

UNCLASSIFIED

PE NUMBER: 0305173F

PE TITLE: Space & Missile Test & Evaluation Center

Exhibit R-2, RDT&E Budget Item Justification

DATE

February 2006

BUDGET ACTIVITY

07 Operational System Development

PE NUMBER AND TITLE

0305173F Space & Missile Test & Evaluation Center

Cost (\$ in Millions)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	0.000	0.000	4.675	3.060	1.990	1.662	1.689	Continuing	TBD
A014 R&D Space and Missile Operations	0.000	0.000	4.675	3.060	1.990	1.662	1.689	Continuing	TBD

Note: In FY 2007, all funding from BPAC 4992 (PE# 0305173F) was transferred to new BPAC A014 - this re-name better reflects focus of efforts.

(U) **A. Mission Description and Budget Item Justification**

The RDT&E efforts within this program will focus on the Multi-Mission Satellite Operations Center (MMSOC), which Research and Development (R&D) Space and Missile Operations (RDSMO) program will start in FY 2007. The main objective of MMSOC is to transition R&D space vehicle technology with residual military utility to operational status for immediate real world support and to perform initial operational utility assessment for future acquisition programs. MMSOC will be a multiple-mission operation system that uses standard software to (1) perform satellite command and control (C2) in support of launch requirements; (2) conduct residual operations capability for R&D satellites in order to develop/test tactics, techniques, procedures and concepts; (3) provide a satellite C2 spiral evolution resource for RDT&E of new systems and concepts; and (4) deliver new operational flexibility for currently-flying assigned satellites. MMSOC will leverage demonstrated RDT&E experience to expand the capabilities and proven technologies currently in use by other RDSMO facilities. MMSOC will also support all RDSMO-sustained space vehicles through existing resources. In addition, it will add the capability to rapidly support operational counterspace systems (such as Near-field Infrared Experiment (NFIRE), Interim Satellite as a Sensor (ISAS), and Rapid Attack Identification Detection and Reporting System (RAIDRS)).

The RDSMO Program Element also contains O&M and OPAF funds. RDSMO develops and acquires systems to: operate experimental and demonstration 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 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 which operates R&D satellites; (2) the Center for Research Support (CERES) at Schriever AFB, CO which operates residual satellites and serves as a test bed; (3) the Camp Parks Communication Annex at Dublin, CA which provides multi-band Telemetry Tracking and Commanding (TT&C), calibration and on-orbit testing; (4) the Test, Operations, and Programs at Kirtland AFB which is the focal point for tests, plans, programs, and policy and (5) the deployable test systems, based at Kirtland AFB, NM which deploys mobile antennas worldwide to support space RDT&E activities.

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

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(U) B. Program Change Summary (\$ in Millions)

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget	0.000	0.000	4.622
(U) Current PBR/President's Budget	0.000	0.000	4.675
(U) Total Adjustments	0.000	0.000	
(U) Congressional Program Reductions			
Congressional Rescissions			
Congressional Increases			
Reprogrammings			
SBIR/STTR Transfer			
(U) <u>Significant Program Changes:</u>			
FY 2007 New Start Effort (MMSOC)			

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Exhibit R-2a, RDT&E Project Justification

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0305173F Space & Missile Test & Evaluation Center

PROJECT NUMBER AND TITLE

A014 R&D Space and Missile Operations

Cost (\$ in Millions)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
A014 R&D Space and Missile Operations	0.000	0.000	4.675	3.060	1.990	1.662	1.689	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

Note: In FY 2007, all funding from BPAC 4992 (PE# 0305173F) was transferred to new BPAC A014 - this re-name better reflects focus of efforts.

(U) **A. Mission Description and Budget Item Justification**

The RDT&E efforts within this program will focus on the Multi-Mission Satellite Operations Center (MMSOC), which Research and Development (R&D) Space and Missile Operations (RDSMO) program will start in FY 2007. The main objective of MMSOC is to transition R&D space vehicle technology with residual military utility to operational status for immediate real world support and to perform initial operational utility assessment for future acquisition programs. MMSOC will be a multiple-mission operation system that uses standard software to (1) perform satellite command and control (C2) in support of launch requirements; (2) conduct residual operations capability for R&D satellites in order to develop/test tactics, techniques, procedures and concepts; (3) provide a satellite C2 spiral evolution resource for RDT&E of new systems and concepts; and (4) deliver new operational flexibility for currently-flying assigned satellites. MMSOC will leverage demonstrated RDT&E experience to expand the capabilities and proven technologies currently in use by other RDSMO facilities. MMSOC will also support all RDSMO-sustained space vehicles through existing resources. In addition, it will add the capability to rapidly support operational counterspace systems (such as Near-field Infrared Experiment (NFIRE), Interim Satellite as a Sensor (ISAS), and Rapid Attack Identification Detection and Reporting System (RAIDRS)).

The RDSMO Program Element also contains O&M and OPAF funds. RDSMO develops and acquires systems to: operate experimental and demonstration 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 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 which operates R&D satellites; (2) the Center for Research Support (CERES) at Schriever AFB, CO which operates residual satellites and serves as a test bed; (3) the Camp Parks Communication Annex at Dublin, CA which provides multi-band Telemetry Tracking and Commanding (TT&C), calibration and on-orbit testing; (4) the Test, Operations, and Programs at Kirtland AFB which is the focal point for tests, plans, programs, and policy and (5) the deployable test systems, based at Kirtland AFB, NM which deploys mobile antennas worldwide to support space RDT&E activities.

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

(U) **B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Multi-Mission Satellite Operations Center (MMSOC) development/integration	0.000	0.000	4.675
(U) Total Cost	0.000	0.000	4.675

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Evaluation Center

PROJECT NUMBER AND TITLE

A014 R&D Space and Missile
Operations(U) **C. Other Program Funding Summary (\$ in Millions)**

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) OPAF, Electronics & Telecom Equipment (BA 03, PE 0305173F, P-48)	0.251	0.236	7.077	7.668	10.035	3.495	3.550	Continuing	TBD

(U) **D. Acquisition Strategy**

The AF uses the competitively-awarded Engineering, Development, and Sustainment (EDS) Contract, managed by Space and Missile System Center, Detachment 12, to modernize and sustain RDSMO on a non-interference basis as it continues to support RDT&E and other designated users. The AF will use the competitively-awarded EDS Follow-on Contract to develop MMSOC.

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Exhibit R-3, RDT&E Project Cost Analysis

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PROJECT NUMBER AND TITLE

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(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract</u> <u>Method &</u> <u>Type</u>	<u>Performing</u> <u>Activity &</u> <u>Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2005</u> <u>Cost</u>	<u>FY 2005</u> <u>Cost</u>	<u>FY 2005</u> <u>Award</u> <u>Date</u>	<u>FY 2006</u> <u>Cost</u>	<u>FY 2006</u> <u>Award</u> <u>Date</u>	<u>FY 2007</u> <u>Cost</u>	<u>FY 2007</u> <u>Award</u> <u>Date</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>	<u>Target Value</u> <u>of Contract</u>
(U) <u>Product Development</u>												
Engineering, Development, and Sustainment (EDS)	C/CPAF	TBD	0.000	0.000		0.000		4.000	Dec-06	Continuing	TBD	TBD
Follow-on Contract												
Subtotal Product Development			0.000	0.000		0.000		4.000		Continuing	TBD	TBD
Remarks:												
(U) <u>Support</u>												
Program Support (SETA, SPO ops)	Various	Various	0.000	0.000		0.000		0.675		Continuing	TBD	TBD
Subtotal Support			0.000	0.000		0.000		0.675		Continuing	TBD	TBD
Remarks:												
(U) Total Cost			0.000	0.000		0.000		4.675		Continuing	TBD	TBD

Exhibit R-4, RDT&E Schedule Profile

DATE

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BUDGET ACTIVITY

07 Operational System Development

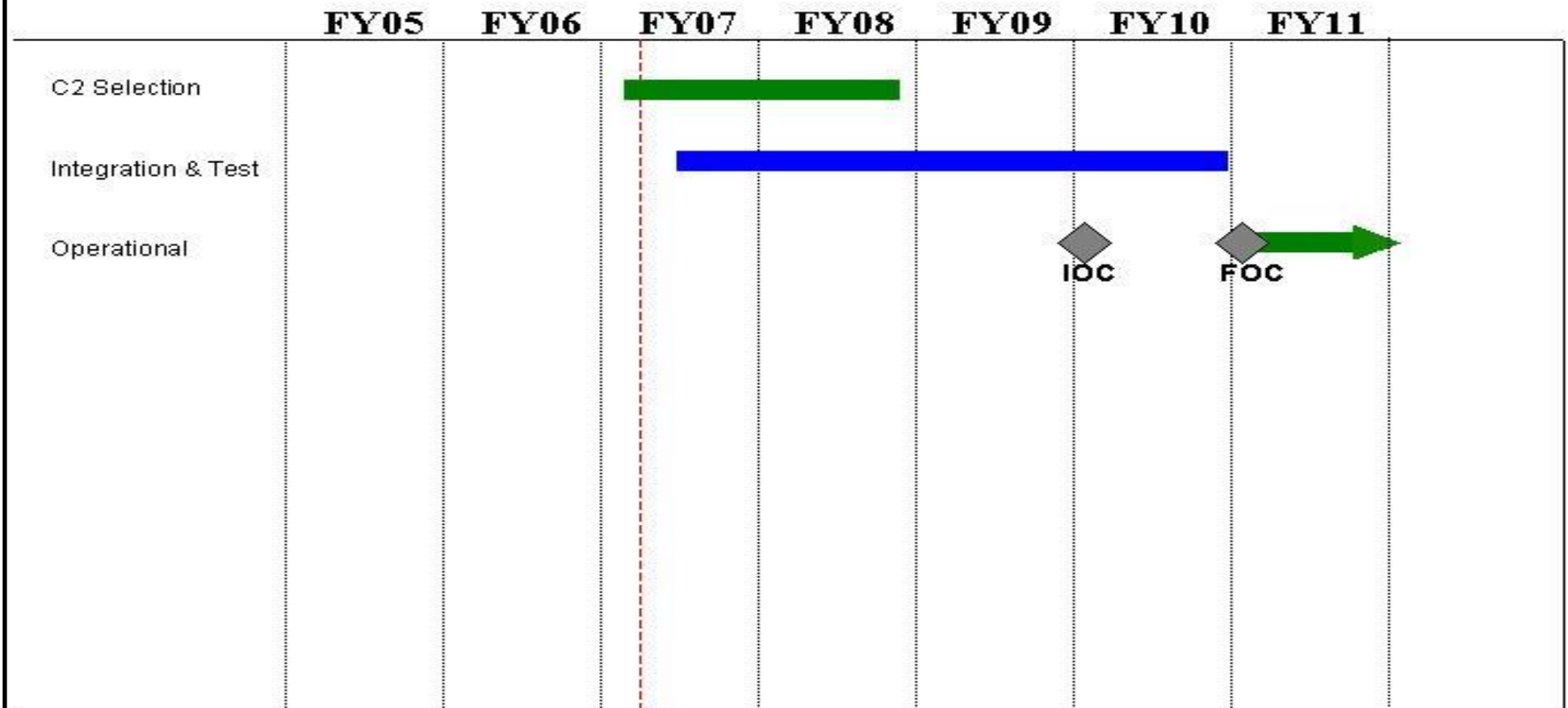
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Operations

MMSOC Schedule



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Exhibit R-4a, RDT&E Schedule Detail

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PROJECT NUMBER AND TITLE

A014 R&D Space and Missile
Operations(U) Schedule ProfileFY 2005FY 2006FY 2007

(U) Begin MMSOC Design

1Q

(U) MMSOC Command and Control System Selection

2Q

(U) Begin MMSOC Integration

3Q