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 0303601F: MILSATCOM Terminals

BA 7: Operational Systems Development

All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
1,841.726	235.769	107.237	140.170	-	140.170	55.897	3.979	0.000	0.000	Continuing	Continuing
1,841.726	193.769	107.237	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
0.000	42.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
0.000	0.000	0.000	140.170	-	140.170	55.897	3.979	0.000	0.000	Continuing	Continuing
	Years 1,841.726 1,841.726 0.000	Years         FY 2012           1,841.726         235.769           1,841.726         193.769           0.000         42.000	Years         FY 2012         FY 2013#           1,841.726         235.769         107.237           1,841.726         193.769         107.237           0.000         42.000         0.000	Years         FY 2012         FY 2013#         Base           1,841.726         235.769         107.237         140.170           1,841.726         193.769         107.237         0.000           0.000         42.000         0.000         0.000	Years         FY 2012         FY 2013#         Base         OCO ##           1,841.726         235.769         107.237         140.170         -           1,841.726         193.769         107.237         0.000         -           0.000         42.000         0.000         0.000         -	Years         FY 2012         FY 2013#         Base         OCO ##         Total           1,841.726         235.769         107.237         140.170         -         140.170           1,841.726         193.769         107.237         0.000         -         0.000           0.000         42.000         0.000         0.000         -         0.000	Years         FY 2012         FY 2013*         Base         OCO ***         Total         FY 2015           1,841.726         235.769         107.237         140.170         -         140.170         55.897           1,841.726         193.769         107.237         0.000         -         0.000         0.000           0.000         42.000         0.000         0.000         -         0.000         0.000	Years         FY 2012         FY 2013#         Base         OCO ##         Total         FY 2015         FY 2016           1,841.726         235.769         107.237         140.170         -         140.170         55.897         3.979           1,841.726         193.769         107.237         0.000         -         0.000         0.000         0.000           0.000         42.000         0.000         0.000         -         0.000         0.000         0.000	Years         FY 2012         FY 2013#         Base         OCO ##         Total         FY 2015         FY 2016         FY 2017           1,841.726         235.769         107.237         140.170         -         140.170         55.897         3.979         0.000           1,841.726         193.769         107.237         0.000         -         0.000         0.000         0.000         0.000           0.000         42.000         0.000         0.000         -         0.000         0.000         0.000         0.000	Years         FY 2012         FY 2013#         Base         OCO ##         Total         FY 2015         FY 2016         FY 2017         FY 2018           1,841.726         235.769         107.237         140.170         -         140.170         55.897         3.979         0.000         0.000           1,841.726         193.769         107.237         0.000         -         0.000         0.000         0.000         0.000         0.000           0.000         42.000         0.000         0.000         -         0.000         0.000         0.000         0.000         0.000	Years         FY 2012         FY 2013#         Base         OCO ##         Total         FY 2015         FY 2016         FY 2017         FY 2018         Complete           1,841.726         235.769         107.237         140.170         -         140.170         55.897         3.979         0.000         0.000         Continuing           1,841.726         193.769         107.237         0.000         -         0.000         0.000         0.000         0.000         0.000         Continuing           0.000         42.000         0.000         0.000         -         0.000         0.000         0.000         0.000         Continuing

MDAP/MAIS Code(s): 199

#### Note

Air Force

FY12 Congressional Add funding of \$42M for FAB-T Alternative is executed from project 672489 within this program element. FY13 funding for FAB-T continues in project 672487 within this program element. FY14 funding for FAB-T continues in project 672490 within this program element.

# A. Mission Description and Budget Item Justification

The Military Satellite Communications (MILSATCOM) terminals program develops and fields equipment enabling users to communicate via legacy and future systems to include Milstar, Advanced Extremely High Frequency (AEHF), Ultra High Frequency (UHF) Follow-On (UFO), Wideband Global SATCOM (WGS), Defense Satellite Communication System (DSCS), Enhanced Polar Systems (EPS), and other military and commercial satellites, to support tactical Air and Space Expeditionary Force requirements and maintain essential connectivity for strategic forces. Program RDT&E currently includes the following program efforts:

- 1) Concept development work to identify commercial/military technology solutions to improve MILSATCOM terminal capabilities for the warfighters. Focus includes, but is not limited to, increasing throughput, facilitating sustainability, reducing footprint on existing user platform and future concept terminals to provide more resilient and/ or higher data rate satellite communications to warfighters.
- 2) The Family of Advanced Beyond Line-of-Sight Terminals (FAB-T) program replaces legacy Milstar terminals and will provide Extremely High Frequency (EHF), protected high data rate communication for nuclear and conventional forces to include Presidential National Voice Conferencing (PNVC). FAB-T will provide this new, highly secure, state-of-the-art capability to strategic and tactical airborne and ground command posts via Milstar, AEHF, and Enhanced Polar System (EPS) satellites. FAB-T terminals will also support the critical command and control (C2) of the Milstar, AEHF, and EPS satellite constellations. In FY14, the Air Force will continue development of the FAB-T terminal.
- 3) The Joint Terminal Engineering Office (JTEO) provides tri-service coordination of terminal development, acquisition and fielding activities.

PE 0303601F: MILSATCOM Terminals

<sup>&</sup>lt;sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>\*\*\*</sup> The FY 2014 OCO Request will be submitted at a later date

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 0303601F: MILSATCOM Terminals

BA 7: Operational Systems Development

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	236.581	107.237	157.787	-	157.787
Current President's Budget	235.769	107.237	140.170	-	140.170
Total Adjustments	-0.812	0.000	-17.617	-	-17.617
<ul> <li>Congressional General Reductions</li> </ul>	-	0.000			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	0.000			
<ul> <li>Congressional Rescissions</li> </ul>	0.000	0.000			
<ul> <li>Congressional Adds</li> </ul>	-	0.000			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	0.000			
<ul> <li>Reprogrammings</li> </ul>	0.000	0.000			
SBIR/STTR Transfer	0.000	0.000			
Other Adjustments	-0.812	0.000	-17.617	-	-17.617

# **Change Summary Explanation**

FY14 Other Adjustments: -\$17.617M for higher department priorities

PE 0303601F: MILSATCOM Terminals
Air Force

DATE: April 2013

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

APPROPRIATION/BUDGET ACTIVITY

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

BA 7: Operational Systems Development

DATE: April 2013

R-1 ITEM NOMENCLATURE
PE 0303601F: MILSATCOM Terminals
672487: MILSATCOM Terminals

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
672487: MILSATCOM Terminals	1,841.726	193.769	107.237	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

<sup>\*</sup>FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

## A. Mission Description and Budget Item Justification

The Military Satellite Communications (MILSATCOM) terminals program develops and fields equipment enabling users to communicate via legacy and future systems to include Milstar, Advanced Extremely High Frequency (AEHF), Ultra High Frequency (UHF) Follow-On (UFO), Wideband Global SATCOM (WGS), Defense Satellite Communication System (DSCS), Enhanced Polar Systems (EPS), and other military and commercial satellites, to support tactical Air and Space Expeditionary Force requirements and maintain essential connectivity for strategic forces. Program RDT&E currently includes the following program efforts:

- 1) Concept development work to identify commercial/military technology solutions to improve MILSATCOM terminal capabilities for the warfighters. Focus includes, but is not limited to, increasing throughput, facilitating sustainability, reducing footprint on existing user platform and future concept terminals to provide more resilient and/or higher data rate satellite communications to warfighters.
- 2) The Family of Advanced Beyond Line-of-Sight Terminals (FAB-T) program replaces legacy Milstar terminals and will provide Extremely High Frequency (EHF), protected high data rate communication for nuclear and conventional forces to include Presidential National Voice Conferencing (PNVC). FAB-T will provide this new, highly secure, state-of-the-art capability to strategic and tactical airborne and ground command posts via Milstar, AEHF, and Enhanced Polar System (EPS) satellites. FAB-T terminals will also support the critical command and control (C2) of the Milstar, AEHF, and EPS satellite constellations. In FY14, the Air Force will continue development of the FAB-T terminal.
- 3) The Joint Terminal Engineering Office (JTEO) provides tri-service coordination of terminal development, acquisition and fielding activities.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Title: FAB-T Boeing Development	184.616	79.723	0.000
Description: Develop FAB-T command post and airborne wideband terminals.			
FY 2012 Accomplishments: Continued software development, integration and testing for the FAB-T terminals and converted Boeing development contract to Firm Fixed-Price			
FY 2013 Plans:			

PE 0303601F: MILSATCOM Terminals

Air Force

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<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

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

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force
BA 7: Operational Systems Development

DATE: April 2013

R-1 ITEM NOMENCLATURE
PE 0303601F: MILSATCOM Terminals
672487: MILSATCOM Terminals

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Continue software development; will begin Flight Testing and Functional Qualificational Testing for FAB-T.			
Title: FAB-T Raytheon Development	0.000	18.000	0.000
Description: Develop FAB-T command post terminals.			
FY 2013 Plans:			
Raytheon will continue development and accomplish Preliminary and Critical Design Review			
Title: MILSATCOM Terminals	9.153	9.514	0.000
<b>Description:</b> Conduct concept development, prototype demonstrations and maintain the MILSATCOM Terminal roadmap. Support the JTEO.			
FY 2012 Accomplishments:  1. Continued concept development/prototype demonstrations/MILSATCOM terminal roadmap.  2. Continued support for the JTEO.			
<ul> <li>FY 2013 Plans:</li> <li>1. Continue concept development/prototype demonstrations/MILSATCOM terminal roadmap.</li> <li>2. Continue support for the JTEO. Continue program support and other related activities</li> </ul>			
Accomplishments/Planned Programs Subtotals	193.769	107.237	0.000

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

		•	FY 2014	FY 2014	FY 2014					<b>Cost To</b>	
<u>Line Item</u>	FY 2012	FY 2013	<b>Base</b>	OCO	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	<b>Complete</b>	<b>Total Cost</b>
<ul> <li>APAF: BA05, OTHACF: Other</li> </ul>	3.791	4.580	1.920		1.920	37.939	27.773	12.904	13.136	Continuing	Continuing
Aircraft											
• OPAF: BA03, 836780:	36.229	47.333	105.674		105.674	108.005	259.947	239.457	243.875	Continuing	Continuing
MILSATCOM Space											
<ul> <li>OPAF: BA05, 86190A: Spares</li> </ul>	0.000	0.000	0.000		0.000	12.220	45.820	48.880	49.760	Continuing	Continuing
and Repair Parts											

# Remarks

NOTE: Related RDT&E costs for MILSATCOM satellite systems to which terminal development is linked can be found in RDT&E Budget Item Justification Sheets.

OPAF funds in FY14-18 shown here are for all MILSATCOM Terminals to include FAB-T.

PE 0303601F: MILSATCOM Terminals
Air Force

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DATE: April 2013 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 0303601F: MILSATCOM Terminals 672487: MILSATCOM Terminals

BA 7: Operational Systems Development

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

FY 2014 FY 2014 FY 2014 Cost To Line Item FY 2013 OCO FY 2016 FY 2012 Base

FY 2018 Complete Total Cost Total FY 2015 FY 2017

The APAF BA05 (OTHACF) line includes spares funding from BP16

#### D. Acquisition Strategy

In FY12, the FAB-T program restructured to introduce competition into the acquisition strategy in order to reduce risk in delivering this capability as well as to drive down production costs. To ensure the best value to the government, the Air Force will award a production readiness planning contract to both contractors (Boeing and Raytheon) in the 3Q of FY13. The Air Force will then downselect and award a production contract to one vendor in 1Q FY14.

#### 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 0303601F: MILSATCOM Terminals

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

APPROPRIATION/BUDGET ACTIVITY

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

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0303601F: MILSATCOM Terminals

**PROJECT** 

672487: MILSATCOM Terminals

DATE: April 2013

Product Developme	nt (\$ in M	illions)		FY 2	2012	FY 2	2013	FY 2 Ba			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
FAB-T Development (Boeing)	C/FFP	Boeing Corp:Huntington Beach, CA	1,654.536	152.671	Apr 2012	57.624	Oct 2012	0.000		-		0.000	0.000	1,864.831	
FAB-T Development (Raytheon)	C/FFP	Raytheon:Marlborough	<sup>1,</sup> 0.000	0.000		18.000	Dec 2012	0.000		-		0.000	0.000	18.000	
FAB-T INC 2	C/CPFF	Boeing/ Northrop:Seattle/ Melbourne, WA	54.206	0.000		0.000		0.000		-		0.000	0.000	54.206	
(1) High Data Rate (HDR) RF Ground Terminal Development	C/FFP	Comtech:Tempe, AZ	5.993	0.000		0.000		0.000		-		0.000	0.000	5.993	
(2) High Data Rate (HDR) RF Ground Terminal Development	C/FFP	Raytheon:Marlborougl MA	<sup>1,</sup> 6.365	0.000		0.000		0.000		-		0.000	0.000	6.365	
(3) High Data Rate (HDR) RF Ground Terminals Development	C/FFP	L3 Comm:Hauppauge, NY	1.767	0.000		0.000		0.000		-		0.000	0.000	1.767	
(4) High Data Rate (HDR) RF Ground Terminals Development	SS/CPFF	MITRE:Bedford, MA	3.305	0.000		0.000		0.000		-		0.000	0.000	3.305	
High Data Rate (HDR) RF Air Terminal Development (merged with FAB-T beginning in FY06)	C/CPAF	Boeing Corp:Huntington Beach, CA	13.787	0.000		0.000		0.000		-		0.000	0.000	13.787	
Lasercom Terminal Development Studies	C/CPFF	Northrop-Raytheon- MITRE-MIT/ LL:Various,	30.395	0.000		0.000		0.000		-		0.000	0.000	30.395	
Global Broadcast Service (GBS)	C/CPFF	Booz Allen- Windmill:McLeans, VA	3.882	0.000		0.000		0.000		-		0.000	0.000	3.882	
(1) High Data Rate Airborne Terminal (HDRAT) AFSPC AoA	C/FP	LinQuest:Colorado Springs, CO	2.000	0.000		0.000		0.000		-		0.000	0.000	2.000	

PE 0303601F: MILSATCOM Terminals
Air Force

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

R-1 ITEM NOMENCLATURE

**PROJECT** 

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

APPROPRIATION/BUDGET ACTIVITY

BA 7: Operational Systems Development

PE 0303601F: MILSATCOM Terminals

672487: MILSATCOM Terminals

DATE: April 2013

Product Developme	nt (\$ in Mi	llions)		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
(2) High Data Rate Airborne Terminal (HDRAT) Development	SS/CPFF	MITRE:Bedford, MA	5.421	0.000		0.000		0.000		-		0.000	0.000	5.421	
Teminals Development MIT Lincoln Lab	SS/CPFF	MIT/LL:Bedford, MA	7.100	0.000		0.000		0.000		-		0.000	0.000	7.100	
JTEO Development	C/CPFF	Booz Allen Hamilton:McLeans, VA	5.716	4.443	Dec 2011	4.569	Dec 2012	0.000		-		0.000	0.000	14.728	
	Subtotal 1,794					80.193		0.000		0.000		0.000	0.000	2,031.780	

#### Remarks

FY12 funding of \$42M for FAB-T Alternate Source will be executed from project 672489 within this program element.

Support (\$ in Millior	ıs)			FY 2	2012	FY 2	2013		2014 ise	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 Complete	Total Cost	Target Value of Contract
MILSATCOM Terminals System Integration	Various	Various:Various,	14.592	13.704	Jan 2012	5.520	Dec 2012	0.000		-		0.000	0.000	33.816	
	*	Subtotal	14.592	13.704		5.520		0.000		0.000		0.000	0.000	33.816	

Test and Evaluation	(\$ in Milli	ons)		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 Complete	Total Cost	Target Value of Contract
MILSATCOM Terminals T&E	Various	AF Research Lab, AFOTEC, Various:,	14.237	10.017	Jan 2012	8.202	Dec 2012	0.000		-		0.000	0.000	32.456	
		Subtotal	14.237	10.017		8.202		0.000		0.000		0.000	0.000	32.456	

PE 0303601F: MILSATCOM Terminals

Air Force

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

R-1 ITEM NOMENCLATURE

DATE: April 2013 **PROJECT** 

APPROPRIATION/BUDGET ACTIVITY

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

PE 0303601F: MILSATCOM Terminals

672487: MILSATCOM Terminals

BA 7: Operational Systems Development

Management Servic	es (\$ in M	lillions)		FY	2012	FY:	2013	FY 2 Ba	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	Total Cost	Target Value of Contract
Systems Engineering Support	SS/CPAF	MITRE:Bedford, MA	11.416	9.024	Dec 2011	9.295	Dec 2012	0.000		-		0.000	0.000	29.735	
ETASS (Engineering & Technology Acq Spt Services), (PMA)	C/CPFF	Jacobs:Lincoln, MA	3.402	1.661	Dec 2011	1.711	Dec 2012	0.000		-		0.000	0.000	6.774	
PASS (Professional Acq Spt Services), (PMA)	C/CPAF	Oasis:Lexington, MA	3.606	2.249	Dec 2011	2.316	Dec 2012	0.000		-		0.000	0.000	8.171	
		Subtotal	18.424	12.934		13.322		0.000		0.000		0.000	0.000	44.680	
			All Prior Years	FY:	2012	FY:	2013	FY 2 Ba	2014 ise		2014 CO	FY 2014 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	1,841.726	193.769		107.237		0.000		0.000		0.000	0.000	2,142.732	

Remarks

PE 0303601F: MILSATCOM Terminals

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

R-1 ITEM NOMENCLATURE

PROJECT

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

APPROPRIATION/BUDGET ACTIVITY

BA 7: Operational Systems Development

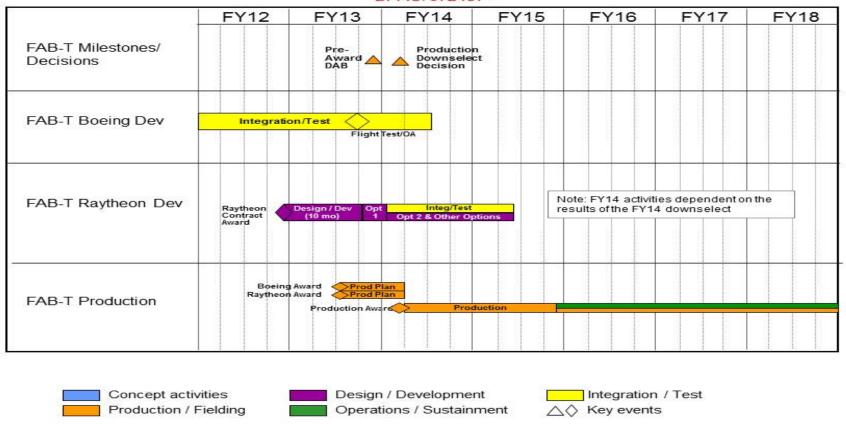
PE 0303601F: MILSATCOM Terminals

672487: MILSATCOM Terminals

DATE: April 2013

# MILSATCOM Terminals Schedule Rdoc

BPAC: 672487



PE 0303601F: MILSATCOM Terminals
Air Force

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

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

AFFROFRIATION/BUDGET ACTIVITY R-TITEM NOMENCEATURE PROJECT

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

PE 0303601F: MILSATCOM Terminals

672487: MILSATCOM Terminals

# Schedule Details

	St	art	E	nd
Events	Quarter	Year	Quarter	Year
FAB-T Raytheon Development Contract	4	2012	2	2015
FAB-T Pre-Award Defense Acquisition Board (DAB)	4	2013	4	2013
Boeing and Raytheon Production Planning Contract	3	2013	1	2014
FAB-T Production Downselect Decision	1	2014	1	2014
FAB-T Production Contract	1	2014	4	2018

PE 0303601F: MILSATCOM Terminals
Air Force

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

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

3600: Research, Development, Test & Evaluation, Air Force PE 0303601F: MILSATCOM Terminals 672489: FAB-T Alternative

BA 7: Operational Systems Development

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
672489: FAB-T Alternative	0.000	42.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

<sup>\*</sup>FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

# A. Mission Description and Budget Item Justification

The Family of Advanced Beyond Line-of-Sight Terminals (FAB-T) program replaces legacy Milstar terminals and will provide Extremely High Frequency (EHF), protected high data rate communication for nuclear and conventional forces to include Presidential National Voice Conferencing (PNVC). FAB-T will provide this new, highly secure, state-of-the-art capability to strategic and tactical airborne and ground command posts via Milstar, AEHF, and Enhanced Polar System (EPS) satellites. FAB-T terminals will also support the critical command and control (C2) of the Milstar, AEHF, and EPS satellite constellations. In FY14, the Air Force will continue development of the FAB-T terminal

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Title: FAB-T Raytheon Development	42.000	0.000	0.000
Description: Develop FAB-T command post terminals.			
FY 2012 Accomplishments: Congressional add for alternate source (Raytheon) to bring competition to the FAB-T program.			
Accomplishments/Planned Programs Subtotals	42.000	0.000	0.000

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

N/A

#### Remarks

Air Force

# **D. Acquisition Strategy**

In FY12, the FAB-T program restructured to introduce competition into the acquisition strategy in order to reduce risk in delivering this capability as well as to drive down production costs. To ensure the best value to the government, the Air Force will award a production readiness planning contract to both contractors (Boeing and Raytheon) in the 3Q of FY13. The Air Force will then downselect and award a production contract to one vendor in 1Q FY14.

#### **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 0303601F: MILSATCOM Terminals

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<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

DATE: April 2013 Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force **R-1 ITEM NOMENCLATURE** APPROPRIATION/BUDGET ACTIVITY **PROJECT** 3600: Research, Development, Test & Evaluation, Air Force PE 0303601F: MILSATCOM Terminals 672489: FAB-T Alternative BA 7: Operational Systems Development FY 2014 FY 2014 FY 2014 **Product Development (\$ in Millions)** oco FY 2012 FY 2013 Base Total Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type **Activity & Location** Years Cost Date Cost Date Cost Date Cost Date Complete Cost Contract Cost FAB-T Ravtheon Raytheon:Marlborough. C/FFP 0.000 42.000 Sep 2012 0.000 0.000 0.000 0.000 42.000 0.000 Development MA Subtotal 0.000 42.000 0.000 0.000 0.000 0.000 0.000 42.000 0.000 FY 2014 FY 2014 FY 2014 Support (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target Award Method Performing All Prior Award Award Award **Cost To** Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract Subtotal 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 FY 2014 FY 2014 FY 2014 Test and Evaluation (\$ in Millions) FY 2012 FY 2013 oco Total Base Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of **Activity & Location** Cost Cost Complete Contract **Cost Category Item** & Type Years Date Cost Date Cost Date Cost Date Cost Subtotal 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 FY 2014 FY 2014 FY 2014 Management Services (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target Cost To Method Performing All Prior Award Award Award Award Total Value of **Activity & Location Cost Category Item** & Type Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract Subtotal 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 Target All Prior FY 2014 FY 2014 FY 2014 **Cost To** Value of **Total** Years FY 2012 FY 2013 Base oco Total Complete Cost Contract 0.000 42.000 0.000 0.000 0.000 0.000 **Project Cost Totals** 0.000 42.000 0.000

Remarks

Air Force

PE 0303601F: MILSATCOM Terminals

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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 7: Operational Systems Development

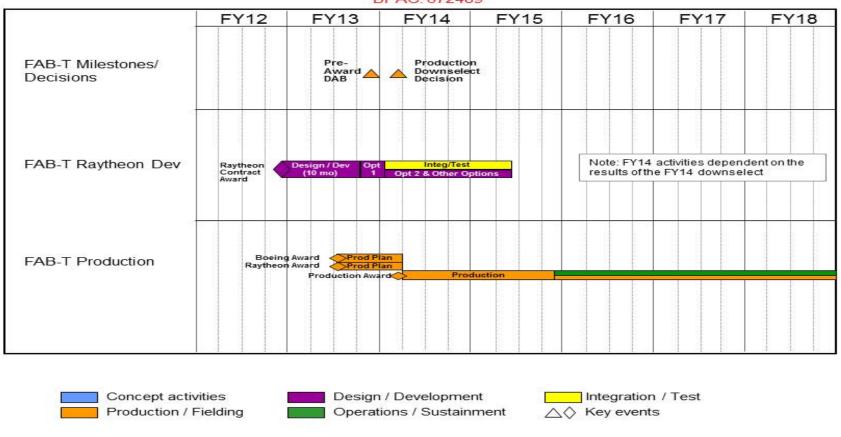
PE 0303601F: MILSATCOM Terminals

672489: FAB-T Alternative

DATE: April 2013

# MILSATCOM Terminals Schedule Rdoc

BPAC: 672489



PE 0303601F: MILSATCOM Terminals Air Force

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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 0303601F: MILSATCOM Terminals 672489: FAB-T Alternative

BA 7: Operational Systems Development

# Schedule Details

	St	art	E	nd
Events	Quarter	Year	Quarter	Year
FAB-T Raytheon Development Contract	4	2012	2	2015
FAB-T Pre-Award DAB	4	2013	4	2013
Boeing and Raytheon Production Planning Contract	3	2013	4	2014
FAB-T Production Downselect Decision	1	2014	1	2014
FAB-T Production Contract	1	2014	4	2018

PE 0303601F: MILSATCOM Terminals

Exhibit R-2A, RDT&E Project Ju	ustification:	PB 2014 A	Air Force							<b>DATE:</b> Apr	il 2013	
APPROPRIATION/BUDGET ACT 3600: Research, Development, To BA 7: Operational Systems Development	est & Evalua	ition, Air Fo	orce			NOMENCLA D1F: MILSA		ninals	PROJECT 672490: Fa of-Sight Te	amily of Adv	vanced Beyo B-T)	ond Line-
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
672490: Family of Advanced Beyond Line-of-Sight Terminals (FAB-T)	0.000	0.000	0.000	140.170	-	140.170	55.897	3.979	0.000	0.000	Continuing	Continuing
Quantity of RDT&F Articles		0	0	0		0	0	0	0	0		

<sup>\*</sup>FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

#### **Note**

This project was funded prior to FY14 in project 672487 and 672489 within this program.

#### A. Mission Description and Budget Item Justification

The Family of Advanced Beyond Line-of-Sight Terminals (FAB-T) program replaces legacy Milstar terminals and will provide Extremely High Frequency (EHF), protected high data rate communication for nuclear and conventional forces to include Presidential National Voice Conferencing (PNVC). FAB-T will provide this new, highly secure, state-of-the-art capability to strategic and tactical airborne and ground command posts via Milstar, AEHF, and Enhanced Polar System (EPS) satellites. FAB-T terminals will also support the critical command and control (C2) of the Milstar, AEHF, and EPS satellite constellations. In FY14, the Air Force will continue development of the FAB-T terminal

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Title: FAB-T Development	0.000	0.000	140.170
<b>Description:</b> The FAB-T program will provide EHF voice and data MILSATCOM for nuclear and conventional forces as well as airborne and ground command posts with connectivity to Milstar, AEHF, and EPS satellites. <b>FY 2014 Plans:</b>			
Continue development of FAB-T Terminal.			
Accomplishments/Planned Programs Subtotals	0.000	0.000	140.170

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

			FY 2014	FY 2014	FY 2014					Cost To	
<u>Line Item</u>	FY 2012	FY 2013	<b>Base</b>	000	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	<b>Total Cost</b>
• APAF: BA05, OTHACF: Other	0.000	0.000	1.920		1.920	37.939	27.773	12.904	13.136	0.000	0.000

Aircraft

PE 0303601F: MILSATCOM Terminals
Air Force

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<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Air Force			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	<b>PROJECT</b>	
3600: Research, Development, Test & Evaluation, Air Force	PE 0303601F: MILSATCOM Terminals	672490: <i>Fa</i>	amily of Advanced Beyond Line-
BA 7: Operational Systems Development		of-Sight Te	erminals (FAB-T)

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

		<del></del>	FY 2014	FY 2014	FY 2014					<b>Cost To</b>	
Line Item	FY 2012	FY 2013	Base	<u>000</u>	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	<b>Total Cost</b>
• OPAF: BA03, 836780:	0.000	0.000	73.000		73.000	69.865	226.013	205.000	208.910	0.000	0.000
MILSATCOM Space											
• OPAF: BA05, 86190A: Spares	0.000	0.000	0.000		0.000	12.220	45.820	48.880	49.760	0.000	156.680
and Repair Parts											

#### Remarks

Other program funding listed in FY14-18 is only for the FAB-T program

The APAF BA05 (OTHACF) line includes spares funding from BP16

#### D. Acquisition Strategy

In FY12, the FAB-T program restructured to introduce competition into the acquisition strategy in order to reduce risk in delivering this capability as well as to drive down production costs. To ensure the best value to the government, the Air Force will award a production readiness planning contract to both contractors (Boeing and Raytheon) in the 3Q of FY13. The Air Force will then downselect and award a production contract to one vendor in 1Q FY14.

#### **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 0303601F: MILSATCOM Terminals
Air Force

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DATE: April 2013 Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 3600: Research, Development, Test & Evaluation, Air Force PE 0303601F: MILSATCOM Terminals 672490: Family of Advanced Beyond Lineof-Sight Terminals (FAB-T) BA 7: Operational Systems Development FY 2014 FY 2014 FY 2014 **Product Development (\$ in Millions)** oco FY 2012 FY 2013 Base Total Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Date Cost Date Cost Date Complete Contract Cost Cost Cost **FAB-T** Development C/FFP TBD:TBD 0.000 0.000 0.000 116.511 Jan 2014 116 511 59.876 176.387 Subtotal 0.000 0.000 0.000 116.511 0.000 116.511 59.876 176.387 FY 2014 FY 2014 FY 2014 Support (\$ in Millions) oco Total FY 2012 FY 2013 Base Contract Target Method Performing All Prior Value of Award Award Award Award Cost To Total **Cost Category Item** & Type **Activity & Location** Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract MITRE DMS SS/CPAF MITRE:Bedford, MA 0.000 0.000 0.000 4.774 Jan 2014 4.774 0.000 4.774 0.000 0.000 1.391 1.391 Crypto Support MIPR NSA:TBD. MD 0.000 1.391 Jan 2014 0.000 0.000 Subtotal 0.000 0.000 6.165 0.000 6.165 0.000 6.165 FY 2014 FY 2014 FY 2014 Test and Evaluation (\$ in Millions) oco FY 2012 FY 2013 Base Total Contract Target Method All Prior **Cost To** Value of Performing Award Award Award Award Total Activity & Location Cost **Cost Category Item** & Type Years Date Cost Date Cost Date Cost Date Cost Complete Cost Contract Government Test & RTO TBD TBD:TBD. 0.000 0.000 0.000 1.550 Jan 2014 1.550 0.000 1.550 Support **Developmental Test** SS/CPAF MIT/LL:Bedford, MA 0.000 0.000 0.000 7.500 Jan 2014 7.500 0.000 7.500 Support 0.000 0.000 0.000 9.050 0.000 9.050 0.000 9.050 Subtotal FY 2014 FY 2014 FY 2014 Management Services (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target Method All Prior Cost To Performing Award Award Award Award Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract Systems Engineering SS/CPAF MITRE:Bedford, MA 0.000 0.000 0.000 2.387 Jan 2014 2.387 0.000 2.387 Support ETASS (Engineering & Technology Acq Spt C/CPFF Jacobs:Lincoln, MA 0.000 0.000 0.000 1.596 Jan 2014 1.596 0.000 1.596

PE 0303601F: MILSATCOM Terminals

Services) (PMA)

Air Force

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

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development

PE 0303601F: MILSATCOM Terminals

672490: Family of Advanced Beyond Line-

of-Sight Terminals (FAB-T)

Management Service	s (\$ in M	illions)		FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise	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 Complete	Total Cost	Target Value of Contract
PASS (Professional Acq Spt Services) (PMA)	C/CPAF	Oasis:Lexington, MA	0.000	0.000		0.000		1.914	Jan 2014	-		1.914	0.000	1.914	
SCS (Specialized Cost Services) (PMA)	C/CPAF	Tecolote:Bedford, MA	0.000	0.000		0.000		0.347	Jan 2014	-		0.347	0.000	0.347	
SPO Cost & Indirect (PMA)	TBD	Not specified.:,	0.000	0.000		0.000		2.200	Jan 2014	-		2.200	0.000	2.200	
		Subtotal	0.000	0.000		0.000		8.444		0.000		8.444	0.000	8.444	
												1			

	All Prior Years	FY 2	2012	FY 2	013	FY 2 Ba	-	2014 FY 20 DCO Tota			Target Value of Contract
Project Cost Totals	0.000	0.000		0.000		140.170	0.00	0 140.	70 59.87	6 200.046	

Remarks

PE 0303601F: MILSATCOM Terminals

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

R-1 ITEM NOMENCLATURE

PROJECT

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

APPROPRIATION/BUDGET ACTIVITY

BA 7: Operational Systems Development

PE 0303601F: MILSATCOM Terminals

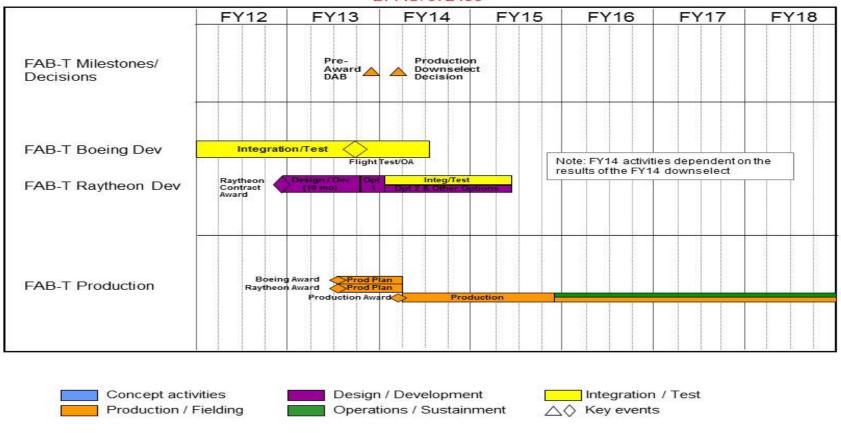
672490: Family of Advanced Beyond Line-

DATE: April 2013

of-Sight Terminals (FAB-T)

# MILSATCOM Terminals Schedule Rdoc

BPAC: 672490



PE 0303601F: MILSATCOM Terminals
Air Force

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

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force
BA 7: Operational Systems Development

BA 7: Operational Systems Development

DATE: April 2013

R-1 ITEM NOMENCLATURE
PE 0303601F: MILSATCOM Terminals
672490: Family of Advanced Beyond Line-of-Sight Terminals (FAB-T)

# Schedule Details

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Air Force

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