Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force										DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*				R-1 ITEM NOMENCLATURE PE 0207581F: *JOINT STARS*							
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	180.663	168.917	121.610	-	121.610	29.292	29.388	29.236	29.740	Continuing	Continuing
670003: *JSTARS*	180.663	168.917	121.610	-	121.610	29.292	29.388	29.236	29.740	Continuing	Continuing

Note

The program funding includes reductions for overhead reduction efficiencies that are not intended to impact program content. The efficiencies reductions total $2.490M in FY12.

A. Mission Description and Budget Item Justification

The Joint Surveillance Target Attack Radar System (Joint STARS) program produces the world's premier airborne ground surveillance platform, meeting joint combat capability requirements. The 707-based E-8C Joint STARS aircraft provides all-weather radar-derived surveillance and targeting information on moving and stationary ground targets, slowly moving rotary and fixed wing aircraft, and rotating antennas. Joint STARS 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 commanders to effectively make and execute battlefield decisions. It also helps achieve predictive battle space awareness. Activities also include studies and analyses to support both current program planning and execution and future program planning.

This program element enhances the war fighter's ability to achieve the joint vision of combat operations. It develops 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 support continuous improvements in Command & Control and ISR (C2ISR), Network Centric Operations capabilities, and interoperability with Joint Service, Allied, and Coalition systems.

This program element comprises two major efforts, modernization and re-engining:

The modernization effort consists of multiple projects to develop and integrate system improvements, platform wide. These include, but are not limited to the following: Spiral development, Enhanced Land Maritime Mode (ELMM), Diminishing Manufacturing Sources (DMS), and Communications and Networking Upgrades (CNU). The modernization effort also includes support for Joint STARS Test and Infrastructure as well as upgrades to the Training and Support Systems. These efforts are detailed below.

Spiral Development - The spiral development is an umbrella for various technology development/ insertion efforts to enhance target identification, data processing and transmittal and weapon control capabilities, such as Joint STARS Net Enabled Weapons (JNEW) and Joint Surface Warfare (JSuW), Joint STARS Radar Modernization (JSRM), Senior Year Electro-optical Reconnaissance System (SYERS-3) and Blue Force Tracking. The Joint Surface Warfare (JSuW)-Joint Network Enabled Weapons (JNEW) effort includes participation in the JSuW Joint Capability Technology Demonstration (JCTD) and Engineering and Manufacturing Development (EMD) for Network Enabled Weapons (NEW) which includes, but is not limited to, Joint Air to Surface Standoff Missile-Air Surface Warfare-Anti-Surface Warfare (JASSM-ASuW). The JSRM program applies the Multi-Platform Radar Technology Insertion Program (MP-RTIP) technology to JSTARS. The MP-RTIP

capability on the E-8 will provide the ability to detect, track and identify both stationary and moving ground vehicles. The demonstration has matured this capability so that it has the potential to begin System Design and Development (SDD) in FY 12 if funds are available. The SYERS-3 program was a demonstration of the SYERS-3 capability on a Joint STARS aircraft. Spiral development also supports requirements for current Urgent Operational Needs (UON), Quick Reaction Capabilities (QRCs), top-down directed efforts, requirements definition, capability gap analysis, Pre-MSA technical risk reduction activities, Blue Force Tracking as well as other large airborne platform integration efforts including Self Defense Suite (SDS), and radar and aircraft performance improvements.

Programs and projects under Spiral Development are procured under Kill Chain Enhancement- MN-38203.

Enhanced Land Maritime Mode (ELMM) - The ELMM program implements the maritime tracking & improved land tracking upgrade to provide land and maritime tracking capability and improved imagery. ELMM incorporates imagery compression and advanced radar modes.

Diminishing Manufacturing Sources (DMS) - DMS issues are categorized as Prime Mission Equipment-Diminishing Manufacturing Sources (PME-DMS) and Avionics DMS issues. The PME-DMS program includes the replacement of the Radar Airborne Signal Processor (RASP) and the Clipper Operating Work Stations (OWS) computers. The Avionics DMS issues include, but are not limited to, Aircraft Information Program (AIP), Ground Proximity Warning System (GPWS), Communications, Navigation, Surveillance and Air Traffic Management (CNS/ATM) upgrades, Control and Display Unit (CDU) Replacement, Emergency Locator Transmitter (ELT), Flight Data Recorder (FDR), Electric Flight Bag (EFB), Mode 5 Identification Friend or Foe (IFF), Embedded GPS Inertial (EGI) with Selective Availability Anti-Spoofing Module (SAASM)/M-Code GPS, Digital Multi-Function Flight Display (Attitude Direction Indicator, Horizontal Situation Indicator and Attitude Heading Reference System) , Automatic Dependent Surveillance-Broadcast (ADS-B), a new Flight Management System (FMS), Flight Director, Instrument Landing System (ILS) Marker Beacon multi-mode receiver (MMR), and digital engine instruments.

Communications and Networking Upgrades (CNU) - A multi-phased CNU effort includes, but is not limited to, replacement of the E-8C Link 16 Tactical Data Link (TDL) equipment with National Security Agency (NSA) Cryptographic Modernization Program (CMP) compliant equipment, the Multifunctional Information Distribution System (MIDS) Joint Tactical Radio System (JTRS), Integrated Broadcast Services (IBS), the Family of Advanced Beyond Line of Sight Terminals (FAB-T), wideband line-of-sight and beyond line-of-sight (BLOS) network communication upgrades, Advanced Tactical Data Links integration, Airborne Networking, and Network Centric operation enhancements.

Test and Infrastructure - All of these efforts rely on the test infrastructure provided by the Joint STARS Extended Test Support (JETS) program C2 Enterprise Integration Facility (CEIF). JETS includes a dedicated test aircraft, laboratories, and support facilities used by the Joint STARS Test Force (JTF) to conduct RDT&E activities.

Training and support systems upgrades as a part of modernization efforts include, 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).

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force	DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0207581F: *JOINT STARS*

Other modernization efforts include interoperability with manned and unmanned platforms; space data links; advanced Battle-Management Command and Control (BMC2) concepts; 8.33/25 kHz VHF Radio with Single Channel Ground and Airborne Radio System (SINCGARS) voice and data communication; ISR Constellation; Air Moving Target Indicator (AMTI); Advanced Radar Modes (ARM); Aided Target Recognition (ATR); Synthetic Aperture Radar (SAR)/Enhanced Synthetic Aperture Radar (ESAR); Network Centric Collaborative Targeting (NCCT); and Beyond Line of Sight (BLOS) networking.

The second major Joint STARS effort is re-engining. The JSTARS Re-Engining program replaces legacy TF33-P102C engines with new production JT8D-219 engines. These new engines are predicted to provide the E-8C aircraft improved performance, including thrust, altitude capability, mission duration, time to climb, critical field length (i.e. takeoff performance), fuel efficiency, noise abatement, emissions and reliability. It also adds the potential for additional power generation for future systems. Efforts include non-recurring engineering including Federal Aviation Administration (FAA) certification, flight test, manuals, MIL-STD airworthiness qualification, flight data analysis, and purchase of the Propulsion Pod System (PPS). The PPS consists of new engines (4), pneumatic bleed air system, thrust reversers, nacelles, pylons, exhaust ducts, controls, and instrumentation.

This program is in Budget Activity 7, Operational System Development because 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 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	185.616	168.917	72.228	-	72.228
Current President's Budget	180.663	168.917	121.610	-	121.610
Total Adjustments	-4.953	-	49.382	-	49.382
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-4.953	-			
• Other Adjustments	-	-	49.382	-	49.382

Change Summary Explanation

FY 2012 funding total includes an increase to preserve JSTARS PME-DMS

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0207581F: *JOINT STARS*	PROJECT 670003: *JSTARS*	

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
670003: *JSTARS*	180.663	168.917	121.610	-	121.610	29.292	29.388	29.236	29.740	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

Note

The program funding includes reductions for overhead reduction efficiencies that are not intended to impact program content. The efficiencies reductions total $2.490M in FY12.

A. Mission Description and Budget Item Justification

The Joint Surveillance Target Attack Radar System (Joint STARS) program produces the world's premier airborne ground surveillance platform, meeting joint combat capability requirements. The 707-based E-8C Joint STARS aircraft provides all-weather radar-derived surveillance and targeting information on moving and stationary ground targets, slowly moving rotary and fixed wing aircraft, and rotating antennas. Joint STARS 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 commanders to effectively make and execute battlefield decisions. It also helps achieve predictive battle space awareness. Activities also include studies and analyses to support both current program planning and execution and future program planning.

This program element enhances the war fighter's ability to achieve the joint vision of combat operations. It develops 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 support continuous improvements in Command & Control and ISR (C2ISR), Network Centric Operations capabilities, and interoperability with Joint Service, Allied, and Coalition systems.

This program element comprises two major efforts, modernization and re-engining:

The modernization effort consists of multiple projects to develop and integrate system improvements, platform wide. These include, but are not limited to the following: Spiral development, Enhanced Land Maritime Mode (ELMM), Diminishing Manufacturing Sources (DMS), and Communications and Networking Upgrades (CNU). The modernization effort also includes support for Joint STARS Test and Infrastructure as well as upgrades to the Training and Support Systems. These efforts are detailed below.

Spiral Development - The spiral development is an umbrella for various technology development/ insertion efforts to enhance target identification, data processing and transmittal and weapon control capabilities, such as Joint STARS Net Enabled Weapons (JNEW) and Joint Surface Warfare (JSuW), Joint STARS Radar Modernization (JSRM), Senior Year Electro-optical Reconnaissance System (SYERS-3) and Blue Force Tracking. The Joint Surface Warfare (JSuW)-Joint Network Enabled Weapons (JNEW) effort includes participation in the JSuW Joint Capability Technology Demonstration (JCTD) and Engineering and Manufacturing Development (EMD) for Network Enabled Weapons (NEW) which includes, but is not limited to, Joint Air to Surface Standoff Missile-Air Surface Warfare-Anti-Surface Warfare (JASSM-ASuW). The JSRM program applies the Multi-Platform Radar Technology Insertion Program (MP-RTIP) technology to JSTARS. The MP-RTIP

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force		DATE: February 2011
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capability on the E-8 will provide the ability to detect, track and identify both stationary and moving ground vehicles. The demonstration has matured this capability so that it has the potential to begin System Design and Development (SDD) in FY 12 if funds are available. The SYERS-3 program was a demonstration of the SYERS-3 capability on a Joint STARS aircraft. Spiral development also supports requirements for current Urgent Operational Needs (UON), Quick Reaction Capabilities (QRCs), top-down directed efforts, requirements definition, capability gap analysis, Pre-MSA technical risk reduction activities, Blue Force Tracking as well as other large airborne platform integration efforts including Self Defense Suite (SDS), and radar and aircraft performance improvements.

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Diminishing Manufacturing Sources (DMS) - DMS issues are categorized as Prime Mission Equipment-Diminishing Manufacturing Sources (PME-DMS) and Avionics DMS issues. The PME-DMS program includes the replacement of the Radar Airborne Signal Processor (RASP) and the Clipper Operating Work Stations (OWS) computers. The Avionics DMS issues include, but are not limited to, Aircraft Information Program (AIP), Ground Proximity Warning System (GPWS), Communications, Navigation, Surveillance and Air Traffic Management (CNS/ATM) upgrades, Control and Display Unit (CDU) Replacement, Emergency Locator Transmitter (ELT), Flight Data Recorder (FDR), Electric Flight Bag (EFB), Mode 5 Identification Friend or Foe (IFF), Embedded GPS Inertial (EGI) with Selective Availability Anti-Spoofing Module (SAASM)/M-Code GPS, Digital Multi-Function Flight Display (Attitude Direction Indicator, Horizontal Situation Indicator and Attitude Heading Reference System) , Automatic Dependent Surveillance-Broadcast (ADS-B), a new Flight Management System (FMS), Flight Director, Instrument Landing System (ILS) Marker Beacon multi-mode receiver (MMR), and digital engine instruments.

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Test and Infrastructure - All of these efforts rely on the test infrastructure provided by the Joint STARS Extended Test Support (JETS) program C2 Enterprise Integration Facility (CEIF). JETS includes a dedicated test aircraft, laboratories, and support facilities used by the Joint STARS Test Force (JTF) to conduct RDT&E activities.

Training and support systems upgrades as a part of modernization efforts include, 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).

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0207581F: *JOINT STARS*	PROJECT 670003: *JSTARS*

Other modernization efforts include interoperability with manned and unmanned platforms; space data links; advanced Battle-Management Command and Control (BMC2) concepts; 8.33/25 kHz VHF Radio with Single Channel Ground and Airborne Radio System (SINCGARS) voice and data communication; ISR Constellation; Air Moving Target Indicator (AMTI); Advanced Radar Modes (ARM); Aided Target Recognition (ATR); Synthetic Aperture Radar (SAR)/Enhanced Synthetic Aperture Radar (ESAR); Network Centric Collaborative Targeting (NCCT); and Beyond Line of Sight (BLOS) networking.

The second major Joint STARS effort is re-engining. The JSTARS Re-Engining program replaces legacy TF33-P102C engines with new production JT8D-219 engines. These new engines are predicted to provide the E-8C aircraft improved performance, including thrust, altitude capability, mission duration, time to climb, critical field length (i.e. takeoff performance), fuel efficiency, noise abatement, emissions and reliability. It also adds the potential for additional power generation for future systems. Efforts include non-recurring engineering including Federal Aviation Administration (FAA) certification, flight test, manuals, MIL-STD airworthiness qualification, flight data analysis, and purchase of the Propulsion Pod System (PPS). The PPS consists of new engines (4), pneumatic bleed air system, thrust reversers, nacelles, pylons, exhaust ducts, controls, and instrumentation.

This program is in Budget Activity 7, Operational System Development because 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. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Modernization	39.615	62.165	53.221	-	53.221
Description: Multiple projects to develop and integrate system improvements, platform wide ***FY 2010 Accomplishments:*** JSuW Link 16 JCTD tested, continued JSRM radar receiver development, completed SYERS Demo, continued Avionics DMS development, continued ELMM SDD and testing, continued CNU-JTRS replacement development, started 8.33/25 kHz Radio with SINCGARS Retrofit, completed SINCGARS SDD, continued PME DMS RASP SDD, started FVB mitigation and AoA, continued QRC efforts, continued Spiral Development. ***FY 2011 Plans:*** Completing JSuW Link 16 JCTD, continuing JSRM radar receiver development, completed SYERS Demo, continuing Avionics DMS development, completing ELMM SDD and beginning production, continuing CNU-JTRS replacement development, continuing 8.33/25 kHz Radio with SINCGARS Retrofit, continuing PME DMS RASP SDD, continuing FVB mitigation, completing AoA, continuing QRC efforts, continuing Spiral Development. ***FY 2012 Base Plans:*** Will complete JSRM radar receiver development and begin flight demo, will continue Avionics DMS development, will continue ELMM SDD production and retrofit, will begin CNU-JTRS production, will continue					

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force		DATE: February 2011
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
8.33/25 kHz Radio with SINCGARS Retrofit, will continue PME DMS RASP SDD, will continue FVB mitigation, will continue QRC efforts, will continue Spiral Development. ***FY 2012 OCO Plans:*** Not applicable.					
Title: Test and infrastructure ***Description:*** Test and Infrastructure Effort ***FY 2010 Accomplishments:*** Supported Test and Infrastructure Effort including but not limited to Joint Test Force, JETS contract, Information Assurance, range support, and PL-2 security; supported T-3 aircraft, test labs, facilities. ***FY 2011 Plans:*** Supporting Test and Infrastructure Effort including but not limited to Joint Test Force, JETS contract, Information Assurance, range support, and PL-2 security; supporting T-3 aircraft, test labs, facilities. ***FY 2012 Base Plans:*** Will support Test and Infrastructure Effort including but not limited to Joint Test Force, JETS contract, Information Assurance, range support, and PL-2 security; will support T-3 aircraft, test labs, facilities. ***FY 2012 OCO Plans:*** Not applicable.	34.209	35.107	30.650	-	30.650
Title: Re-Engining ***Description:*** Replaces legacy TF-33 Propulsion Pod System (PPS) consisting of new engines, thrust reversers, nacelles, pylons, exhaust ducts, controls, instrumentation and all associated components. ***FY 2010 Accomplishments:*** Supported non-recurring engineering activity including development, FAA Certification, Flight Testing, Flight Performance Manuals, Pneumatic SDD (Bleed Air), Maintenance Training. ***FY 2011 Plans:***	106.839	71.645	37.739	-	37.739

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force		DATE: February 2011
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Supporting non-recurring engineering activity including development, FAA Certification, Flight Testing, Flight Performance Manuals, Pneumatic SDD (Bleed Air), Maintenance Training. ***FY 2012 Base Plans:*** Will supporting non-recurring engineering activity including development, FAA Certification, Flight Testing, Flight Performance Manuals, Pneumatic SDD (Bleed Air), Maintenance Training & logistics development. ***FY 2012 OCO Plans:*** Not applicable.					
Accomplishments/Planned Programs Subtotals	180.663	168.917	121.610	-	121.610

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• PE 0207581F: *JSTARS, APAF, MODERNIZATION*	102.360	195.201	43.546	0.000	43.546	76.313	73.836	27.616	28.628	Continuing	Continuing

D. Acquisition Strategy

Development efforts are performed in an incremental method. 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.

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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force		DATE: February 2011
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Spiral Development	Various	NGC:Melb, FL	115.289	0.249	Nov 2010	0.254	Nov 2011	-		0.254	Continuing	Continuing	TBD
Communications & Network Upgrade (CNU)(Joint Tactical Radio System (JTRS))	SS/CPAF	NGC:Melb, Fl	6.971	0.792	Nov 2010	0.045	Nov 2011	-		0.045	0.000	7.808	7.808
ELMM/ARM	SS/CPFF	NGC:Melb, Fl	96.438	0.092	Nov 2010	-		-		-	0.000	96.530	96.530
PME DMS	SS/CPIF	NGC:Melb, Fl	96.316	59.351	Nov 2010	50.386	Nov 2011	-		50.386	0.000	206.053	206.053
SYERS Demonstration	SS/FFP	NGC:Melb, Fl	16.009	-		-		-		-	0.000	16.009	16.009
Avionics DMS	SS/TBD	NGC:Melb, FL	0.774	1.681	Nov 2010	2.536	Nov 2011	-		2.536	Continuing	Continuing	TBD
Re-Engining	SS/CPIF	NGC:Melb, Fl	257.005	71.645	Feb 2011	37.739	Feb 2012	-		37.739	0.000	366.389	366.389
		Subtotal	588.802	133.810		90.960		-		90.960			

Remarks

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

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Pending Actions	TBD	Not specified.:,	-	-		-		-		-	0.000	0.000	0.000
		Subtotal	-	-		-		-		-	0.000	0.000	0.000

Remarks

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

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
E-8C JSTARS Ext. Test Spt (JETS)	SS/CPAF	NGC:Melb, Fl	577.036	31.086	Nov 2010	25.955	Nov 2011	-		25.955	Continuing	Continuing	TBD
JTF Test Ops/Support	Various	JTF:Melb, Fl	83.614	4.021	Nov 2010	4.695	Nov 2011	-		4.695	Continuing	Continuing	TBD

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force		DATE: February 2011
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Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			660.650	35.107		30.650		-		30.650			

Remarks

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

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-	0.000	0.000	0.000

Remarks

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

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	1,249.452	168.917		121.610		-		121.610			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0207581F: *JOINT STARS*	**PROJECT** 670003: *JSTARS*

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0207581F: *JOINT STARS*	**PROJECT** 670003: *JSTARS*

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0207581F: *JOINT STARS*	**PROJECT** 670003: *JSTARS*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Joint Surface Warfare (JSuW) p.1 of 2	1	2010	1	2011
Joint STARS Radar Modernization (JSRM) p. 1 of 2	1	2010	4	2012
SYERS Study/Demonstration p. 1 of 2	1	2010	4	2010
Avionics DMS EMD Baseline I p. 1 of 2	3	2013	1	2016
Avionics Production p. 1 of 2	1	2016	4	2016
ELMM Initial Retrofit p. 1 of 2	1	2010	2	2010
ELMM Retrofit Production p. 1 of 2	2	2011	2	2013
ELMM EMD p. 1 of 2	1	2010	3	2011
CNU Phase I EMD p. 1 of 2	1	2010	3	2012
CNU Production p. 1 of 2	3	2012	4	2014
8.33/25 kHz Radio Retrofit p. 1 of 2	1	2010	3	2013
SINCGARS EMD p. 1 of 2	1	2010	3	2010
PME DMS Phase II SDD p. 1 of 2	4	2010	2	2013
PME DMS Production p. 1 of 2	3	2013	4	2015
Re-Engine NRE Phase II p. 2 of 2	1	2010	4	2012
Re-Engine Production Phase IA p. 2 of 2	1	2010	3	2012
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