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

R-1 ITEM NOMENCLATURE

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

PE 0208021F: Information Warfare Support

DATE: February 2011

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

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	13.361	2.294	2.322	-	2.322	2.355	2.390	2.424	2.467	Continuing	Continuing
670374: Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt	13.361	2.294	2.322	-	2.322	2.355	2.390	2.424	2.467	Continuing	Continuing

Note

In FY 2011, 670374, Electronic Combat Spt, C3 Protection/Multi-Mission, Technology, RDT&E for Intelligence Support to Counterspace was transferred to PE 0301400F, Space Superiority Intelligence, for proper execution in Air Force Space Command (AFSPC).

A. Mission Description and Budget Item Justification

This Program Element funds research and development of information operations (IO) and intelligence capabilities required to execute counterspace and information operations in support of combatant commanders. Programs that are supported include the Information Warfare Planning Capability (IWPC) and Counterspace Intelligence Support.

IWPC is a full-spectrum, offensive and defensive, planning capability. IWPC is an Air and Space Operations Center (AOC) weapon system component which enables operators to develop strategic courses of action for the Joint Forces Air Component Commander (JFACC), create Air Operations Directives (AODs) and Joint Air Operations Plans (JAOPs), and nominate IO "targets" for inclusion into the Master Air Attack Plan and the Joint Integrated Prioritized Target List (JIPTL). This project funds the development and upgrade, testing and evaluation, and installation and training of an evolving suite of interoperable planning and decision support capabilities comprised of software, hardware, and communications products. This project will identify and implement an open, scalable system architecture that will accommodate growth as the virtual world grows and cyber operations change. The project builds functional software modules that are designed to be interoperable with C2 systems such as the Theater Battle Management Core System (TBMCS) and other AOC tools.

The Counterspace effort provides intelligence support for key find, fix, track, target, engage, and assess (F2T2EA) requirements supporting counterspace activities and also performs developmental intelligence collection to support new capability acquisition and development. This project funds transportable intelligence collection and analysis capabilities that are modular (plug-and-play), and can keep pace with technological advances and emerging threats; intelligence support systems supporting Space Situational Awareness activities that provide the requisite current and predictive knowledge of space events and threat conditions; and, intelligence support to Space Protection Programs by providing architectural survivability analysis of critical mission assets for mission assurance. It also supports phased threat system Analysis and Studies (A&S), test support, lab equipment, and Material Acquisition and Exploitation (MAE) for new system development and vulnerability/susceptibility assessments to support tactics, techniques and procedures (TTP) development, and future threat technology studies necessary for mission area success, the achievement of space superiority, and to preserve the US space advantage across all domains. This PE funds development and continued research to identify existing military and commercial efforts which can satisfy unfulfilled operational requirements for IO planning and integration. Activities also include studies and analysis to support both current program planning and execution and future program planning. 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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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force	DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0208021F: Information Warfare Support	

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	13.779	2.294	2.330	-	2.330
Current President's Budget	13.361	2.294	2.322	-	2.322
Total Adjustments	-0.418	-	-0.008	=	-0.008
 Congressional General Reductions 		-			
 Congressional Directed Reductions 		-			
 Congressional Rescissions 	-0.058	-			
 Congressional Adds 		-			
 Congressional Directed Transfers 		-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.360	-			
Other Adjustments	-	-	-0.008	-	-0.008

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 670374: Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and

Congressional Add: Electromagnetic Battlespace Management

and Spt		
	1.591	-
Congressional Add Subtotals for Project: 670374	1.591	-
Congressional Add Totals for all Projects	1.591	-

FY 2010

FY 2011

Change Summary Explanation

In FY 2011, 670374, Electronic Combat Spt, C3 Protection/Multi-Mission, Technology, RDT&E for Intelligence Support to Counterspace was transferred to PE 0301400F, Space Superiority Intelligence, for proper execution in AFSPC.

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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 7: Operational Systems Development					OMENCLAT 1F: Informati	TURE ion Warfare	Support		ROJECT 70374: Electronic Combat Spt, C3 Protection fulti-Mission, Technology and Spt			
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	
670374: Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt	13.361	2.294	2.322	-	2.322	2.355	2.390	2.424	2.467	Continuing	Continuing	
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0			

Note

In FY 2011, 670374, Electronic Combat Spt, C3 Protection/Multi-Mission, Technology, RDT&E for Intelligence Support to Counterspace was transferred to PE 0301400F, Space Superiority Intelligence, for proper execution in AFSPC.

A. Mission Description and Budget Item Justification

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The Counterspace effort provides intelligence support for key find, fix, track, target, engage, and assess (F2T2EA) requirements supporting counterspace activities and also performs developmental intelligence collection to support new capability acquisition and development. This project funds transportable intelligence collection and analysis capabilities that are modular (plug-and-play), and can keep pace with technological advances and emerging threats; intelligence support systems supporting Space Situational Awareness activities that provide the requisite current and predictive knowledge of space events and threat conditions; and, intelligence support to Space Protection Programs by providing architectural survivability analysis of critical mission assets for mission assurance. It also supports phased threat system Analysis and Studies (A&S), test support, lab equipment, and Material Acquisition and Exploitation (MAE) for new system development and vulnerability/susceptibility assessments to support tactics, techniques and procedures (TTP) development, and future threat technology studies necessary for mission area success, the achievement of space superiority, and to preserve the US space advantage across all domains. This PE funds development and continued research to identify existing military and commercial efforts which can satisfy unfulfilled operational requirements for IO planning and integration. Activities also include studies and analysis to support both current program planning and execution and future program planning. 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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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force			D	ATE: Febru	ary 2011		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0208021F: Information Warfare Sup	port 67	PROJECT 670374: Electronic Combat Spt, C3 Pr Multi-Mission, Technology and Spt				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	
Title: IWPC		2.240	2.294	2.322	-	2.322	
Description: IWPC Installation/Training/Upgrades							
FY 2010 Accomplishments: This funding allowed the program office to maintain the IWPC program requirements. This project funded the upgrade, installation, and train decision support tools. Software and hardware updates were necessand maintain interoperability with external programs. The funds also support.	ning of the IWPC suite of planning and sary to keep up with existing technology						
FY 2011 Plans: This funding continues the maintainance of the IWPC program to me funds the upgrades, installation, and training of the IWPC suite of pla and hardware updates are necessary to keep up with existing technic external programs. These funds also support required testing and continues the support required testing and support required testing the support required testing testing the support required testing testing testing testing the support required testing tes							
FY 2012 Base Plans: This funding will support maintainance of the IWPC program to me project will fund training and upgrades of the IWPC suite of planning hardware updates are necessary to keep up with existing technology programs. Will also fund required testing and contract support.							
FY 2012 OCO Plans:							
Title: Counterspace Intel Support		9.530	-	-	-	-	
Description: Counterspace Intelligence Support							
FY 2010 Accomplishments: Funding provided intelligence support to counterspace activities. The awareness activities providing predictive threat conditions and survive Project funds supported testing, lab environment, and material acquitechniques, and procedures development.	vability analysis for mission assurance.						
FY 2011 Plans:							

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DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0208021F: Information Warfare Supp	port 6			onic Combat Spt, C3 Protection/ Technology and Spt		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	
FY 2012 Base Plans:							
FY 2012 OCO Plans:							
Acco	mplishments/Planned Programs Subtotals	11.77	2.294	2.322	-	2.322	
		FY 2010	FY 2011				
Congressional Add: Electromagnetic Battlespace Management		1.59	1 -				
FY 2010 Accomplishments: Congressional Add: Electromagnetic	Battlespace Management.						
FY 2011 Plans:							
	Congressional Adds Subtotals	1.59	1 -	1			

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

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force

			FY 2012	FY 2012	FY 2012					Cost To	
<u>Line Item</u>	FY 2010	FY 2011	Base	<u>000</u>	<u>Total</u>	FY 2013	FY 2014	FY 2015	FY 2016	Complete	Total Cost
• PE 0208021F: Information	0.799	0.239	1.153	0.000	1.153	1.194	1.234	0.690	0.000	Continuing	Continuing
Warfare Support, O&M										_	

D. Acquisition Strategy

IWPC site installations of Ver 4.25 will continue through end of FY11. Future upgrades will be delivered as maintenance releases with incremental increases in capability.

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 **R-1 ITEM NOMENCLATURE PROJECT** 3600: Research, Development, Test & Evaluation, Air Force 670374: Electronic Combat Spt, C3 Protection/ PE 0208021F: Information Warfare Support BA 7: Operational Systems Development Multi-Mission, Technology and Spt FY 2012 FY 2012 FY 2012 **Product Development (\$ in Millions)** oco **FY 2011** Base Total **Total Prior** Target Contract Method Performing Years Award Award Award Cost To Value of **Activity & Location Cost Category Item** Cost Cost Cost Date Cost Complete **Total Cost** Contract & Type Date Cost Date General Dynamics:San **IWPC Prime Contract** SS/FFP 0.855 1.195 Oct 2010 1.158 Oct 2011 1.158 Continuing Continuing TBD Antonio, TX Counterspace and R&D Various:Lackland AFB. Various 0.000 2.424 0.000 2.424 Intelligence Support Architecture Upgrade Support Various:Lackland AFB, Various 1.510 0.000 1.510 0.000 to SSA,SSP & Counterspace TX Data Analysis and Product Various Lackland AFB Various 5.217 0.000 5.217 0.000 Development for R&D TX Deployment Support for Various:Lackland AFB. Various 0.437 0.000 0.437 0.000 Testing and Data Collection TX Subtotal 1.195 1.158 10.443 1.158 _ FY 2012 FY 2012 FY 2012 Support (\$ in Millions) FY 2011 oco Base Total Contract **Total Prior** Target Method Performing Years Award Award Award Cost To Value of **Cost Category Item** & Type **Activity & Location** Cost Date Cost Date Cost Date Complete **Total Cost** Contract Cost Cost Various:San Antonio, Acquisition Support C/CPAF 0.475 0.493 0.493 Continuina 0.000 0.435 Nov 2010 Nov 2011 Continuina TX Various:San Antonio. **Engineering Support** Various 0.481 0.358 Oct 2010 0.391 Oct 2011 0.391 Continuina Continuina 0.000 TX Various:Lackland AFB. Congressional Add Various 1.583 0.000 1.583 0.000 TX Subtotal 2.499 0.833 0.884 0.884 0.000 FY 2012 FY 2012 FY 2012 Test and Evaluation (\$ in Millions) **FY 2011** Base oco Total **Total Prior** Contract Target Method Performing Years Award Award Award Cost To Value of **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract IWPC 46 Det 2 Test Support C/CPAF 46th TS:Eglin AFB, FL 0.290 0.180 Apr 2011 0.180 Mar 2012 0.180 Continuing Continuing **TBD**

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0.100

0.280

Apr 2012

0.100

0.280

Continuina

Continuing

TBD

May 2011

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0.129

0.419

0.086

0.266

IWPC 605th Test Support

C/CPAF

605th:Ealin AFB. FL

Subtotal

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force **DATE:** February 2011 R-1 ITEM NOMENCLATURE

APPROPRIATION/BUDGET ACTIVITY

PROJECT

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

PE 0208021F: Information Warfare Support

670374: Electronic Combat Spt, C3 Protection/

Multi-Mission, Technology and Spt

Management Services	(\$ in Millio	ns)		FY	2011		2012 se		2012 CO	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 2 Ba	2012 se		2012 CO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	13.361	2.294		2.322		-		2.322			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force	DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0208021F: Information Warfare Support	PROJECT 670374: Electronic Combat Spt, C3 Protection Multi-Mission, Technology and Spt

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force	DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0208021F: Information Warfare Support	PROJECT 670374: Electronic Combat Spt, C3 Protection Multi-Mission, Technology and Spt	

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Air Force	DATE : February 2011	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
3600: Research, Development, Test & Evaluation, Air Force	PE 0208021F: Information Warfare Support	670374: Electronic Combat Spt, C3 Protection.
BA 7: Operational Systems Development		Multi-Mission, Technology and Spt

Schedule Details

	Start		End	
Events	Quarter	Year	Quarter	Year
IWPC Development Test & Integration	3	2011	3	2016
IWPC Fielding/Site Installation	1	2010	4	2011
IWPC Upgrades/Maintenance Releases	1	2010	4	2016
Exercises	1	2010	4	2016
Counterspace and R&D Intelligence Support	1	2010	4	2010
Architecture Upgrade Supporting SSA, SSP, & Counterspace	1	2010	4	2010
Data Analysis and Product Development for R&D	1	2010	4	2010
Deployment Support for Testing and Data Collection	1	2010	4	2010