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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2013 Air Force	<b>DATE:</b> February 2012
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<b>APPROPRIATION/BUDGET ACTIVITY</b>				<b>R-1 ITEM NOMENCLATURE</b>							
3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				PE 0604421F: <i>Counterspace Systems</i>							
<b>COST (\$ in Millions)</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013 Base</b>	<b>FY 2013 OCO</b>	<b>FY 2013 Total</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	37.994	31.578	28.797	-	28.797	23.930	24.187	26.676	-	Continuing	Continuing
65A001: <i>Counter Satellite Communications System</i>	20.045	19.128	16.362	-	16.362	16.277	16.373	16.728	-	Continuing	Continuing
65A003: <i>Rapid Identification Detection and Reporting System (RAIDRS)</i>	11.044	5.016	4.877	-	4.877	-	-	-	-	Continuing	Continuing
65A005: <i>Offensive Counterspace (OCS) C2</i>	6.905	7.434	7.558	-	7.558	7.653	7.814	9.948	-	Continuing	Continuing

**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 is conducting demonstration, engineering and manufacturing development tasks aimed at meeting validated counterspace and space control requirements.

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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 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	40.276	31.913	30.579	-	30.579
Current President's Budget	37.994	31.578	28.797	-	28.797
Total Adjustments	-2.282	-0.335	-1.782	-	-1.782
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-0.335			
• SBIR/STTR Transfer	-1.885	-			
• Other Adjustments	-0.397	-	-1.782	-	-1.782
Change Summary Explanation					
FY11: -1.885M reduction for Small Business Innovative Research (SBIR)					
FY13: -\$1.782M reallocation of funding to higher Department priorities.					

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force									DATE: February 2012		
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 System			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
65A001: Counter Satellite Communications System	20.045	19.128	16.362	-	16.362	16.277	16.373	16.728	-	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
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 is conducting demonstration, engineering and manufacturing development tasks aimed at meeting validated counterspace and space control requirements.											
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2011	FY 2012	FY 2013	
Title: Counter Communications System (CCS) Pre-planned Product Improvement (P3I)								20.045	19.128	16.362	
Description: Develop, integrate, test and field the CCS Pre-planned Product Improvement (P3I) program. Includes architecture development, studies & analysis, and program office support.											
FY 2011 Accomplishments: Completed Critical Design Review and began integration and test effort for CCS P3I Increment 1.											
FY 2012 Plans: Complete integration and test of Increment 1 of the CCS P3I. Develop the Increment 1 trainer. Begin concept activities for the development of Increment 2.											
FY 2013 Plans: Continue with the CCS P3I. Deliver the Increment 1 Trainer and begin development of the Increment 2 capability.											
Accomplishments/Planned Programs Subtotals								20.045	19.128	16.362	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• P-48: OPAF, PE 0604421F, Counterspace Systems	6.795	9.885	13.506	0.000	13.506	13.602	13.210	12.392	0.000	0.000	70.226

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<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604421F: <i>Counterspace Systems</i>	<b>PROJECT</b> 65A001: <i>Counter Satellite Communications System</i>
<p><b><u>D. Acquisition Strategy</u></b></p> <p>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.</p> <p><b><u>E. Performance Metrics</u></b></p> <p>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.</p>		

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Air Force		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604421F: <i>Counterspace Systems</i>	PROJECT 65A001: <i>Counter Satellite Communications System</i>

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2013 Air Force			<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604421F: <i>Counterspace Systems</i>	<b>PROJECT</b> 65A001: <i>Counter Satellite Communications System</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Block 10 P3I Increment 1 Critical Design Review	2	2011	2	2011
Block 10 P3I Increment 1 Developmental Test/Operational Test (DT/OT)	2	2012	3	2012
Block 10 P3I Increment 1 Procurement - Retrofit	3	2012	1	2015
Block 10 P3I Increment 1 Deliveries	3	2012	1	2015
Block 10 P3I Increment 2 Contract Award	2	2013	2	2013
Block 10 P3I Increment 2 Development	2	2013	4	2014
Block 10 P3I Increment 2 DT/OT	1	2015	2	2015
Block 10 P3I Increment 2 Procurement - Retrofit	2	2015	2	2017
Block 10 P3I Increment 2 Deliveries	2	2015	2	2017
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	4	2016	4	2016

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force								DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604421F: Counterspace Systems				PROJECT 65A003: Rapid Identification Detection and Reporting System (RAIDRS)			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
65A003: Rapid Identification Detection and Reporting System (RAIDRS)	11.044	5.016	4.877	-	4.877	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
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 support the National Security Strategy of the United States. RAIDRS 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 RAIDRS 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 has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements in preparation for deployment.											
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2011	FY 2012	FY 2013	
Title: RAIDRS								11.044	5.016	4.877	
Description: 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 2011 Accomplishments: Completed system development and integration. Developed Type 1 training and prepared for Operational Test and Evaluation (OT&E).											
FY 2012 Plans: Continue acceptance testing and Training system development. Will complete Operational Test & Evaluation (OT&E) and deliver the Full Operational Capability (FOC) Trainer.											
FY 2013 Plans: Complete Full Operational Capability trainer acceptance testing.											
Accomplishments/Planned Programs Subtotals								11.044	5.016	4.877	

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2013 Air Force							<b>DATE:</b> February 2012				
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>			<b>R-1 ITEM NOMENCLATURE</b> PE 0604421F: <i>Counterspace Systems</i>				<b>PROJECT</b> 65A003: <i>Rapid Identification Detection and Reporting System (RAIDRS)</i>				

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

<u>Line Item</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u> <u>Base</u>	<u>FY 2013</u> <u>OCO</u>	<u>FY 2013</u> <u>Total</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• P-48: <i>OPAF, PE 0604421F</i> <i>Counterspace Systems</i>	18.739	9.433	6.055	0.000	6.055	0.000	0.000	0.000	0.000	0.000	33.459

**D. Acquisition Strategy**

All contracts funded in this program element will be awarded using competitive procedures to the maximum extent possible.

**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-4, RDT&E Schedule Profile: PB 2013 Air Force		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604421F: <i>Counterspace Systems</i>	PROJECT 65A003: <i>Rapid Identification Detection and Reporting System (RAIDRS)</i>

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2013 Air Force			<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604421F: <i>Counterspace Systems</i>	<b>PROJECT</b> 65A003: <i>Rapid Identification Detection and Reporting System (RAIDRS)</i>	

Schedule Details

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

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force								DATE: February 2012			
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			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
65A005: Offensive Counterspace (OCS) C2	6.905	7.434	7.558	-	7.558	7.653	7.814	9.948	-	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
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 leverage the Joint Execution and Tasking System for Space (JETSS) effort in the development of C2 for future space control and counterspace mission capabilities. 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 2011	FY 2012	FY 2013	
Title: Joint Execution and Tasking System for Space (JETSS)								6.905	7.434	7.558	
Description: Develop a Counterspace mission planning and command and control capability to support counterspace systems space control warfighter activities.											
FY 2011 Accomplishments: Completed JETSS Spiral 3 Data Wizard development, testing and delivery to the Joint Space Operations Center (JSPOC).											
FY 2012 Plans: Complete development of JETSS Spiral 3 Future System Planning, Deployment Planner, Federated Query and Continuity of Operations (COOP) Development and deployment to the Joint Space Operations Center.											
FY 2013 Plans: Continue JETSS development with Spiral 4 future system planning development and deployment to the JSPOC.											
Accomplishments/Planned Programs Subtotals								6.905	7.434	7.558	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• None: N/A	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2013 Air Force		<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604421F: <i>Counterspace Systems</i>	<b>PROJECT</b> 65A005: <i>Offensive Counterspace (OCS) C2</i>
<p><b><u>D. Acquisition Strategy</u></b></p> <p>All contracts will be awarded using competitive procedures to the maximum extent possible to acquire next generation capabilities through incremental acquisitions.</p> <p><b><u>E. Performance Metrics</u></b></p> <p>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.</p>		

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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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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2013 Air Force			<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604421F: <i>Counterspace Systems</i>	<b>PROJECT</b> 65A005: <i>Offensive Counterspace (OCS) C2</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
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	3	2016
C2 Spiral #5 Test	3	2016	4	2016
C2 Spiral #5 Delivery	4	2016	4	2016