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

R-1 ITEM NOMENCLATURE

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

PE 0604421F: Counterspace Systems

DATE: February 2011

BA 5: Development & Demonstration (SDD)

APPROPRIATION/BUDGET ACTIVITY

	1 - /										
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	60.141	40.276	31.913	-	31.913	30.579	31.072	31.198	31.622	Continuing	Continuing
65A001: Counter Satellite Communications System	29.320	21.035	19.463	-	19.463	18.171	18.362	18.251	18.460	Continuing	Continuing
65A003: Rapid Identification Detection and Reporting System (RAIDRS)	24.009	11.875	5.016	-	5.016	4.868	5.057	5.180	5.259	Continuing	Continuing
65A005: Offensive Counterspace (OCS) C2	6.812	7.366	7.434	-	7.434	7.540	7.653	7.767	7.903	Continuing	Continuing

#### Note

The program funding includes reductions for Overhead Reduction efficiencies that are not intended to impact program content. The efficiencies reductions total \$2.099M in FY12.

## A. Mission Description and Budget Item Justification

This program supports the conduct of critical planning, technology and capability insertion, and system acquisition in support of Air Force space control systems and associated command and control development to meet current and future military space control needs. Development and acquisition of counterspace systems will be conducted, capitalizing on the technology development and risk reduction efforts of PE 0603438F, Space Control Technology. This funding supports the acquisition process including concept development, risk reduction, design, and demonstration. Space control systems include both offensive counterspace (OCS) and defensive counterspace (DCS) systems. OCS systems include the means to disrupt, deny, degrade, or destroy an adversary's space systems, or the information they provide, which may be used for purposes hostile to U.S. national security interests. DCS systems include both active and passive measures to protect U.S. and friendly space related capabilities (satellites, communications links, and supporting ground systems) from enemy attack or interference. This includes development efforts to prevent adversarial ability to use U.S. space systems and services for purposes hostile to U.S. national security interests. Counterspace Command and Control (C2) supports the development of command and control and mission planning capabilities in support of the fielding and employment of counterspace systems. This program is in Budget Activity 5, System Development and Demonstration, because it supports the demonstration, engineering and manufacturing development of counterspace and space control systems.

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

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

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

PE 0604421F: Counterspace Systems

BA 5: Development & Demonstration (SDD)

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	<b>FY 2012 Base</b>	FY 2012 OCO	FY 2012 Total
Previous President's Budget	64.248	40.276	34.119	-	34.119
Current President's Budget	60.141	40.276	31.913	-	31.913
Total Adjustments	-4.107	-	-2.206	-	-2.206
<ul> <li>Congressional General Reductions</li> </ul>		-			
<ul> <li>Congressional Directed Reductions</li> </ul>		-			
<ul> <li>Congressional Rescissions</li> </ul>	-0.678	-			
<ul> <li>Congressional Adds</li> </ul>		-			
<ul> <li>Congressional Directed Transfers</li> </ul>		-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-3.429	-			
Other Adjustments	-	-	-2.206	-	-2.206

## **Change Summary Explanation**

The program funding includes reductions for Overhead Reduction efficiencies that are not intended to impact program content. The efficiencies reductions total \$2.099M in FY12.

**DATE:** February 2011

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3600: Research, Development, Te BA 5: Development & Demonstrat	st & Evaluatio	n, Air Force			1F: Counters			65A001: Co System	ounter Satelli	ite Communi	cations
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
65A001: Counter Satellite Communications System	29.320	21.035	19.463	-	19.463	18.171	18.362	18.251	18.460	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

### A. Mission Description and Budget Item Justification

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

ADDDODDIATION/DUDGET ACTIVITY

This effort supports concept exploration and follow-on system development of mobile/transportable counter satellite communications capabilities derived from technologies prototyped in PE0603438F, Space Control Technology, in the area of Offensive Counterspace. Future advanced counter satellite communications systems will also be developed in this program. Included are: architecture engineering, system hardware design and development, software design and integration, testing and procurement of capabilities to provide disruption of satellite communications signals in response to USSTRATCOM requirements. This program is in Budget Activity 5, System Development and Demonstration, because it supports the demonstration, engineering and manufacturing development of counterspace and space control systems.

B. Accomplishments/Planned Programs (\$ in Millions)			FY 2012	FY 2012	FY 2012
	FY 2010	FY 2011	Base	oco	Total
Title: CCS Capability Upgrades	1.605	-	-	-	-
<b>Description:</b> Complete capability upgrades to the Block 10 Counter Communications System (CCS). Includes architecture development and program office support.					
FY 2010 Accomplishments: Completed work on the CCS plug-in upgrades. Continued mission area architecture development support.					
FY 2011 Plans:					
FY 2012 Base Plans:					
FY 2012 OCO Plans:					
Title: CCS Pre-planned Product Improvement ( P3I)	17.748	12.260	11.517	-	11.517
<b>Description:</b> Develop, integrate, test and field the CCS Pre-planned Product Improvement (P3I) program. Includes architecture development, studies & analysis, and program office support.					
FY 2010 Accomplishments: Use prototype lessons-learned to begin development and integration of the first increment of the CCS P3I.					
FY 2011 Plans:					

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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 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604421F: Counterspace Systems	65	ROJECT 5A001: Cour ystem	nter Satellite	e Communio	cations
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Continue development and integration of Increment 1 of the CCS F	<sup>2</sup> 31.					
FY 2012 Base Plans: Continue and complete development, integration and test of Incren	nent 1 of the CCS P3I.					
FY 2012 OCO Plans:						
Title: Next generation prototype		1.000	-	-	-	-
<b>Description:</b> Study options and perform risk reduction prototyping communications capability.	for the next generation advanced counter					
FY 2010 Accomplishments: Study/refine and develop prototype risk reduction.						
FY 2011 Plans:						
FY 2012 Base Plans:						
FY 2012 OCO Plans:						
Title: Architecture Development Support		3.340	3.856	2.536	-	2.536
<b>Description:</b> Provide support for mission area architecture develop	pment.					
FY 2010 Accomplishments:  Continued to provide mission area architecture development support	ort.					
FY 2011 Plans: Continue to provide mission area architecture development suppor	t.					
FY 2012 Base Plans: Continue to provide mission area architecture development suppor	t.					
FY 2012 OCO Plans:						
Title: Program Office and other Technical support		5.627	4.919	5.410	-	5.410
<b>Description:</b> Provide technical/engineering and other required sup	pport to the Program Office.					
FY 2010 Accomplishments:						

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force			DATE: February 2011
	R-1 ITEM NOMENCLATURE PE 0604421F: Counterspace Systems	PROJECT 65A001: Co System	ounter Satellite Communications

B. Accomplishments/Planned Programs (\$ in Millions)			FY 2012	FY 2012	FY 2012
	FY 2010	FY 2011	Base	oco	Total
Provide technical/engineering and other required support to the Program Office.					
FY 2011 Plans: Provide technical/engineering and other required support to the Program Office.					
FY 2012 Base Plans: Provide technical/engineering and other required support to the Program Office.					
FY 2012 OCO Plans:					
Accomplishments/Planned Programs Subtotals	29.320	21.035	19.463	-	19.463

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

			<u>FY 2012</u>	<u>FY 2012</u>	<u>FY 2012</u>					Cost To	
<u>Line Item</u>	FY 2010	FY 2011	<b>Base</b>	OCO	<u>Total</u>	FY 2013	FY 2014	FY 2015	FY 2016	<b>Complete</b>	<b>Total Cost</b>
Other Procurement: PE	4.200	11.576	10.149	0.000	10.149	13.833	15.311	14.814	13.968	Continuing	Continuing
0604421F Counterspace Systems											

## D. Acquisition Strategy

All contracts in this program element will be awarded using competitive procedures to the maximum extent possible, to upgrade existing capabilities as well as to acquire next generation capabilities through incremental acquisitions.

#### 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

APPROPRIATION/BUDGET ACTIVITY

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

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604421F: Counterspace Systems

PROJECT

65A001: Counter Satellite Communications

**DATE:** February 2011

System

Product Development	(\$ in Millio	ns)		FY 2	2011	FY 2 Ba	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
Architectural Engineering Support	C/CPAF	Aerospace:El Segundo, CA	31.078	3.856	Jan 2011	2.536	Jan 2012	-		2.536	Continuing	Continuing	TBD
Block 10 Capability Upgrades(a)	C/CPAF	General Dynamics:Santa Clara, CA	9.999	-		-		-		-	0.000	9.999	9.999
Block 10 Capability Upgrades(b)	Various	Harris Corp:Melbourne, FL	9.407	-		-		-		-	0.000	9.407	0.000
Block 20 Prototype Development & Future Capability Studies	C/CPAF	SERCO:Colorado Springs, CO	9.801	-		-		-		-	0.000	9.801	11.422
Block 10 P3I Development	C/CPAF	Harris Corp:Melbourne, FL	16.068	12.260	Dec 2010	11.517	Nov 2011	-		11.517	Continuing	Continuing	TBD
Block 10 P3I Development	Various	Various:Various,	1.680	-		-		-		-	0.000	1.680	0.000
		Subtotal	78.033	16.116		14.053		-		14.053			

Support (\$ in Millions)	)			FY 2	2011	FY 2 Ba	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
System Program Office Support	Various	SMC:El Segundo, CA	1.849	2.201	Nov 2010	2.939	Nov 2011	-		2.939	Continuing	Continuing	TBD
Security	C/CPAF	Mantech:El Segundo, CA	2.411	2.718	Nov 2010	2.471	Nov 2011	-		2.471	0.000	7.600	0.000
Architectural Engineering Support	C/CPFF	Northrup Grumman:El Segundo, CA	1.367	-		-		-		-	0.000	1.367	0.000
		Subtotal	5.627	4.919		5.410		-		5.410			

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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 PE 0604421F: Counterspace Systems 65A001: Counter Satellite Communications BA 5: Development & Demonstration (SDD) System FY 2012 FY 2012 FY 2012 Test and Evaluation (\$ in Millions) FY 2011 oco Base Total Contract **Total Prior** Target Method Performing Years Award Award Award Cost To Value of **Cost Category Item Activity & Location** Cost Date Cost Date Cost Date Complete **Total Cost** Contract & Type Cost Cost 0.000 0.000 0.000 Subtotal FY 2012 FY 2012 FY 2012 **Management Services (\$ in Millions)** FY 2011 oco Base Total Contract **Total Prior** Target Value of Method Performing Years Award Award Award Cost To **Cost Category Item** Cost Cost **Total Cost** Contract & Type **Activity & Location** Cost Date Date Cost Date Cost Complete 0.000 Subtotal 0.000 0.000 **Total Prior** Target FY 2012 FY 2012 FY 2012 Cost To Value of Years Cost FY 2011 Base oco Total Complete | Total Cost Contract

19.463

19.463

21.035

83.660

Remarks

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**Project Cost Totals** 

xhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force	rofile: PB 2012 Air Force							
APPROPRIATION/BUDGET ACTIVITY 600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604421F: Counterspace Systems	PROJECT 65A001: Counter Satellite Communications System						

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

APPROPRIATION/BUDGET ACTIVITY

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

R-1 ITEM NOMENCLATURE
PE 0604421F: Counterspace Systems
System

PROJECT
65A001: Counter Satellite Communications
System

## Schedule Details

	Si	tart	En	ıd
Events	Quarter	Year	Quarter	Year
Block 10 P3I Contract Award	3	2010	3	2010
Block 10 P3I Increment 1 Development	3	2010	2	2012
Block 10 P3I Increment 1 DT/OT	2	2012	3	2012
Block 10 P3I Increment 1 Procurement - Retrofit	3	2012	1	2015
Block 10 P3I Increment 1 Deliveries	4	2012	1	2015
Block 10 P3I Increment 2 Contract Award	1	2013	1	2013
Block 10 P3I Increment 2 Development	1	2013	3	2014
Block 10 P3I Increment 2 DT/OT	4	2014	4	2014
Block 10 P3I Increment 2 Procurement - Retrofit	4	2014	3	2016
Block 10 P3I Increment 2 Deliveries	1	2015	4	2016
Block 10 P3I Increment 3 Contract Award	1	2015	1	2015
Block 10 P3I Increment 3 Development	1	2015	3	2016
Block 10 P3I Increment 3 DT/OT	3	2016	3	2016

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Exhibit R-2A, RDT&E Project Just	ification: PB	3 2012 Air Fo	orce						DATE: Febr	uary 2011	
APPROPRIATION/BUDGET ACTIV 3600: Research, Development, Test BA 5: Development & Demonstration	& Evaluation	tion, Air Force PE 0604421F: Counterspace Systems 65A						oid Identification Detection and ystem (RAIDRS)			
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
65A003: Rapid Identification Detection and Reporting System (RAIDRS)	24.009	11.875	5.016	-	5.016	4.868	5.057	5.180	5.259	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

#### Note

The program funding includes reductions for Knowledge Based Services, Acquisition Program Management Administrative efficiencies that are not intended to impact program content. The efficiencies reductions total \$0.306M in FY12.

#### A. Mission Description and Budget Item Justification

The RAIDRS program performs attack detection, geolocation, reporting, characterization and mission impact assessment for US owned, operated or used space systems. RAIDRS capabilities, in support of the National Security Strategy of the United States, are procured and deployed in blocks. The first Block (RB-10) is focused on detecting, characterizing, geolocating and reporting satellite communications (SATCOM) radio frequency interference (RFI) using currently existing Commercial-Off-the-Shelf (COTS) and Government-Off-the-Shelf (GOTS) technology. The event information provided by RB-10 will allow operators to identify possible interference against space capabilities and enable rapid employment of protective responses. This program is in Budget Activity 5, System Development and Demonstration, because it supports the engineering and manufacturing development of counterspace and space control systems.

B. Accomplishments/Planned Programs (\$ in Millions)			FY 2012	FY 2012	FY 2012
	FY 2010	FY 2011	Base	oco	Total
Title: RAIDRS	24.009	11.875	5.016	-	5.016
<b>Description:</b> Develop, integrate, test and field the Rapid Attack Identification Detection and Reporting System (RAIDRS). RAIDRS is a counterspace system designed to identify, characterize and locate interference to SATCOM communications capabilities. Includes architecture development, systems engineering, site activation and program office support and test support.					
FY 2010 Accomplishments: Continued system development, integration and factory acceptance testing of the RAIDRS system. Completed verification of technical orders.					
FY 2011 Plans: Complete system development and integration. Develop Type 1 training and prepare for and begin Operational Test and Evaluation.					
FY 2012 Base Plans:					

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**DATE:** February 2011

5.016

5.016

24.009

11.875

APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604421F: Counterspace Systems	1 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total		
Continue acceptance testing and Training system development. W Trainer upgrade.	ill complete OT&E and deliver the FOC						
FY 2012 OCO Plans:							

## 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	<b>Base</b>	OCO	<u>Total</u>	FY 2013	FY 2014	FY 2015	FY 2016	Complete	<b>Total Cost</b>
Other Procurment: PE 0604421F	24.103	14.025	9.169	0.000	9.169	7.597	3.195	3.987	5.079	Continuing	Continuing
Counterspace Systems										_	

**Accomplishments/Planned Programs Subtotals** 

#### **D. Acquisition Strategy**

All contracts funded in this program element will be awarded using competitive procedures to the maximum extent possible. System will be designed and acquired in Block increments using a Block Acquisition strategy.

#### **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.

Air Force Page 11 of 21 R-1 Line Item #64

				U	NCLASS	IFIED									
Exhibit R-3, RDT&E Pro	oject Cost	Analysis: PB 2012 A	ir Force							DATI	E: Februar	y 2011			
APPROPRIATION/BUD 3600: Research, Develop BA 5: Development & De	pment, Tes	t & Evaluation, Air Fo	rce	I	<b>ITEM NON</b> 0604421F:			ems		3: Rapid Id	lentification Detection and n (RAIDRS)				
Product Development	(\$ in Millio	ns)		FY 2	2011	FY 2 Ba	-		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		
Architecture Development & Systems Engineering	Various	Various:Various,	16.370	1.639	Oct 2010	0.719	Oct 2011	-		0.719	Continuing	Continuing	TBD		
RAIDRS Block 10 System Development	C/CPAF	Integral Systems Inc:Columbia, MD	87.317	4.607	Oct 2010	0.795	Oct 2011	-		0.795	Continuing	Continuing	TBD		
RAIDRS Block 10 Training System	C/CPFF	Sonalysts:Waterford, CT	2.604	3.725	Oct 2010	1.862	Oct 2011	-		1.862	Continuing	Continuing	TBD		
		Subtotal	106.291	9.971		3.376		-		3.376					
Support (\$ in Millions)	ons)			FY 2	2011	FY 2 Ba	-		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	Total Cost	Target Value of Contract		
Program Office Support for RAIDRS	Various	SMC:El Segundo, CA	11.733	1.190	Oct 2010	0.995	Oct 2011	-		0.995	Continuing	Continuing	TBD		
FFRDC	RO	Aerospace Corp:El Segundo, CA	10.808	0.714	Oct 2010	0.565	Oct 2011	-		0.565	0.000	12.087	0.000		
	1	Subtotal	22.541	1.904		1.560		-		1.560					
Test and Evaluation (\$	in Millions	3)		FY 2	2011	FY 2	-		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	Total Cost	Target Value of Contract		
RAIDRS Block 10 Test Support	Various	Various:Various,	0.843	-	Oct 2010	0.080	Oct 2011	-		0.080	Continuing	Continuing	TBD		
		Subtotal	0.843	-		0.080		-		0.080					
Management Services (\$ in Millions)			FY 2	2011	FY 2 Ba	-		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		

**UNCLASSIFIED** 

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Ai					DATE	DATE: February 2011				
		R-1 ITEM NOMENCLATURE PE 0604421F: Counterspace Systems PROJECT 65A003: Rapid Identification Dete					n and			
Ţ.	Total Prior								Target	

	Total Prior Years Cost	FY 2	2011		2012 Ise	FY 2	2012 CO	FY 2012 Total	Cost To	Total Cost	Target Value of Contract
	0001						-		Complete	Total Goot	Continuot
Project Cost Totals	129.675	11.875		5.016		-		5.016			

Remarks

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xhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011					
PPROPRIATION/BUDGET ACTIVITY 600: Research, Development, Test & Evaluation, Air Force A 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604421F: Counterspace Systems	PROJECT 65A003: Rapid Identification Detection and Reporting System (RAIDRS)					
to. Development a Demonstration (CDD)		responding eyelem (reliable)					

**UNCLASSIFIED** 

Air Force Page 14 of 21 R-1 Line Item #64

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

APPROPRIATION/BUDGET ACTIVITY

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

R-1 ITEM NOMENCLATURE
PE 0604421F: Counterspace Systems
65A003: Rapid Identification Detection and Reporting System (RAIDRS)

## Schedule Details

	S	Start	End		
Events	Quarter	Year	Quarter	Year	
RAIDRS IOC	4	2012	4	2012	
RAIDRS FOC	4	2013	4	2013	
RAIDRS Operational Test and Evaluation	3	2011	4	2012	
RAIDRS Operator Training	3	2011	1	2012	
Site #1 Activation	1	2011	2	2012	
Site #2 Activation	2	2011	3	2012	
Site #3 Activation	3	2011	4	2012	
Site #4 Activation	4	2011	2	2013	
Site #5 Activation	1	2012	4	2013	

DATE: February 2011

EXHIBIT K-ZA, KDT&E PTOJECT JUST	ilication. Fl	2012 All F	JICE						DATE. FED	iuary 2011	
APPROPRIATION/BUDGET ACTIV		R-1 ITEM NOMENCLATURE PROJECT					2001.00				
3600: Research, Development, Test BA 5: Development & Demonstration		n, Air Force		PE 0604421F: Counterspace Systems 65A005: Offensive Counter				nterspace (C	)CS) C2		
COST (\$ in Millions)	EV 0040	EV 0044	FY 2012	FY 2012	FY 2012	<b>5</b> )/ 0040	<b>5</b> 1/ 004 4	<b>5</b> 1/ 00/ <b>5</b>	<b>5</b> )/ 0040	Cost To	<b>T</b>

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
65A005: Offensive Counterspace (OCS) C2	6.812	7.366	7.434	-	7.434	7.540	7.653	7.767	7.903	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

#### A. Mission Description and Budget Item Justification

Exhibit P-2A PDT&E Project Justification: DR 2012 Air Force

This effort supports the development of command and control and mission planning capabilities in support of the fielding and employment of Counterspace Systems. It provides for the integration and development of collaborative tools to link deployable counterspace systems with Joint Warfighting C2 systems and to enable integrated planning and execution of the counterspace mission. Developed capabilities will be integrated into current and future command and control systems. This program will also leverage the Joint Execution and Tasking System for Space (JETSS) efforts in support of space control and the counterspace mission areas. This program is in Budget Activity 5, System Development and Demonstration, because it supports the engineering and manufacturing development of counterspace and space control systems.

B. Accomplishments/Planned Programs (\$ in Millions)			FY 2012	FY 2012	FY 2012
	FY 2010	FY 2011	Base	OCO	Total
Title: Joint Execution and Tasking System for Space (JETSS)	6.812	7.366	7.434	-	7.434
<b>Description:</b> Develop a Counterspace mission planning and command and control capability to support counterspace systems space control warfighter activities.					
FY 2010 Accomplishments: Completed JETSS Spiral 2 development, testing and delivery to the Joint Space Operations Center (JSpOC).					
FY 2011 Plans: Continue JETSS development with Spiral 3 Future System Planning, Deployment Planner and the Data Wizard.					
FY 2012 Base Plans: Complete development of JETSS Spiral 3 and deploy at the Joint Space Operations Center.					
FY 2012 OCO Plans: Not applicable.					
Accomplishments/Planned Programs Subtotals	6.812	7.366	7.434	-	7.434

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

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

AFFROFRIATION/BUDGET ACTIVITY R-TITEM NOMENCLATURE FROJECT

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

PE 0604421F: Counterspace Systems 65A005: Offensive Counterspace (OCS) C2

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

			FY 2012	FY 2012	FY 2012					Cost To	
<u>Line Item</u>	FY 2010	FY 2011	<u>Base</u>	OCO	<u>Total</u>	FY 2013	FY 2014	FY 2015	FY 2016	Complete	<b>Total Cost</b>
N/A: None	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

### **D. Acquisition Strategy**

All contracts will be awarded using competitive procedures to the maximum extent possible to acquire next generation capabilities through incremental acquisitions.

#### **E. Performance Metrics**

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force DATE: February 2011 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 3600: Research, Development, Test & Evaluation, Air Force PE 0604421F: Counterspace Systems 65A005: Offensive Counterspace (OCS) C2 BA 5: Development & Demonstration (SDD) 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 **Cost Category Item Activity & Location** Cost Date Cost Date Cost Date Complete **Total Cost** Contract & Type Cost Cost Develop Counterspace General Planning and C2 System C/CPAF Dynamics:Santa Clara, 19.032 4.769 Jan 2011 4.850 Jan 2012 Continuing TBD 4.850 Continuing (JETSS) CA Subtotal 19.032 4.769 4.850 4.850 FY 2012 FY 2012 FY 2012 Support (\$ in Millions) FY 2011 oco Total Base Contract **Total Prior** Target Method Performing Years Award Award Award Cost To Value of Cost Cost **Cost Category Item** & Type **Activity & Location** Cost Cost Date Date Date Cost Complete **Total Cost** Contract Northrup Counterspace Architecture Grumman Mission C/CPFF 3.978 0.954 Dec 2010 0.966 Dec 2010 0.966 Continuina Continuina TBD Development Systems:Redondo Beach, CA Subtotal 3.978 0.954 0.966 0.966 FY 2012 FY 2012 FY 2012 Test and Evaluation (\$ in Millions) FY 2011 Base oco Total Contract **Total Prior Target** Method Performing Years Award Award **Cost To** Value of Award **Total Cost Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete Contract Subtotal 0.000 0.000 0.000 FY 2012 FY 2012 FY 2012 Management Services (\$ in Millions) FY 2011 Base oco Total **Total Prior** Contract Target Value of Method Performing Years Award Award Award Cost To **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract Program Office and Other SMC:El Segundo, CA 1.643 Oct 2010 1.618 Oct 2011 1.618 Continuing **TBD** Various 4.578 Continuing **Technical Support** 4.578 1.643 1.618 1.618 Subtotal

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force	<b>DATE</b> : February 2011	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
3600: Research, Development, Test & Evaluation, Air Force	PE 0604421F: Counterspace Systems	65A005: Offensive Counterspace (OCS) C2
BA 5: Development & Demonstration (SDD)		

	Total Prior Years Cost		2011	FY 2012 Base		2012 CO	FY 2012 Total	Cost To	Total Cost	Target Value of Contract
	- 550			_400				- 5pioto		
Project Cost Totals	27.588	7.366		7.434	-		7.434			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force	<b>DATE:</b> February 2011			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604421F: Counterspace Systems	PROJECT 65A005: Offensive Counterspace (OCS) C2		

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

APPROPRIATION/BUDGET ACTIVITY

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

ART: February 2011

R-1 ITEM NOMENCLATURE
PE 0604421F: Counterspace Systems
65A005: Offensive Counterspace (OCS) C2

## Schedule Details

	Start		Er	nd
Events	Quarter	Year	Quarter	Year
C2 Spiral #2 Delivery	4	2010	4	2010
C2 Spiral #3 Development	1	2011	3	2012
C2 Spiral #3 Test	3	2012	4	2012
C2 Spiral #3 Delivery	4	2012	4	2012
C2 Spiral #4 Development	1	2013	3	2014
C2 Spiral #4 Test	3	2014	4	2014
C2 Spiral #4 Delivery	4	2014	4	2014
C2 Spiral #5 Development	1	2015	2	2016
C2 Spiral #5 Test	2	2016	4	2016
C2 Spiral #5 Delivery	4	2016	4	2016