

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0305614F I JSPOC Mission System							
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	271.587	56.523	73.779	81.911	-	81.911	65.414	54.407	55.319	56.139	Continuing	Continuing
67A030: Infrastructure	135.717	24.637	34.781	31.112	-	31.112	-	-	-	-	-	226.247
67A031: Mission Applications	127.278	31.886	38.998	38.380	-	38.380	-	-	-	-	-	236.542
67A035: INCREMENT 3	0.000	-	-	12.419	-	12.419	65.414	54.407	55.319	56.139	Continuing	Continuing
Program MDAP/MAIS Code: N82												

⁽⁺⁾ The sum of all Prior Years is \$8.592 million less than the represented total due to several projects ending

Note

In FY 2016, Project 65A035, (Increment 3), includes new start efforts to include pre-Milestone A requirements development, systems engineering and program planning for JMS Increment 3.

A. Mission Description and Budget Item Justification

The Joint Space Operations Center (JSpOC) Mission System (JMS) Program is a Space Command and Control (C2) capability for the Commander, Joint Functional Component Commander for Space (JFCC SPACE). The JMS program is predominately a software effort that will produce an integrated, net-centric Service Oriented Architecture (SOA) and the necessary software applications to accomplish required missions. The program will provide a collaborative environment that will enhance and modernize space situational awareness (SSA) capabilities; create decision-relevant views of the space environment; rapidly detect, track and characterize objects of interest; identify / exploit traditional and non-traditional sources; perform space threat analysis; and enable efficient distribution of data across the Space Surveillance Network (SSN). Furthermore, it provides a viable migration path from the legacy Space Defense Operations Center (SPADOC) system, which has 75% of its components beyond end of life or end of service, and the majority of its software no longer vendor-supported. JMS will also integrate data from SSA sensors which is exposed via the Net-Centric Sensors and Data Sources effort (project 65A012) in the SSA Systems program (0604425F) through FY15. JMS 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.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force				Date: February 2015	
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development		R-1 Program Element (Number/Name) PE 0305614F I JSPOC Mission System			
B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	56.523	73.779	69.004	-	69.004
Current President's Budget	56.523	73.779	81.911	-	81.911
Total Adjustments	-	-	12.907	-	12.907
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	12.907	-	12.907
Change Summary Explanation					
FY16: +\$12.907M funds requirements development, system engineering, program planning, and risk reduction pre-Milestone A activities for JMS Increment 3 and continues work on Net-Centric Sensors and Data Sources					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System				Project (Number/Name) 67A030 / Infrastructure			
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
67A030: Infrastructure	135.717	24.637	34.781	31.112	-	31.112	-	-	-	-	-	226.247
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

*Due to the planned delivery of Increment 2 in FY16, a new BPAC was created for Increment 3 (67A035). All funding in FY17-FY20 has been allocated to Increment 3 and realigned from 67A030 to 67A035.

A. Mission Description and Budget Item Justification

Infrastructure will provide a Service Oriented Architecture (SOA), net-centric collaborative information environment at the Unclassified, Secret, TS/SCI, and SAP levels. Efforts incorporate net-centric enterprise services and integrating incremental space mission applications services. Priority is migration off the legacy SPADOC hardware and services into a sustainable infrastructure. Effort integrates components of SSA mission applications and C2 capabilities into the JSpOC to create timely, actionable knowledge necessary for maintaining space superiority and exercising command and control of space forces.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Increment 1	3.800	-	-	-	-
Description: Pursues and integrates a collaborative net-centric, SOA information environment					
FY 2014 Accomplishments: Continued ICS. Increment 1 was subsumed into Increment 2 with delivery of Service Pack 7. This was the last year of ICS. Sustainment of JMS will begin in FY15.					
Title: Increment 2	20.837	34.781	31.112	-	31.112
Description: Pursues and integrates a collaborative net-centric, SOA information environment					
FY 2014 Accomplishments: Developed, matured and accredited the SOA infrastructure to support operations of Service Pack (SP) 7; provided incremental upgrades to infrastructure (including net ready, security, reliability core services, messaging, and UDOP) as new applications/capabilities were delivered with each service pack. Provided systems engineering, integration, support and testing of enhanced infrastructure to support future SP-9 fielding.					
FY 2015 Plans: Continuing development of accrediting SOA infrastructure to support operations of SP-9; providing incremental upgrades to infrastructure (including net ready, security, reliability core services, messaging, and UDOP) as					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force							Date: February 2015				
Appropriation/Budget Activity 3600 / 7			R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System			Project (Number/Name) 67A030 / Infrastructure					
B. Accomplishments/Planned Programs (\$ in Millions)						FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	
new applications/capabilities are delivered with each service pack. Providing systems engineering, integration, support and testing of enhanced infrastructure to support future SP-11 and SP-13 fielding.											
FY 2016 Base Plans: Complete development and fielding of SP-11 and 13 to complete Increment-2. Develop JMS Standard Space Trainer and develop capability to net-centrally expose legacy sensor data.											
Accomplishments/Planned Programs Subtotals						24.637	34.781	31.112	-	31.112	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	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
• OPAF: BA03: Line Item # 836790: Space Mods Space	0.867	-	-	-	-	-	11.932	12.347	12.567	Continuing	Continuing
Remarks											
Replaces JMS components and provides an operational, sustainable environment to maintain capabilities that fuse data from space intelligence, surveillance, reconnaissance, and environmental sources. This modification will procure commercial hardware, software licenses, and warranties to upgrade the operational environment enclaves (2 Secret / 2 SCI), as well as keep up to date development/operational testing locations.											
D. Acquisition Strategy											
The JMS overarching Acquisition Strategy, approved by the Milestone Decision Authority on 15 Apr 2012, provides for a multi-increment program to develop, integrate, test, and deliver JMS capability. The acquisition strategy reflects new principles that address the speed, agility, and adaptability required for successful IT acquisition resulting in a tailored incremental acquisition approach to deliver early and often by leveraging mature industry capabilities and taking advantage of previous Government investments in Federally Funded Research and Development Center (FFRDC) and Government lab prototyping efforts.											
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.											

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force												Date: February 2015			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System				Project (Number/Name) 67A030 / Infrastructure					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
SOA, Infrastructure and core service development	MIPR	ISS, TDKC : Various,	39.583	12.946	Dec 2013	16.227	Dec 2014	9.606	Dec 2015	-		9.606	-	78.362	TBD
Interim Contractor Support	MIPR	ISS : Colorado Springs, CO	1.070	1.100	Dec 2013	-		-		-		-	-	2.170	TBD
High-performance computing and security infrastructure development	MIPR	MIT/LL : Lexington, MA	21.380	2.652	Dec 2013	3.496	Dec 2014	4.364	Dec 2015	-		4.364	-	31.892	TBD
Mission Infrastructure	Various	Various : Various,	23.742	-		3.657	Nov 2014	3.300	Nov 2015	-		3.300	-	30.699	TBD
Net-Centric Sensors and Data Sources	TBD	TBD : TBD,	0.000	-		-		0.835	Nov 2015	-		0.835	-	0.835	-
Standard Space Trainer	C/TBD	Sonalyt : Colorado Springs, CO	0.000	-		-		4.000	Nov 2015	-		4.000	-	4.000	-
Integration & Acq Logistics	MIPR	SPAWAR : San Diego, CA	19.696	6.885	Dec 2013	8.633	Dec 2014	6.942	Dec 2015	-		6.942	-	42.156	TBD
Subtotal			105.471	23.583		32.013		29.047		-		29.047	-	190.114	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
Support Costs	Various	Various : Various,	0.842	-		-		0.200	Feb 2015	-		0.200	-	1.042	TBD
Subtotal			0.842	-		-		0.200		-		0.200	-	1.042	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
Combined Developmental Test / Operational Test	Various	Various : Various,	4.959	-		-		-		-		-	-	4.959	TBD
Combined Test Facility	Various	Various : Various,	0.565	-		-		-		-		-	-	0.565	TBD
Subtotal			5.524	-		-		-		-		-	-	5.524	-

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force												Date: February 2015			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System				Project (Number/Name) 67A030 / Infrastructure					
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
Program Management Administration (PMA)	Various	Various : Various,	17.108	0.794	Dec 2013	2.260	Dec 2014	1.865	Dec 2015	-		1.865	-	22.027	TBD
Program Office Engineering (FFRDC)	MIPR	Mitre : Bedford, MD	3.146	-		-		-		-		-	-	3.146	TBD
Program Office Engineering Support (FFRDC)	RO	Aerospace : Los Angeles, CA	3.626	0.260	Nov 2013	0.508	Nov 2014	-		-		-	-	4.394	-
Subtotal			23.880	1.054		2.768		1.865		-		1.865	-	29.567	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			135.717	24.637		34.781		31.112		-		31.112	-	226.247	-
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force			Date: February 2015		
Appropriation/Budget Activity 3600 / 7		R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System			Project (Number/Name) 67A030 / Infrastructure

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
Commerical Software Contract Award (Oct 2014)	■																											
Commerical Software Operation Licenses (Sep 2014)				■																								
Commerical Software Operation Licenses (Nov 2015)										■																		
Service Pack 7 Delivery	■	■	■	■																								
Service Pack 9 Delivery	■	■	■	■	■	■	■	■																				
Service Pack 11 Delivery					■	■	■	■	■	■	■	■																
Service Pack 13 Delivery						■	■	■	■	■	■	■	■	■	■	■												
Inc 2 MS C (Sep 2016)													■	■														
Inc 2 FDD (Oct 2016)																■	■											

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System	Project (Number/Name) 67A030 / Infrastructure	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Commerical Software Contract Award (Oct 2014)	1	2014	1	2014
Commerical Software Operation Licenses (Sep 2014)	4	2014	4	2014
Commerical Software Operation Licenses (Nov 2015)	1	2016	1	2016
Service Pack 7 Delivery	1	2014	1	2015
Service Pack 9 Delivery	1	2014	1	2016
Service Pack 11 Delivery	1	2015	3	2016
Service Pack 13 Delivery	2	2015	4	2016
Inc 2 MS C (Sep 2016)	4	2016	4	2016
Inc 2 FDD (Oct 2016)	1	2017	1	2017

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System				Project (Number/Name) 67A031 / Mission Applications			
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
67A031: Mission Applications	127.278	31.886	38.998	38.380	-	38.380	-	-	-	-	-	236.542
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Due to the planned delivery of Increment 2 in FY16, a new BPAC was created for Increment 3 (67A035). Funding has been realigned from 67A031 to 67A035 for Increment 3. \$12.4M was realigned in FY16 and all remaining funds in FY17 through FY20.

A. Mission Description and Budget Item Justification

Mission applications will provide space services to enhance the accuracy, sustainability, and responsiveness of space surveillance capabilities by providing the knowledge environment necessary to enable the Commander JFCC Space to make rapid, responsive decisions for the protection of space assets from proliferating threats (adversary as well as orbiting debris). The system will provide a high accuracy space catalog (knowledge of space objects), increased observation verification and capabilities, and improved event processing. Research, design, and development will provide SSA space catalog applications, services, space surveillance observation processing, and sensor tasking. Funding includes technical studies, development, and integration.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Increment 2	31.886	38.998	38.380	-	38.380
Description: Services/mission applications to conduct space control/situational awareness					
FY 2014 Accomplishments: Continued development, testing and fielding of Government developed and commercial software, providing mission services such as the critical elements of space catalog, sensor calibration, routine metric tasking, conjunction assessment, maneuver, message processing, reentry, space order of battle and NUDET; efforts associated with the focus on retirement of legacy functionality. Fielded JMS Service Pack 7.					
FY 2015 Plans: Continuing development, testing and fielding of commercial software, providing mission services such as improved resident space object accuracy, breakup processing, launch processing, high priority tasking and additional conjunction assessment tools; efforts associated with the focus on retirement of legacy functionality. Field JMS Service Pack 9.					
FY 2016 Base Plans:					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System	Project (Number/Name) 67A031 / Mission Applications	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Continue development, testing and fielding of commercial software, providing mission services such as exercise/training capabilities, high priority sensor tasking, integration of special access data sources and other operator tools. Field Service Packs 11 and 13.					
Accomplishments/Planned Programs Subtotals	31.886	38.998	38.380	-	38.380

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

Line Item	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
• OPAF: BA03: Line Item #836790: Space Mods Space	0.867	-	-	-	-	-	11.932	12.347	12.567	Continuing	Continuing

Remarks

D. Acquisition Strategy

The JMS overarching Acquisition Strategy, approved by the Milestone Decision Authority on 15 Apr 2012, provides for a multi-increment program to develop, integrate, test, and deliver JMS capability. The acquisition strategy reflects new principles that address the speed, agility, and adaptability required for successful IT acquisition resulting in a tailored incremental acquisition approach to deliver early and often by leveraging mature industry capabilities and taking advantage of previous Government investments in Federally Funded Research and Development Center (FFRDC) and Government lab prototyping efforts.

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.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force												Date: February 2015			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System				Project (Number/Name) 67A031 / Mission Applications					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
Breakup, debris modeling, and NUDET applications	MIPR	National Labs : Various,	5.890	0.045	Mar 2014	0.010	Jan 2015	0.010	Jan 2016	-		0.010	-	5.955	TBD
Continuity of operations pathfinder	C/CPFF	Lockheed Martin : Chantilly, VA	8.000	-		-		-		-		-	-	8.000	-
Mission applications and service pack content development	Various	Various : Various,	23.166	15.871	Dec 2013	9.772	Dec 2014	18.338	Dec 2015	-		18.338	-	67.147	TBD
Service pack deployment and evaluation	RO	SPAWAR and MITRE : Los Angeles and San Diego, CA	0.846	-		-		-		-		-	-	0.846	0.846
Positive object ID, rapid object characterization, and dynamic sensor tasking risk reduction	MIPR	MIT/LL, AFRL : Various,	11.251	-		-		-		-		-	-	11.251	-
High performance computing and security infrastructure development	MIPR	MIT/LL : Lexington, MA	21.525	-		-		-		-		-	-	21.525	-
COTS hardware, software purchase and engineering support	C/Various	AGI, Exton, PA; ai Solutions, Lanham, MD; SPAWAR, San Diego, CA : Various,	18.790	9.523	Oct 2013	21.817	Nov 2014	13.520	Nov 2015	-		13.520	-	63.650	TBD
Subtotal			89.468	25.439		31.599		31.868		-		31.868	-	178.374	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
Support Costs	Various	Various : Various,	0.480	0.326	Mar 2014	0.354	Nov 2014	0.361	Nov 2015	-		0.361	-	1.521	TBD
Subtotal			0.480	0.326		0.354		0.361		-		0.361	-	1.521	-

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force												Date: February 2015			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System				Project (Number/Name) 67A031 / Mission Applications					
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
Combined Developmental Test / Operational Test	Various	Various : Various,	4.768	1.832	Jan 2014	2.075	Nov 2014	2.300	Nov 2015	-		2.300	-	10.975	TBD
Combined Test Facility	Various	Various : Various,	2.442	1.747	Jan 2014	1.526	Nov 2014	0.868	Nov 2015	-		0.868	-	6.583	TBD
Subtotal			7.210	3.579		3.601		3.168		-		3.168	-	17.558	-
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
Program Management Admin (PMA)	Various	Various : Various,	7.984	1.093	Dec 2014	2.063	Dec 2014	1.777	Dec 2015	-		1.777	-	12.917	TBD
Program Office Engineering (FFRDC)	MIPR	Mitre : Bedford, MA	15.290	0.963	Dec 2013	0.920	Dec 2014	0.635	Dec 2015	-		0.635	-	17.808	TBD
Program Office Engineering Support (FFRDC)	RO	Aerospace : Los Angeles, CA	0.566	0.486	Dec 2013	0.461	Dec 2014	0.571	Dec 2015	-		0.571	-	2.084	-
Systems Engineering and Integration	C/CPFF	Various : Various,	6.280	-		-		-		-		-	-	6.280	TBD
Subtotal			30.120	2.542		3.444		2.983		-		2.983	-	39.089	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			127.278	31.886		38.998		38.380		-		38.380	-	236.542	-
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force			Date: February 2015		
Appropriation/Budget Activity 3600 / 7		R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System		Project (Number/Name) 67A031 / Mission Applications	

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
Commerical Software Contract Award (Oct 2014)	■																											
Commerical Software Operation Licenses (Sep 2014)				■																								
Commerical Software Operation Licenses (Nov 2015)										■																		
Service Pack 7 Delivery	■	■	■	■																								
Service Pack 9 Delivery	■	■	■	■	■	■	■	■																				
Service Pack 11 Delivery					■	■	■	■	■	■	■	■																
Service Pack 13 Delivery						■	■	■	■	■	■	■	■	■	■	■												
Inc 2 MS C (Sep 2016)													■	■														
Inc 2 FDD (Oct 2016)																■	■											

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force	Date: February 2015
--	----------------------------

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System	Project (Number/Name) 67A031 / Mission Applications
--	--	---

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Commerical Software Contract Award (Oct 2014)	1	2014	1	2014
Commerical Software Operation Licenses (Sep 2014)	4	2014	4	2014
Commerical Software Operation Licenses (Nov 2015)	1	2016	1	2016
Service Pack 7 Delivery	1	2014	1	2015
Service Pack 9 Delivery	1	2014	1	2016
Service Pack 11 Delivery	1	2015	3	2016
Service Pack 13 Delivery	2	2015	4	2016
Inc 2 MS C (Sep 2016)	4	2016	4	2016
Inc 2 FDD (Oct 2016)	1	2017	1	2017

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System				Project (Number/Name) 67A035 / INCREMENT 3			
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
67A035: INCREMENT 3	-	-	-	12.419	-	12.419	65.414	54.407	55.319	56.139	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note												
In FY 2016, Project 65A035, (Increment 3), includes new start efforts to include pre-Milestone A requirements development, systems engineering and program planning for JMS Increment 3.												
A. Mission Description and Budget Item Justification												
Increment 3 will provide the mission applications to deliver a robust, responsive Battle Management Command, Control and Communications (BMC3) that allows JFCC-Space to meet emerging threats. These applications will include, but are not limited to, providing the ability to aggregate intelligence data from various user-defined sources and automatically generating alerts, provide an integrated operating picture for RF spectrum, and create an interactive modeling and simulation environment to support training and exercises, collaborative data sharing, and Course of Action (COA) development and assessment. Funding includes technical studies, development, integration and related support costs.												
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Increment 3								-	-	12.419	-	12.419
Description: Services/mission applications to deliver a robust, responsive BMC3 capability to meet emerging threats.												
FY 2014 Accomplishments: NA												
FY 2015 Plans: NA												
FY 2016 Base Plans: Start initial requirements development, systems engineering and program planning for Increment-3. Begin technical maturation studies and risk reduction efforts to enable migration from catalog maintenance to predictive battle management and improved integration planning for intelligence and sensor data. Perform market research and data calls to determine existing capabilities that can be integrated into JMS to meet BMC3 objectives.												
FY 2016 OCO Plans:												

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015	
Appropriation/Budget Activity 3600 / 7				R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System				Project (Number/Name) 67A035 / INCREMENT 3			
B. Accomplishments/Planned Programs (\$ in Millions)						FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	
NA											
Accomplishments/Planned Programs Subtotals						-	-	12.419	-	12.419	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	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
• OPAF: BA03: Line Item #836790: Space Mods Space	-	-	-	-	-	-	11.932	12.347	12.567	Continuing	Continuing
Remarks											
D. Acquisition Strategy											
The Air Force is in the process of updating the acquisition strategy fo JMS Increment 3. The PMO is currently using a government led integration effort using the Navy SPAWAR Systems Center and incremental service pack deliveries for operations.											
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.											

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force												Date: February 2015			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System				Project (Number/Name) 67A035 / INCREMENT 3					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
Service Oriented Architecture	Various	ISS, TDKC, various : TBD,	0.000	-		-		2.948	Apr 2016	-		2.948	Continuing	Continuing	TBD
System Integration	MIPR	SPAWAR : San Diego, CA	0.000	-		-		0.762	Apr 2016	-		0.762	Continuing	Continuing	TBD
Mission Applications & Service Pack Content Development	Various	TBD : TBD,	0.000	-		-		0.667	Apr 2016	-		0.667	Continuing	Continuing	-
Software Development, Risk Reduction & Integration	Various	AFRL, FFRDCs, Others TBD : TBD,	0.000	-		-		2.238	Apr 2016	-		2.238	-	2.238	-
Subtotal			0.000	-		-		6.615		-		6.615	-	-	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
Combined Developmental Test / Operational Test	PO	Various : Various,	0.000	-		-		0.260	Apr 2016	-		0.260	Continuing	Continuing	TBD
Subtotal			0.000	-		-		0.260		-		0.260	-	-	-
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
Program Management Admin (PMA)	Various	Various : Various,	0.000	-		-		2.544	Apr 2016	-		2.544	Continuing	Continuing	TBD

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force												Date: February 2015			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System				Project (Number/Name) 67A035 / INCREMENT 3					
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
FFRDC	C/CPFF	Mitre, MA : El Segundo, CA	0.000	-		-		2.000	Apr 2016	-		2.000	Continuing	Continuing	TBD
FFRDC - Aerospace	RO	Aerospace : El Segundo, CA	0.000	-		-		1.000	Apr 2016	-		1.000	Continuing	Continuing	TBD
Subtotal			0.000	-		-		5.544		-		5.544	-	-	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	-		-		12.419		-		12.419	-	-	-
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force	Date: February 2015
---	----------------------------

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System	Project (Number/Name) 67A035 / INCREMENT 3
--	--	--

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
Milestone B																												
Service Pack 15 Delivery																												
Service Pack 17 Delivery																												
Service Pack 19 Delivery																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305614F / JSPOC Mission System	Project (Number/Name) 67A035 / INCREMENT 3	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Milestone B	1	2017	1	2017
Service Pack 15 Delivery	1	2017	1	2018
Service Pack 17 Delivery	1	2018	1	2019
Service Pack 19 Delivery	1	2019	1	2020