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

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

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

PE 0305173F: Space and Missile Test and Evaluation Center

BA 7: Operational Systems Development

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	-	1.542	3.680	3.696	-	3.696	3.720	3.751	3.781	3.849	Continuing	Continuing
67A014: R&D Space and Missile Operations	-	1.542	3.680	3.696	-	3.696	3.720	3.751	3.781	3.849	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

R&D Space and Missile Operations (RDSMO) develops and acquires systems to: operate experimental, demonstration, and operational satellites; operate fixed and deployable satellite ground systems; perform satellite compatibility testing; act as the focal point and center of expertise for DoD experimental and demonstration space and missile operations; support space and missile R&D; and conduct/support experimental/demonstration of space and missile Developmental Test and Evaluation (DT&E) and Initial Operational Test and Evaluation (IOT&E) activities. It consists of the Space Test and Operations organization at Kirtland AFB which is the focal point for (1) the Multi-Mission Satellite Operations Center (MMSOC) which is installed in the RDT&E Support Complex (RSC) at Kirtland AFB, NM which operates R&D satellites, and the 1 Space Operations Squadron (1 SOPS) at Schriever AFB, CO which operates operational satellites; (2) satellite ground system development and integration; and (3) deployable test systems which deploy mobile antennas worldwide to support space RDT&E activities.

FY14 funds include incremental development and establishing new capabilities for the MMSOC, systems engineering, special studies, integration and test efforts in support of demonstrations and operational architectures designed to increase operations and maintenance efficiency and resiliency for global satellite command and control through military and commercial capabilities. It also includes development of additional capabilities of a mobile test system, known as the Remote Tracking Station Block Change Transportable Space Test Resource (RBC TSTR).

The main objective of MMSOC is to develop the capability to rapidly support R&D and operational systems and to transition R&D space vehicle technology with residual military utility to operational status for immediate war-fighter support. MMSOC is a multiple mission operation system that uses standard software (1) to perform satellite command and control (C2) in support of launch requirements; (2) develop and test tactics, techniques, procedures and concepts to conduct satellite operations; (3) provide a satellite C2 incremental block evolution resource for RDT&E of new systems and concepts; and (4) deliver operational flexibility for new and currently-flying assigned satellites.

The main objective of RBC TSTR is to verify satellite compatibility with the Air Force Satellite Control Network (AFSCN) Remote Block Change architecture, currently being fielded worldwide. The system will be capable of being deployed around the world to perform compatibility testing in the factory as well as launch ranges to include Kodiak, AK, Wallops Island, VA, and Kwajalein Atoll where there is no other existing or planned capability.

This effort is in Budget Activity 7, Operational System Development, and it supports research and development of space systems.

PE 0305173F: Space and Missile Test and Evaluation Center 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 7: Operational Systems Development		R-1 ITEM NOME PE 0305173F: S	NCLATURE pace and Missile Test and	d Evaluation Center		
B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 T	<u> Total</u>
Previous President's Budget	1.629	3.680	3.696	-	3	.696
Current President's Budget	1.542	3.680	3.696	-	3	.696
Total Adjustments	-0.087	0.000	0.000	-	0	.000
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	-0.087	0.000				
SBIR/STTR Transfer	0.000	0.000				
 Other Adjustments 	0.000	0.000	0.000	-	0	.000
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2012	FY 2013	FY 2014
Title: MMSOC Development				1.542	3.680	3.19
Description: Multi-Mission Satellite Operations Center (MMSC	C) developmer	t/integration				
FY 2012 Accomplishments: Implemented hardware virtualization, began implementation of onto MMSOC architecture (Comm/Nav Outage Forcasting Sys and CloudSat) and maintained 99.7% operational availability. automation. Continued program office support and related support studies, Systems Engineering and Technical Assistance (SETA)	tem (C/NOFS), Supported oper port activities su	Space Environme ations of multiple s ch as, but not limit	nt Nanosat Experiment (S satellites and enhanced ted to, mission support, s	SENSE),		
(FFRDC), etc.						
	llites and enhan missions supp	ce automation cap ort, special studies	pability. Continue programs, SETA, FFRDC, etc.	n office		

PE 0305173F: Space and Missile Test and Evaluation Center Air Force

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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 0305173F: Space and Missile Test and Evaluation Center

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C. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
program office support and related support activities such as, but not limited to missions support, special studies, SETA, FFRDC,			
etc.			
Title: RBC TSTR	0.000	0.000	0.500
Description: Remote Tracking Station Block Change Transportable Space Test Resource (RBC TSTR) development/integration			
FY 2014 Plans:			
Begin incorporation of Unified S-Band (USB) test capability.			
Accomplishments/Planned Programs Subtotals	1.542	3.680	3.696

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

		,	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
834010: General Information	3.470	1.586	1.639		1.639	1.698	1.764	1.832	1.865	Continuing	Continuing
Technology											

Remarks

Due to a database error, the RDSMO program in General Information Technology incorrectly reflects \$7.497M in FY12, but actually only has \$3.47M in FY12 to execute.

E. Acquisition Strategy

The AF uses the competitively-awarded Engineering, Development, and Sustainment (EDS) Contract, managed by Space and Missile System Center, Space Development & Test Directorate, to modernize and sustain MMSOC. The AF uses the competitively-awarded AFSCN RBC contract to develop RBC TSTR.

F. 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 0305173F: Space and Missile Test and Evaluation Center Air Force

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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 7: Operational Systems Development

R-1 ITEM NOMENCLATURE PROJECT

PE 0305173F: Space and Missile Test and

Evaluation Center

67A014: R&D Space and Missile Operations

Product Developmen	t (\$ in Mi	llions)		FY 2	2012	FY 2	013	FY 2 Ba		FY 2 OC		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
Engineering, Development, and Sustainment (EDS) Follow-on Contract (MMSOC)	C/CPAF	Lockheed Martin:Santa Maria, CA	-	1.392	Oct 2011	2.118	Oct 2012	1.675	Oct 2013	-		1.675	Continuing	Continuing	TBD
RBC TSTR Contract	C/CPAF	Honeywell:Colorado Springs, CO	-	0.000		0.000		0.500	Oct 2013	-		0.500	Continuing	Continuing	TBD
NASA Support (MMSOC)	MIPR	NASA Goddard:Greenbelt, MD	-	0.000		0.200	Oct 2012	0.200	Oct 2013	-		0.200	Continuing	Continuing	TBD
		Subtotal	0.000	1.392		2.318		2.375		0.000		2.375			

Support (\$ in Millions	s)			FY 2	2012	FY 2	2013	FY 2 Ba		FY 2		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
Information Assurance Support (MMSOC)	Various	Various:,	-	0.000		0.300	Oct 2012	0.300	Oct 2013	-		0.300	Continuing	Continuing	TBD
		Subtotal	0.000	0.000		0.300		0.300		0.000		0.300			

Test and Evaluation	(\$ in Milli	ons)		FY 2	:012	FY 2	:013	FY 2 Ba		FY 2		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
System Test and Engineering (STEC) Contract (MMSOC)	C/CPAF	LINQUEST:Kirtland, AFB, NM	-	0.000		0.200	Oct 2012	0.200	Oct 2013	-		0.200	Continuing	Continuing	TBD
		Subtotal	0.000	0.000		0.200		0.200		0.000		0.200			

PE 0305173F: Space and Missile Test and Evaluation Center Air Force

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

R-1 ITEM NOMENCLATURE

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

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

PE 0305173F: Space and Missile Test and

PROJECT

BA 7: Operational Systems Development

Evaluation Center

67A014: R&D Space and Missile Operations

Management Service	es (\$ in M	illions)		FY	2012	FY 2	2013		2014 ase	FY 2		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 (PMA)	Various	Various:,	-	0.150	Dec 2011	0.862	Dec 2012	0.821	Oct 2013	-		0.821	Continuing	Continuing	TBD
		Subtotal	0.000	0.150		0.862		0.821		0.000		0.821			
			All Prior					FY 2	2014	FY 2	2014	FY 2014	Cost To	Total	Target Value of

	All Prior Years	FY 2	2012	FY 2	2013	FY 2014 Base	4 FY 2014 OCO	FY 2014 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	0.000	1.542		3.680		3.696	0.000	3.696			

Remarks

PE 0305173F: Space and Missile Test and Evaluation Center Air Force

Exhibit R-4. RDT&E Schedule Profile: PB 2014 Air Force DATE: April 2013 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 3600: Research, Development, Test & Evaluation, Air Force PE 0305173F: Space and Missile Test and 67A014: R&D Space and Missile Operations

Evaluation Center BA 7: Operational Systems Development FY12 FY13 FY14 FY15 FY16 FY17 FY18 **RDSMO Systems Upgrades** Begin Unified S-Band test mods

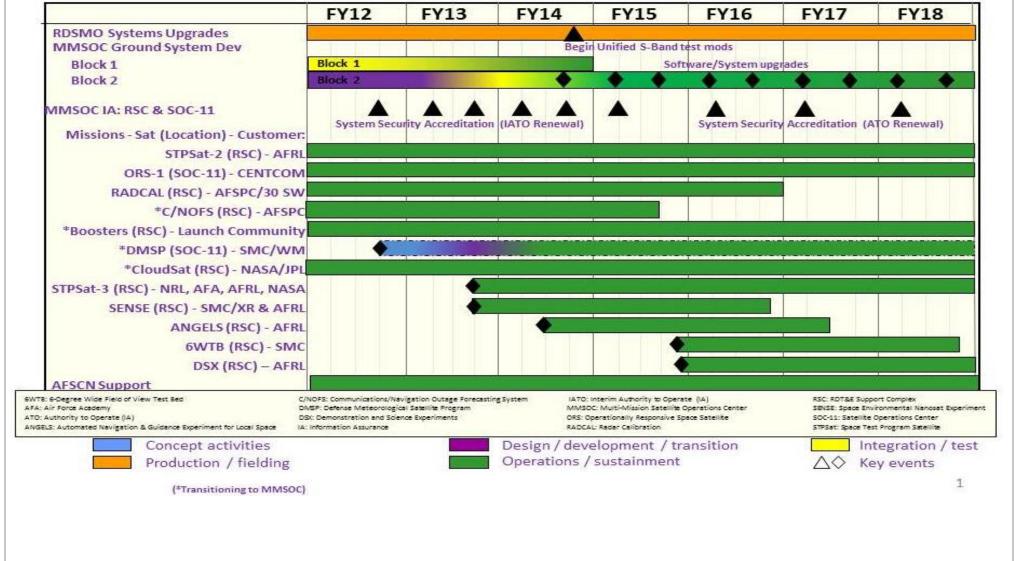


Exhibit R-4A, RDT&E Schedule Details: PB 2014 Air Force

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

3600: Research, Development, Test & Evaluation, Air Force PE 0305173F: Space and Missile Test and 67A014: R&D Space and Missile Operations

BA 7: Operational Systems Development Evaluation Center

Schedule Details

	Sta	art	En	ıd
Events	Quarter	Year	Quarter	Year
RDSMO Systems Upgrades	1	2012	4	2018
MMSOC Block I	1	2012	4	2014
MMSOC Block II	1	2012	4	2018
MMSOC Information Assurance	3	2012	1	2018
MMSOC STP-2 Supt	1	2012	4	2018
MMSOC ORS-1 Supt	1	2012	4	2018
MMSOC RADCAL Supt	1	2012	4	2016
MMSOC C/NOFS Supt	1	2012	3	2015
MMSOC DMSP Supt	4	2012	4	2015
MMSOC CloudSat Supt	1	2012	4	2018
MMSOC STPSat-3 Supt	4	2013	4	2018
MMSOC SENSE Supt	4	2013	4	2016
MMSOC ANGELS Supt	3	2014	2	2017
MMSOC 6WTB Supt	4	2015	4	2018
MMSOC DSX Supt	4	2015	4	2018
AFSCN Support	1	2012	4	2018