programs Subtotals	1.489	1.364	0.995	-	0.995

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• N/A: <i>None</i>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

D. Acquisition Strategy
Requirements for new / upgraded intelligence analysis tools are gathered and prioritized by the Air Force Intelligence, Surveillance and Reconnaissance Agency (AF ISR Agency, formerly the Air Intelligence Agency). Development of capabilities to meet those requirements is managed by the AF 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 2012 Air Force										DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604750F: Intelligence Equipment				PROJECT 652053: National Air Intel Center					
Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Radio Frequency Detection & Analysis Capabilities	Various	Dept of Energy, Northrop Grumman Mission Systems:Fairborn, OH	0.277	-		-		-		-	0.000	0.277	0.793
Electronic Warfare Flagging	C/CPFF	Northrop Grumman, Sierra Nevada Corporation:Fairborn, OH	0.581	0.753	Nov 2010	0.386	Nov 2011	-		0.386	Continuing	Continuing	TBD
Project Theo (Automated Text Retrieval, Analysis & Exploitation Capability)	C/CPFF	Northrop Grumman Mission Systems:Fairborn, OH	0.470	0.081	Nov 2010	0.081	Nov 2011	-		0.081	Continuing	Continuing	TBD
High Performance Aero Vehicle	C/CPFF	Northrop Grumman Mission Systems:Fairborn, OH	0.161	0.530	Nov 2010	0.528	Nov 2011	-		0.528	Continuing	Continuing	TBD
Subtotal			1.489	1.364		0.995		-		0.995			
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Subtotal			-	-		-		-		-	0.000	0.000	0.000
Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Subtotal			-	-		-		-		-	0.000	0.000	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force											DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604750F: <i>Intelligence Equipment</i>				PROJECT 652053: <i>National Air Intel Center</i>					

Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Subtotal			-	-		-		-		-	0.000	0.000	0.000

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	1.489	1.364		0.995		-		0.995			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604750F: <i>Intelligence Equipment</i>	PROJECT 652053: <i>National Air Intel Center</i>

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

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY

3600: *Research, Development, Test & Evaluation, Air Force*
BA 5: *Development & Demonstration (SDD)*

R-1 ITEM NOMENCLATURE

PE 0604750F: *Intelligence Equipment*

PROJECT

652053: *National Air Intel Center*

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Complete Radio Frequency (RF) Detection & Analysis Capabilities	1	2010	1	2011
Continue Electronic Warfare (EW) Flagging	1	2010	2	2014
Continue Project Theo (Automated Text Retrieval, Analysis, and Exploitation Capability)	1	2010	4	2014
Continue High Performance Aero Vehicle Modeler	2	2010	3	2013
Space Air & Terrestrial Modeling & Simulation Initiative	1	2013	1	2016
Human Interface Advanced Control I/O Concept	1	2014	4	2016
Analysis Applications & Information Capture Synthesis & Control	1	2015	4	2016

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