Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

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

PE 0603438F: Space Control Technology

BA 4: Advanced Component Development & Prototypes (ACD&P)

•	•		. ,									
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	43.553	25.144	27.024	-	27.024	25.907	26.514	27.568	28.065	Continuing	Continuing
642611: Technology Insertion Planning and Analysis	-	25.595	5.799	5.560	-	5.560	6.151	6.410	6.978	7.104	Continuing	Continuing
64A007: Space Range	-	17.958	19.345	21.464	-	21.464	19.756	20.104	20.590	20.961	Continuing	Continuing

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

This program supports a range of activities including technology planning, development, demonstrations and prototyping, as well as modeling, simulations and exercises to support development of tactics and procedures in the Space Control mission area. The types of Space Control activities accomplished are Space Situational Awareness (SSA), Defensive Counterspace (DCS), Offensive Counterspace (OCS) and Command and Control (C2) and Battle Management. For use in the Space Control mission area, SSA includes monitoring, detecting, identifying, tracking, assessing, verifying, categorizing, and characterizing, objects and events in space and includes terrestrial based space capabilities. DCS includes defensive activities to protect U.S. and friendly space-systems assets, resources, and operations from enemy attempts to negate or interfere and prevention activities that limit or eliminate an adversary's ability to use U.S. space systems and services for purposes hostile to U.S. national security interests. OCS activities disrupt, deny, degrade or destroy space systems, or the information they provide, which may be used for purposes hostile to U.S. national security interests. Command & Control efforts include identifying technology solutions to enable fusion of data for use in multilevel security environments, and near-real-time data delivery and decision support to war fighter needs. This program supports the development of Rapid Reaction Capabilities in response to immediate warfighter needs in the Space Control mission area.

Funding also supports the development of the technology and infrastructure for space control elements of the Space Test and Training Range (STTR). This includes development and demonstration of test assets, special test equipment, capabilities and systems required to test, validate, and verify performance of integrated space control systems. Additionally, this program supports the development of test range assets required to support developmental and operational test, exercises, training, and tactics development for space control systems. A collaborative command & control capability will be integrated into several range systems to provide real time communications during test event scenarios.

These projects are 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.

PE 0603438F: Space Control Technology

Air Force

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^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

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

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603438F: Space Control Technology

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	44.635	25.144	25.159	-	25.159
Current President's Budget	43.553	25.144	27.024	-	27.024
Total Adjustments	-1.082	0.000	1.865	-	1.865
 Congressional General Reductions 	-	0.000			
 Congressional Directed Reductions 	-	0.000			
 Congressional Rescissions 	0.000	0.000			
Congressional Adds	-	0.000			
 Congressional Directed Transfers 	-	0.000			
Reprogrammings	0.000	0.000			
SBIR/STTR Transfer	-1.082	0.000			
Other Adjustments	0.000	0.000	1.865	-	1.865

Change Summary Explanation

FY2012: -\$1.082M for SBIR

FY2014: +\$2.00M for Joint Force closed loop trainer

- \$0.135 for higher Department priorities

PE 0603438F: Space Control Technology

Air Force

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Air Force **PROJECT** APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE** 3600: Research, Development, Test & Evaluation, Air Force PE 0603438F: Space Control Technology 642611: Technology Insertion Planning and BA 4: Advanced Component Development & Prototypes (ACD&P) Analysis

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
642611: Technology Insertion Planning and Analysis	-	25.595	5.799	5.560	-	5.560	6.151	6.410	6.978	7.104	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

This project supports a range of activities including technology planning, development, demonstrations and prototyping, and testing, as well as modeling, simulations and exercises to support development of tactics and procedures for a responsive and resilient Space Control mission area. This incudes technology development and prototyping for Space Situational Awareness (SSA), Defensive Counterspace (DCS) and Offensive Counterspace (OCS). Specifically supported are OCS activities which include disruption, denial, or degradation of adversary space systems, or the information they provide, which may be used for purposes hostile to U.S. national security interests. Rapid Reaction Capabilities in response to immediate warfighter needs in the Space Control mission area are developed within this program.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Title: SSA	14.274	0.000	0.000
Description: Space Situational Awareness efforts such as key space situational awareness enabling technologies, space sensor value modeling and architecture analysis for responsive and resilient SSA.			
FY 2012 Accomplishments: Continued optical sensor evaluations to augment the Space Surveillance Network, and Space Object identification missions. Developed proximity Indications and Warning prototypes. Planned for qualification and flight testing.			
Title: Survivability	2.096	0.000	0.000
Description: Analysis to support vulnerability and survivability studies and projects.			
FY 2012 Accomplishments: Developed and delivered vulnerability report database.			
Title: DCS	0.612	0.000	0.000
Description: Provides asymmetric threat vulnerability and analysis in support of Space and Missile Center and partnered acquisition developments.			
FY 2012 Accomplishments:			

PE 0603438F: Space Control Technology

Air Force

R-1 Line #32

DATE: April 2013

^{##} The FY 2014 OCO Request will be submitted at a later date

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Air Force		DATE:	April 2013		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603438F: Space Control Technology	PROJECT 642611: Technology Insertion Planning a Analysis			
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014	
Completed risk reduction for a laser indications and warning (I&W) techno	ology concept.				
Title: C2		0.050	0.000	0.000	
Description: Develop techniques and technologies for integrated Space (Control C2.				
FY 2012 Accomplishments: Analyzed space control mission needs for continued C2 efforts in support transition. Delivered protype satellite tracking and orbit determination soft	` ,				
Title: Rapid Reaction Branch (RRB)		8.154	3.799	3.560	
Description: Develops advanced capabilities in response to the warfighted Operational Needs (JUONs). Conducts prototyping, demonstration, testing space control systems in response to warfighter urgent needs. FY 2012 Accomplishments: Developed advanced capabilities in response to warfighter JUONs. Integrated technologies. Evaluated methods and techniques to answer new USSTR Developed techniques and technologies for further expansion of current was a second of the control of the co	ng, and rapid transition of technology and technique rated and tested new advanced techniques and ATCOM Evaluation Request Messages (EReqMs)	es to			
FY 2013 Plans: Developing and testing quick reaction capabilities to satify the UONs, JUC other warfighting commands.	ONs and EReqMs received from USSTRATCOM ar	nd			
FY 2014 Plans: Develop and test quick reaction capabilities to satify the UONs, JUONs ar warfighting commands.	nd EReqMs received from USSTRATCOM and other	er			
Title: STINGER		0.409	0.000	0.000	
Description: Spacetrack Integration Node Global Enhanced Reporting (Scapability, developed for missile warning radar to use for the Space Situates)					
FY 2012 Accomplishments: Converted enhanced processing capability developed for missile warning program radars.	radar to use for the Space Situational Awareness				
Title: Responsive, Resilient Space Architecture Support		0.000	2.000	2.000	

PE 0603438F: Space Control Technology Air Force

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APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603438F: Space Control Technology	PROJECT 642611: Technolo Analysis	Planning and	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
Description: Assist space control programs to develop increasingly response architectures emphasizing hostable payloads, small satellites, interface stan opportunities.				
FY 2013 Plans: Assisting space control programs to develop increasingly responsive, resilied emphasizing hostable payloads, small satellites, interface standards and government.				

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

Exhibit R-2A, RDT&E Project Justification: PB 2014 Air Force

			FY 2014	FY 2014	FY 2014					Cost To	
<u>Line Item</u>	FY 2012	FY 2013	Base	OCO	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	Total Cost
None: None	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000

Accomplishments/Planned Programs Subtotals

Remarks

FY 2014 Plans:

D. Acquisition Strategy

All contracts funded in this program element will be awarded using competitive procedures to the maximum extent possible. Program consists of numerous small projects.

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.

PE 0603438F: Space Control Technology

Air Force Page 5 of 16

Assist space control programs to develop increasingly responsive, resilient and affordable capabilities via architectures emphasizing hostable payloads, small satellites, interface standards and government/commercial hosting opportunities.

R-1 Line #32

DATE: April 2013

25.595

5.799

5.560

DATE: April 2013 Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force

APPROPRIATION/BUDGET ACTIVITY

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

R-1 ITEM NOMENCLATURE

PE 0603438F: Space Control Technology

PROJECT

642611: Technology Insertion Planning and

BA 4: Advanced Component Development & Prototypes (AC											Analysis	S			
Product Developmen	nt (\$ in M	illions)		FY 2	2012	FY 2	2013		2014 ase		2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Survivability	C/CPFF	DTIC:,	-	2.262	Jan 2012	0.000		0.000		-		0.000	0.000	2.262	11.386
SSA Development	Various	Various:Various,	-	13.563	Jan 2012	0.000		0.000		-		0.000	0.000	13.563	26.047
DCS Activities	Various	Various:Various,	-	0.660	Jan 2012	0.000		0.000		-		0.000	0.000	0.660	81.970
Counterspace C2	Various	Various:Various,	-	0.050	Jan 2012	0.000		0.000		-		0.000	0.000	0.050	6.906
Counterspace Technology Prototyping/Rapid Reaction Branch	Various	Various:Various,	-	6.773	Jan 2012	3.440	Jan 2013	3.195	Jan 2014	-		3.195	Continuing	Continuing	TBD
STINGER	Various	Various:Various,	-	0.409	Jan 2012	0.000		0.000		-		0.000	0.000	0.409	2.335
Space Control Architecture Products (ORS Concepts)	C/CPAF	TASC:Redondo Beach, CA	-	0.000		2.000	Jan 2013	2.000	Jan 2014	-		2.000	Continuing	Continuing	TBD
		Subtotal	0.000	23.717		5.440		5.195		0.000		5.195			
Support (\$ in Millions	s)			FY 2	2012	FY 2	2013		2014 ase		2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Program Support	Various	Space and Missile Systems Center:El Segundo, CA	-	0.220	Jan 2012	0.154	Jan 2013	0.155	Jan 2014	-		0.155	Continuing	Continuing	TBD
		Subtotal	0.000	0.220		0.154		0.155		0.000		0.155			
Test and Evaluation	(\$ in Milli	ons)		FY 2	2012	FY 2	2013		2014 ase		2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All 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	0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000

PE 0603438F: Space Control Technology

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

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

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603438F: Space Control Technology

PROJECT

642611: Technology Insertion Planning and

Analysis

Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Administration	Various	SMC:El Segundo, CA	-	1.658	Nov 2011	0.205	Nov 2012	0.210	Nov 2013	-		0.210	Continuing	Continuing	TBD
		Subtotal	0.000	1.658		0.205		0.210		0.000		0.210			
		All Prior Years	FY 2	2012	FY 2	2013	FY 2	2014 ise	FY 2		FY 2014 Total	Cost To	Total Cost	Target Value of Contract	
	Project Cost Totals		0.000	25.595		5.799		5.560		0.000		5.560			

Remarks

PE 0603438F: Space Control Technology

Air Force

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Air Force

APPROPRIATION/BUDGET ACTIVITY

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

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603438F: Space Control Technology

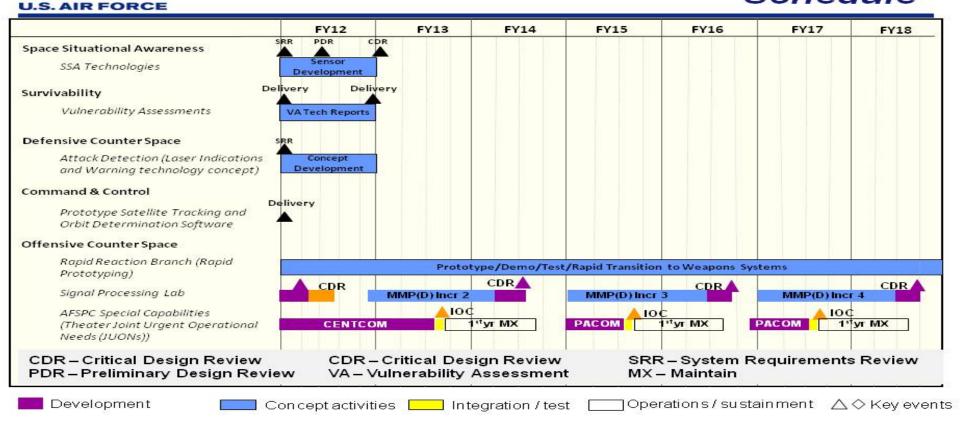
PROJECT

642611: Technology Insertion Planning and

Analysis



SCT Technology Insertion Schedule



PE 0603438F: Space Control Technology

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Air Force

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

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

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE PROJECT

PE 0603438F: Space Control Technology

642611: Technology Insertion Planning and

Analysis

Schedule Details

	Sta	End		
Events	Quarter	Year	Quarter	Year
SSA - Continue sensor development	1	2012	4	2012
SSA - Sensor development Critical Design Review	1	2013	1	2013
Survivability - Vulnerability Assessments and Technical Analysis	1	2012	4	2012
DCS - Attack Detection (Laser indications and warnings technology)	1	2012	4	2012
Command and Control Software Delivery	1	2012	1	2012
Rapid Prototyping	1	2012	4	2018
Signal Processing Lab (MMP(D) Increments 2 - 4)	4	2012	4	2018
AFSPC Special Capabilies Development	1	2012	3	2018

PE 0603438F: Space Control Technology

Exhibit R-2A, RDT&E Project Justification: PB 2014 Air Force

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

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PROJECT

CAA 007: On

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

BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0603438F: Space Control Technology 64A007: Space Range

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
64A007: Space Range	-	17.958	19.345	21.464	-	21.464	19.756	20.104	20.590	20.961	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

This project supports the development of Space Test and Training Range (STTR) capabilities required to support developmental and operational test, training, exercises and tactics development for Space Control systems and related architecture. This includes development, demonstration and delivery of test assets, special test equipment, capabilities and systems required to test, validate, and verify performance of integrated space control systems. The objective of the STTR is to provide a safe, secure, controllable and repeatable environment for the testing and training of Space Control mission systems and operators that is both realistic and relevant. Additionally, this program supports the development of test range assets required to support developmental and operational test, exercises, training, and tactics development for Air Force and Joint-service space control systems/units. Included are both the fixed node Space Range Operation Center (SROC) at Schriever AFB and a deployable capability to support complex Joint and AF exercises. A space range Family of Systems (FoS) called Big Top is being developed to accomplish the STTR mission. The Big Top objective is integration into a Distributed Mission Architecture, tying into both the Information Operations (IO) and Air ranges for increased realism and complexity.

Satellite bandwidth is leased in this program for use in support of live testing and training events.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Title: Range Control	16.216	17.698	17.629
Description: Development and acquisition of mobile, transportable, and fixed range monitoring and communications capabilities for the space range.			
FY 2012 Accomplishments: Successfully integrated initial Space Range Operations Center (iSROC) system into the Schriever AFB Space Range Operations Facility. Conducted DT and prepared for OT. Delivered the Space Common Scheduling Enterprise (S-CSE) range event scheduling tool. Conducted Signal Monitoring Unit (SMU) DT and prepared the SMU for OT. Began the SROC Spiral 1 upgrade.			
FY 2013 Plans: Operational acceptance of both iSROC and SMU to meet STTR IOC criteria. Finalize and deliver S-CSE Spiral-2 for Operational Test and Acceptance. Continue execution of SROC Spiral-1 upgrades. Award "Big Top" range family of systems contract for			

PE 0603438F: Space Control Technology Air Force UNCLASSIFIED

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^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Air Force			DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603438F: Space Control Technology	PROJE 64A007	ECT 7: Space Rai	nge	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2012	FY 2013	FY 2014
capability development of world-wide distributed capability, analysis and so playback capability. Transfer Government Furnished Equipment prototype		and			
FY 2014 Plans: Complete initial delivery of the Deployable Range and SMU. Initiate Deployable SROC Spiral 0. Complete SROC Spiral 1 upgrades and initiate Spiral 2 devirtual and constructive environment and closed loop training capabilities v	evelopment. Continue development of advanced l				
Title: Live Fire Training In Degraded Environments			0.000	0.000	2.000
Description: Development of closed loop trainers that joint forces will use SATCOM environments.	to simulate operating through denied GPS and				
FY 2014 Plans: Will develop and deliver closed loop trainer capability for the STTR that join GPS and SATCOM environments.	nt forces will use to simulate operating though der	nied			
Title: Bandwidth Support			1.742	1.647	1.835
Description: Provides for leased SATCOM bandwidth for STTR operation	S.				
FY 2012 Accomplishments: Provided required space range satellite communications bandwidth for exedefensive space control systems on the space range.	ercise, testing and training of both offensive and				
FY 2013 Plans: Providing required space range satellite communications bandwidth for exceeding space control systems on the space range	ercise, testing and training of both offensive and				
FY 2014 Plans: Will acquire deployable range antenna/hardware required for OCONUS su iSROC and SMU systems. Perform combined DT/OT of SROC Spiral-1. (capability. Deliver Big Top increment-1.					
	Accomplishments/Planned Programs Sub	ototals	17.958	19.345	21.464

PE 0603438F: Space Control Technology Air Force UNCLASSIFIED
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Exhibit R-2A, RDT&E Project Justification: PB 2014 Air Force

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

3600: Research, Development, Test & Evaluation, Air Force PE 0603438F: Space Control Technology 64A007: Space Range

BA 4: Advanced Component Development & Prototypes (ACD&P)

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

			FY 2014	FY 2014	FY 2014					Cost To	
<u>Line Item</u>	FY 2012	FY 2013	Base	000	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	Total Cost
N/A: None	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000

Remarks

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.

PE 0603438F: Space Control Technology

Air Force Page 12 of 16

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force

APPROPRIATION/BUDGET ACTIVITY

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

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603438F: Space Control Technology

PROJECT

64A007: Space Range

DATE: April 2013

Product Developmen	ıt (\$ in M	illions)		FY 2	2012	FY 2	2013		2014 ase	FY 2	2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Leased Bandwidth	SS/FFP	DISA:Arlington, VA	-	1.742	Feb 2012	1.500	Jan 2013	1.530	Jan 2014	-		1.530	Continuing	Continuing	TBD
Space Range Operations Center	C/CPAF	Harris Corp:Melbourne, FL	-	5.389	Feb 2012	4.228	Feb 2013	4.500	Feb 2014	-		4.500	Continuing	Continuing	TBD
Joint Closed Loop Trainer	TBD	TBD:TBD,	-	0.000		0.000		2.000	Jan 2014	-		2.000	Continuing	Continuing	TBD
STTR Transportable	C/TBD	TBD:TBD,	-	0.000		3.900	Jan 2013	3.100	Jan 2014	-		3.100	Continuing	Continuing	TBD
Signal Generation, Monitoring and Collection	Various	SMC:Los Angeles AFB, CA	-	4.015	Nov 2011	0.000		0.000		-		0.000	0.000	4.015	15.000
Range Scheduling Tool	Various	Various:Various,	-	0.200	Nov 2012	0.000		0.000		-		0.000	0.000	0.200	1.000
Advanced Capabilities Environment (ACE)	C/CPAF	Harris Corp:Melbourne, FL	-	0.000		4.260	Jan 2013	5.886	Jan 2014	-		5.886	Continuing	Continuing	TBD
Training Systems Requirements Analysis	C/CPAF	Spiral Solutions Tech:Omaha, NE	-	0.150	Apr 2011	0.200	Nov 2013	0.000		-		0.000	0.000	0.350	0.808
Interim Contractor Support	C/CPAF	Harris Corp:Melbourne, FL	-	2.357	Jan 2012	1.995	Nov 2013	0.000		-		0.000	0.000	4.352	4.300
Managment Operations	Various	TBD:TBD,	-	0.000		1.326	May 2013	1.806	May 2014	-		1.806	Continuing	Continuing	TBD
		Subtotal	0.000	13.853		17.409		18.822		0.000		18.822			
Support (\$ in Millions	s)			FY 2	2012	FY :	2013		2014 ase		2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Program Support	Various	SMC:El Segundo, CA	-	0.190	Jan 2012	0.189	Jan 2012	0.196	Jan 2014	-		0.196	Continuing	Continuing	TBD
		Subtotal	0.000	0.190		0.189		0.196		0.000		0.196			
Test and Evaluation	(\$ in Milli	ions)		FY 2	2012	FY	2013		2014 ise		2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract

PE 0603438F: Space Control Technology Air Force

Subtotal

0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

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

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603438F: Space Control Technology

PROJECT

64A007: Space Range

Management Service	s (\$ in M	lillions)		FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Program Management Administration	Various	Space and Missile Systems Center:El Segundo, CA	-	2.436	Nov 2012	0.673	Jan 2013	0.505	Jan 2014	-		0.505	Continuing	Continuing	TBD
Logistics Support	C/CPAF	AT&T:El Segundo, CA	-	1.234	Mar 2012	0.889	Nov 2013	0.971	Nov 2014	-		0.971	Continuing	Continuing	TBD
Engineering and Technical Services	C/CPAF	AT&T:El Segundo, CA	-	0.245	Mar 2012	0.185	May 2013	0.970	May 2014	-		0.970	Continuing	Continuing	TBD
		Subtotal	0.000	3.915		1.747		2.446		0.000		2.446			
			All Prior Years	FY 2	2012	FY 2	2013		2014 ase		2014 CO	FY 2014 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	0.000	17.958		19.345		21.464		0.000		21.464			

Remarks

PE 0603438F: Space Control Technology

Air Force

UNCLASSIFIED

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Air Force

R-1 ITEM NOMENCLATURE

PROJECT

APPROPRIATION/BUDGET ACTIVITY

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

BA 4: Advanced Component Development & Prototypes (ACD&P)

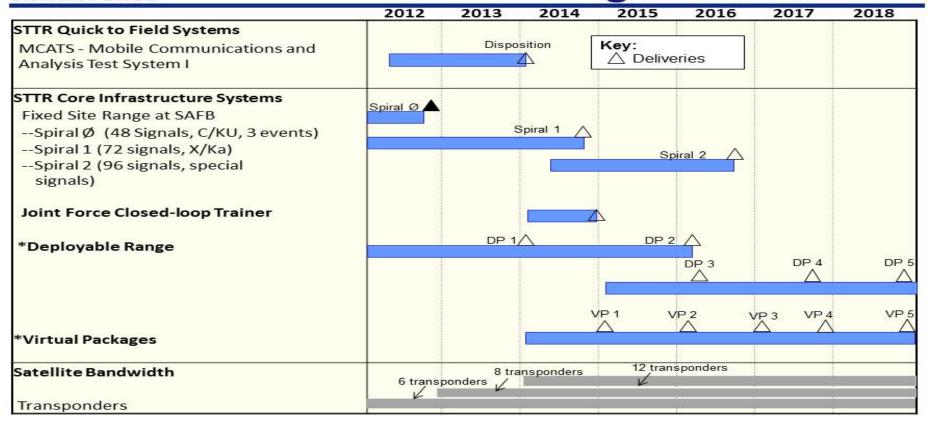
PE 0603438F: Space Control Technology

64A007: Space Range

DATE: April 2013



STTR Program Schedule



PE 0603438F: Space Control Technology

Air Force

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Air Force

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PROJECT

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

APPROPRIATION/BUDGET ACTIVITY

PE 0603438F: Space Control Technology

64A007: Space Range

DATE: April 2013

Schedule Details

	Sta	art	End		
Events	Quarter	Year	Quarter	Year	
Operate Mobile Communications and Analysis Test System (MCATS) 1	1	2012	4	2013	
Space Test and Training Range (STTR) Core Fixed Site development Spiral 0	1	2012	3	2012	
STTR Core Fixed Site development Spiral 1	1	2012	4	2014	
STTR Core Fixed Site development Spiral 2	2	2014	4	2016	
Joint Closed Loop Trainer	1	2014	4	2014	
Deployable Range Development	1	2012	3	2017	
Deployable Range 1 Delivery	4	2013	4	2013	
Deployable Range 2 Delivery	1	2016	1	2016	
Deployable Range 3 Delivery	1	2016	1	2016	
Deployable Range 4 Delivery	3	2017	3	2017	
Deployable Range 5 Delivery	4	2018	4	2018	
Virtual Package Development	1	2014	4	2018	
Virtual Package 1 Delivery	1	2015	1	2015	
Virtual Package 2 Delivery	1	2016	1	2016	
Virtual Package 3 Delivery	1	2017	1	2017	
Virtual Package 4 Delivery	4	2017	4	2017	
Virtual Package 5 Delivery	4	2018	4	2018	
Purchase Commercial Satellite Bandwidth	1	2012	4	2018	

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