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

R-1 ITEM NOMENCLATURE

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

PE 0305173F: Space & Missile Test & Evaluation Center

DATE: February 2011

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	3.578	4.572	196.254	-	196.254	218.131	226.221	232.306	237.143	Continuing	Continuing
67A014: R&D Space and Missile Operations	3.578	4.572	196.254	-	196.254	218.131	226.221	232.306	237.143	Continuing	Continuing

Note

FY2012-FY2016: +\$1.0B for Acquisition workforce civilian pay.

The program funding includes overhead reduction efficiencies that are not intended to impact program content. The efficiencies reductions total \$12.4M in FY12.

A. Mission Description and Budget Item Justification

The RDT&E efforts within this program focus on the Multi-Mission Satellite Operations Center (MMSOC), which the Research and Development (R&D) Space and Missile Operations (RDSMO) program started in FY 2007. 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) to develop and test tactics, techniques, procedures and concepts to conduct operations for R&D satellites; (3) to provide a satellite C2 incremental block evolution resource for RDT&E of new systems and concepts; and (4) to deliver operational flexibility for new and currently-flying assigned satellites. MMSOC leverages demonstrated RDT&E experience to expand the capabilities of proven technologies currently in use in Air Force Space Development and Test Directorate facilities. MMSOC also supports all RDSMO-sustained space vehicles through existing resources.

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 (1) the RDT&E Support Complex (RSC) at Kirtland AFB, NM and MMSOC equipment installed in 1 SOPS at Schriever AFB, CO which operate R&D satellites; (2) the Space Test Operations organization at Kirtland AFB which is the focal point for small satellite tests, plans, programs, and policy and (3) the deployable test systems, based at Kirtland AFB, NM which deploys mobile antennas worldwide to support space RDT&E activities.

The RDT&E effort also includes the development of a mobile test system, known as the Remote Tracking Station Block Change Transportable Space Test Resource (RBC TSTR), used 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, Alaska, Wallops Island, Virginia, and Kwajalein Atoll where there is no other existing or planned capability. This was a new start in FY 2010.

Air Force Page 1 of 9 R-1 Line Item #195

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

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

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

PE 0305173F: Space & Missile Test & Evaluation Center

BA 7: Operational Systems Development

The Space and Missile Systems Center (SMC) equips US and allied forces with operational space and missile systems, launch systems, and command and control infrastructure in support of global military and national security operations. Product Center operates with over 6,300 people and an annual budget exceeding \$10B providing joint warfighters navigation, communication, weather, warning, force application, and space control capabilities.

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

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	3.593	4.572	1.658	-	1.658
Current President's Budget	3.578	4.572	196.254	-	196.254
Total Adjustments	-0.015	-	194.596	-	194.596
 Congressional General Reductions 		-			
 Congressional Directed Reductions 		-			
 Congressional Rescissions 	-	-			
 Congressional Adds 		-			
 Congressional Directed Transfers 		-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustments	-0.015	-	194.596	-	194.596

Change Summary Explanation

FY10: The FY10 program funding includes reductions for FY10 actuals backout totaling \$0.015M.

FY12: +\$194.6M for Acquisition workforce civilian pay. Temporary placement for SMC Acquisition Workforce Civilian Pay. BPAC 676026 was created for this funding.

- The program funding includes overhead reduction efficiencies that are not intended to impact program content. The efficiencies reductions total \$12.4M in FY12.
- The FY12 program funding includes reductions for civilian pay raises totaling \$6.973M.
- The FY12 program funding includes reductions for civilian manpower freeze totaling \$15.507M.

Air Force Page 2 of 9 R-1 Line Item #195

DATE: February 2011

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APPROPRIATION/BUDGET ACTIV	R-1 ITEM N	OMENCLA	TURE		PROJECT 67A014: R&D Space and Missile Operations							
3600: Research, Development, Test	PE 030517	3F: Space &	Missile Test	&								
BA 7: Operational Systems Develop	·				Center			·				
COST (f in Millions)			FY 2012	FY 2012	FY 2012					Cost To		
COST (\$ in Millions)	FY 2010	FY 2011	Base	oco	Total	FY 2013	FY 2014	FY 2015	FY 2016	Complete	Total Cost	
CZAOAA: DOD Oneses and Missile	2.570	4.570	400.054		400.054	040 404	000 004	000 000	007 440	0 1 1	0	

COST (\$ in Millions)			FY 2012	FY 2012	FY 2012					Cost To	
COST (\$ III MIIIIOTIS)	FY 2010	FY 2011	Base	oco	Total	FY 2013	FY 2014	FY 2015	FY 2016	Complete	Total Cost
67A014: R&D Space and Missile Operations	3.578	4.572	196.254	-	196.254	218.131	226.221	232.306	237.143	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

Note

FY2012-FY2016: +\$1.0B for Acquisition workforce civilian pay.

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

FY10 Actuals Backout: -\$.015M

FY2012:

+\$194.596M for Acquisition workforce civilian pay. Temporary placement for SMC Acquisition Workforce Civilian Pay. BPAC 676026 has been requested for this funding.

The FY12 program funding includes overhead reduction efficiencies that are not intended to impact program content. The efficiencies reductions total \$12.4M in FY12.

Civilian pay raise reductions: -\$6.973M

Civilian hiring freeze: -\$15.507M

A. Mission Description and Budget Item Justification

The RDT&E efforts within this program focus on the Multi-Mission Satellite Operations Center (MMSOC), which the Research and Development (R&D) Space and Missile Operations (RDSMO) program started in FY 2007. 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) to develop and test tactics, techniques, procedures and concepts to conduct operations for R&D satellites; (3) to provide a satellite C2 resource for RDT&E of new systems and concepts; and (4) to deliver operational flexibility for new and currently-flying assigned satellites. MMSOC leverages demonstrated RDT&E experience to expand the capabilities of proven technologies currently in use in Air Force Space Development and Test Directorate facilities. MMSOC also supports all RDSMO-sustained space vehicles through existing resources.

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 (IOT&E) and Initial Operational Test and Evaluation (IOT&E) activities. It consists of (1) the RDT&E Support Complex (RSC) at Kirtland AFB, NM and MMSOC equipment installed in 1 SOPS at

Air Force Page 3 of 9 R-1 Line Item #195

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force	DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
3600: Research, Development, Test & Evaluation, Air Force	PE 0305173F: Space & Missile Test &	67A014: R	&D Space and Missile Operations
BA 7: Operational Systems Development	Evaluation Center		

Schriever AFB, CO which operate R&D and operational satellites; (2) the Space Test Operations organization at Kirtland AFB which is the focal point for small satellite tests, plans, programs, and policy and (3) the deployable test systems, based at Kirtland AFB, NM which deploys mobile antennas worldwide to support space RDT&E activities.

The RDT&E effort also includes the development of a mobile test system, known as the Remote Tracking Station Block Change Transportable Space Test Resource (RBC TSTR), used 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, Alaska, Wallops Island, Virginia, and Kwajalein Atoll where there are no other existing or planned AFSCN compatibility test capabilities. This was a new start in FY 2010. Unified S-Band test capability will be incorporated into RBC TSTR in FY11.

The Space and Missile Systems Center (SMC) equips US and allied forces with operational space and missile systems, launch systems, and command and control infrastructure in support of global military and national security operations. Product Center operates with over 6,300 people and an annual budget exceeding \$10B providing joint warfighters navigation, communication, weather, warning, force application, and space control capabilities.

EV 2012 EV 2012 EV 2012

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

Accomplishments/Planned Programs (\$ in Millions)

B. Accomplishments/Planned Programs (\$ in Millions)			FY 2012	FY 2012	FY 2012
	FY 2010	FY 2011	Base	oco	Total
Title: MMSOC Development	3.578	3.572	1.658	-	1.658
Description: Multi-Mission Satellite Operations Center (MMSOC) development/integration					
FY 2010 Accomplishments: Continue MMSOC development/integration efforts; Continue program office support and related support activities such as, but not limited to mission support, special studies, SETA, FFRDC, etc					
FY 2011 Plans: Continue MMSOC development/integration efforts; Continue program office support and related support activities such as, but not limited to mission support, special studies, SETA, FFRDC, etc					
FY 2012 Base Plans: Continue MMSOC development/integration efforts; Continue program office support and related support activities such as, but not limited to mission support, special studies, SETA, FFRDC, etc					
FY 2012 OCO Plans:					
Title: RBC TSTR	_	1.000	-	-	-

Air Force Page 4 of 9 R-1 Line Item #195

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force	DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
3600: Research, Development, Test & Evaluation, Air Force	PE 0305173F: Space & Missile Test &	67A014: <i>R</i> 8	&D Space and Missile Operations
BA 7: Operational Systems Development	Evaluation Center		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Description: Remote Tracking Station Block Change Transportable Space Test Resource (RBC TSTR). Used to verify satellite compatibility with the AFSCN RBC architecture.					
FY 2010 Accomplishments:					
FY 2011 Plans: Incorporate Unified S-band test capability.					
FY 2012 Base Plans:					
FY 2012 OCO Plans:					
Title: Acquisition Workforce Civlian Pay	-	-	194.596	-	194.596
FY 2010 Accomplishments:					
FY 2011 Plans:					
FY 2012 Base Plans:					
FY 2012 OCO Plans:					
Accomplishments/Planned Programs Subtotals	3.578	4.572	196.254	-	196.254

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

			FY 2012	FY 2012	FY 2012					Cost To	
<u>Line Item</u>	FY 2010	FY 2011	Base	OCO	<u>Total</u>	FY 2013	FY 2014	FY 2015	FY 2016	Complete	Total Cost
OPAF: Electronics & Telecom	11.299	3.470	3.470	0.000	3.470	3.586	3.639	3.698	3.764	Continuing	Continuing
Fauinment (BA 03 PF 0305173F											-

P-20)

D. 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.

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 5 of 9 R-1 Line Item #195

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force

APPROPRIATION/BUDGET ACTIVITY

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

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0305173F: Space & Missile Test &

Evaluation Center

DATE: February 2011

PROJECT

67A014: R&D Space and Missile Operations

DA 1. Operational System	is Develop	JIII C III		Lvai	ualion Ce	IILEI							
Product Development (roduct Development (\$ in Millions)					FY 2 Ba	2012 ise		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
Engineering, Development, and Sustainment (EDS) Follow-on Contract	C/CPAF	Lockheed Martin:Kirtland, Schreiver AFB,	3.498	3.572		1.658		-		1.658	Continuing	Continuing	TBD
		Subtotal	3.498	3.572		1.658		-		1.658			
Support (\$ in Millions)		FY 2	011	FY 2012 Base		FY 2012 OCO		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
		Subtotal	-	-		-		-		-	0.000	0.000	0.000
Test and Evaluation (\$ i	n Millions	s)		FY 2	011		2012 Ise		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 Test and Engineering (STEC) Contract	C/CPAF	LINQUEST:Kirtland, AFB,	0.080	-		-		-		-	Continuing	Continuing	0.000
		Subtotal	0.080	-		-		-		-			0.000
lanagement Services (\$ in Millions)				FY 2	011		2012 ise		2012 CO	FY 2012 Total			
	Contract		Total Prior										Target

Cost Category Item	Method & Type	Performing Activity & Location	Years Cost	Cost	Award Date Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Value of Contract
RBC TSTR Contract	TBD	Honeywell:Colorado Springs, CO	-	1.000	-		-		-	0.000	1.000	3.923
SMC Acquisiton Civilian Workforce	TBD	Not specified.:,	-	-	194.596		-		194.596	0.000	194.596	0.000
		Subtotal	-	1.000	194.596		-		194.596	0.000	195.596	3.923

Remarks

FY12: +\$194.6M for Acquisition workforce civilian pay. Temporary placement for SMC Acquisition Workforce Civilian Pay. BPAC 676026 was created for this funding.

Air Force Page 6 of 9 R-1 Line Item #195

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force

APPROPRIATION/BUDGET ACTIVITY
3600: Research, Development, Test & Evaluation, Air Force
BA 7: Operational Systems Development

BA 7: Operational Systems Development

DATE: February 2011

R-1 ITEM NOMENCLATURE
PE 0305173F: Space & Missile Test &
Evaluation Center

PROJECT
67A014: R&D Space and Missile Operations

Tot	otal Prior									Target
	Years			FY 2012	FY 2	2012	FY 2012	Cost To	1	Value of
	Cost	FY 2	2011	Base	oco		Total	Complete	Total Cost	Contract
Project Cost Totals	3.578	4.572		196.254	-		196.254			

<u>Remarks</u>

xhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force	DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 1600: Research, Development, Test & Evaluation, Air Force 13A 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0305173F: Space & Missile Test & Evaluation Center	PROJECT 67A014: R&D Space and Missile Operations		

UNCLASSIFIED

Air Force Page 8 of 9 R-1 Line Item #195

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

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

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

BA 7: Operational Systems Development Evaluation Center

Schedule Details

	Start		End	
Events	Quarter	Year	Quarter	Year
Remote Tracking Block Change Transportable Space Test Resource Contract Award	4	2010	4	2010

Air Force Page 9 of 9 R-1 Line Item #195