Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force

Date: February 2015

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

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

PE 0207581F I Joint Surveillance/Target Attack Radar System (JSTARS)

Operational Systems Development

COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	-	27.308	-	-	-	-	-	-	-	-	-	27.308
670003: <i>JSTARS</i>	-	27.308	-	-	-	-	-	-	-	-	-	27.308
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2015, Project 670003, JSTARS efforts were terminated.

A. Mission Description and Budget Item Justification

The JSTARS is the world's premier airborne ground surveillance platform, meeting joint combat capability requirements. The 707-based E-8C JSTARS aircraft provides all-weather radar-derived Command and Control, Intelligence, Surveillance, and Reconnaissance (C2ISR) and targeting information on moving and stationary ground/surface targets to include dismounts, slow moving rotary and fixed wing aircraft, and rotating antennas. JSTARS provides target information for matching direct attack aircraft, standoff weapons, and ground-based attack assets against selected targets. It can be cued by other intelligence, surveillance, and reconnaissance (ISR) and target acquisition systems. This capability enables air and ground regional/geographic commanders to effectively make and execute battlefield decisions at the component commander's level to battlefield forces. It contributes to predictive battle space awareness.

This program element enhanced the warfighter's ability to achieve the joint vision of combat operations. It developed advanced battle management aids and information fusion technologies to enable rapid decisions in tracking and killing time-critical targets. Concept exploration, program definition/risk reduction efforts, and studies supported continuous improvements in C2ISR, network centric operational capabilities, and interoperability with joint service, allied, and coalition systems.

With the AF decision to begin the Joint Surveillance Target Attack Radar System (JSTARS) Recapitalization Program in FY15, and inclusion of funding for the program included in the FY15 President's Budget, no Modernization funds were requested for the legacy E-8C JSTARS program in FY 2015 and beyond.

This program element last comprised of one development program, JSTARS Modernization, and the supporting Test and Infrastructure. Development efforts for the Prime Mission Equipment-Diminishing Manufacturing Sources (PME-DMS) and Communications and Networking Upgrades (CNU) developmental programs were completed in FY 2013.

In FY14, Project 670003 JSTARS was completed, with JSTARS Extended Test Support (JETS), JSTARS Test Force (JTF) and Government Furnished Equipment (GFE) parts disposition continuing to January 2015.

L JSTARS Modernization:

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PE 0207581F: Joint Surveillance/Target Attack Radar S... Air Force

Exhibit R-2, **RDT&E Budget Item Justification**: PB 2016 Air Force

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

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

PE 0207581F I Joint Surveillance/Target Attack Radar System (JSTARS)

In FY 2014, the JSTARS modernization program consisted of multiple efforts to develop and integrate platform wide system improvements such as, but not limited to, Multi-Agency Communication Capability (MACC), CENTRIX, Ground Moving Target Indicator (GMTI) Risk Reduction and Beyond-Line-of-Sight (BLOS) Network Architecture Upgrades (BNAU).

Training and support systems upgrade efforts included, but are not limited to: Weapon Systems Trainer (WST); Navigator Training System (NTS); and Mission Crew Trainers to include a Mission Maintenance Trainer (MMT), Prime Mission Equipment-Maintenance Training Device (PME-MTD) and the Mission System Trainer (MST).

II. Test and Infrastructure:

The test infrastructure included the JSTARS Extended Test Support (JETS), JSTARS Test Force (JTF), and C2 Enterprise Integration Facility (CEIF). All JSTARS efforts rely on the components of this test infrastructure to carry out RDT&E activities. The infrastructure included a T-3 test aircraft, laboratories, support facilities, protection level (PL-2) security, Information Assurance (IA), and range support. All of the developmental programs have been completed. In FY 2014, the program began the transfer of test infrastructure assets to Robins AFB. The JETS contract and JTF lease will be extended into the second quarter FY 2015 to facilitate preparation of the T-3 aircraft for retirement and the disposition of residual Government Furnished Equipment (GFE).

This program is in Budget Activity 7, Operational System Development. This budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	23.148	-	0.001	-	0.001
Current President's Budget	27.308	-	-	-	-
Total Adjustments	4.160	-	-0.001	-	-0.001
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	4.550	-			
SBIR/STTR Transfer	-0.390	-			
Other Adjustments	-	_	-0.001	-	-0.001

Change Summary Explanation

FY 2014: Reprogrammed funds for GMTI risk reduction activities

FY 2016: Funding is an error in system.

PE 0207581F: Joint Surveillance/Target Attack Radar S...

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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force Date: February 2015 R-1 Program Element (Number/Name) Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: PE 0207581F I Joint Surveillance/Target Attack Radar System (JSTARS) Operational Systems Development C. Accomplishments/Planned Programs (\$ in Millions) **FY 2016** FY 2016 **FY 2016** FY 2014 FY 2015 **Base** oco Total Title: JSTARS Modernization 10.050 **Description:** Multiple efforts to develop and integrate system improvements, platform wide. FY 2014 Accomplishments: Issued a final report on JSRM. - Completed CENTRIX activities on Phase I Tech Refresh. Supported JSTARS Ground Moving Target Indicator (GMTI) risk reduction activities. FY 2015 Plans: N/A FY 2016 Base Plans: N/A FY 2016 OCO Plans: N/A 17.258 Title: Test and Infrastructure Description: Supported test and infrastructure efforts including but not limited to Joint Test Force, JETS contract, CEIF, weight reduction studies, information assurance, range support, PL-2 security, T-3 aircraft, test labs, and facilities. FY 2014 Accomplishments: - The Joint Test Force and test labs supported the CNU, BNAU, MACC and PME DMS retrofits. - The test labs assisted in the evaluation of the IR7 software release. Retained the T-3 test aircraft. FY 2015 Plans: N/A FY 2016 Base Plans: N/A FY 2016 OCO Plans: N/A

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Accomplishments/Planned Programs Subtotals

PE 0207581F: Joint Surveillance/Target Attack Radar S... Air Force

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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force

Date: February 2015

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

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

PE 0207581F I Joint Surveillance/Target Attack Radar System (JSTARS)

Operational Systems Development

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

			FY 2016	FY 2016	FY 2016					Cost To	
Line Item	FY 2014	FY 2015	Base	OCO	<u>Total</u>	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total Cost
 APAF: BA05: Line 	56.501	-	18.001	-	18.001	6.300	10.800	-	-	Continuing	Continuing
Item # E00800: <i>E-8</i>											

Remarks

E. Acquisition Strategy

Most major programs will be sole source to Northrop Grumman Corp. in Melbourne, Florida and Norwalk, Connecticut. Trainer programs are sole source to Rockwell Collins in Sterling, Virginia.

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 0207581F: Joint Surveillance/Target Attack Radar S... Air Force

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force

R-1 Program Element (Number/Name)

Date: February 2015

Appropriation/Budget Activity 3600 / 7

PE 0207581F I Joint Surveillance/Target Attack Radar System (JSTARS) Project (Number/Name) 670003 / JSTARS

Product Developmen	nt (\$ in M	illions)		FY 2	2014	FY 2	2015	FY 2 Ba		FY 2	2016 CO	FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Spiral Development	Various	NGC : Melb, FL	-	0.031	Nov 2013	-		-		-		-	Continuing	Continuing	-
JSTARS GMTI Risk Reduction Activities	Various	Various : ,	-	10.050	May 2014	-		-		-		-	Continuing	Continuing	-
	•	Subtotal	-	10.081		-		-		-		-	-	-	-

Remarks

Where Various Contract Method & Types take place, earliest date funds will be obligated is noted.

Support (\$ in Million	s)			FY	2014	FY	2015		2016 ase		2016 CO	FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
<u> </u>		Subtotal	-	-		-		-		-		-	-	-	-

Test and Evaluation	(\$ in Milli	ons)		FY 2	2014	FY 2	2015		2016 ise		2016 CO	FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
E-8C JSTARS Ext. Test Spt (JETS), T-3 Retention	SS/FFP	NGC : Melb, FI	-	13.865	Apr 2014	-		-		-		-	Continuing	Continuing	-
JTF Test Ops/Support	Various	JTF : Melb, Fl	-	1.480	Nov 2013	-		-		-		-	Continuing	Continuing	-
	,	Subtotal	-	15.345		-		-		-		-	-	-	-

Remarks

Where Various Contract Method & Types take place, earliest date funds will be obligated is noted.

PE 0207581F: Joint Surveillance/Target Attack Radar S... Air Force

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force

Appropriation/Budget Activity
3600 / 7

R-1 Program Element (Number/Name)
PE 0207581F / Joint Surveillance/Target
Attack Radar System (JSTARS)

Pate: February 2015

R-1 Program Element (Number/Name)
670003 / JSTARS

Management Service	es (\$ in M	illions)		FY 2	2014	FY 2	2015	FY 2 Ba		FY 2	2016 CO	FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
РМА	Various	Various : Bedford, MA	-	1.882	Nov 2013	-		-		-		-	Continuing	Continuing	-
	*	Subtotal	-	1.882		-		-		-		-	-	-	-

Remarks

Where Various Contract Method & Types take place, earliest date funds will be obligated is noted.

	Prior Years	FY 2014	FY	2015	FY 2016 Base	6 FY 2016 OCO	FY 2016 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	-	27.308	-		-	-	-	-	-	-

Remarks

PE 0207581F: Joint Surveillance/Target Attack Radar S... Air Force

xhibit R-4, RDT&E Schedule Profile: PB 2016 A	ir Fo	orce																				Dat	e: F	ebr	uary	201	5	
ppropriation/Budget Activity 600 / 7								PE	020	7581	1F <i>I</i> ,		Sur	veil	n ber / lance RS)				Pro 670				er/N RS	lam	ie)			
		FY	2014	4		FY	201	5		FY	2010	6		FY:	2017			FY	2018	3		FY	2019	9		FY	202	0
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Joint STARS Radar Modernization (JSRM)							'		,			,							•				,	,				
JSTARS Ground Moving Target Indicator (GMTI) Risk Reduction Activities																												
Communications Network Upgrade																												
Prime Mission Equipment-Diminishing Manufacturing Sources (PME-DMS) Production and Installation																												

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force			Date: February 2015
3600 / 7	,	Project (N 670003 / J	umber/Name) STARS

Schedule Details

	St	art	Е	nd
Events	Quarter	Year	Quarter	Year
Joint STARS Radar Modernization (JSRM)	1	2014	1	2014
JSTARS Ground Moving Target Indicator (GMTI) Risk Reduction Activities	3	2014	2	2015
Communications Network Upgrade	1	2014	4	2014
Prime Mission Equipment-Diminishing Manufacturing Sources (PME-DMS) Production and Installation	1	2014	4	2018