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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force **Date:** February 2015

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0207410F / <i>Air & Space Operations Center (AOC)</i>
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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	264.584	18.332	25.662	21.193	-	21.193	17.595	17.933	18.271	18.598	Continuing	Continuing
675218: <i>Applications Development</i>	0.000	10.624	14.580	11.512	-	11.512	7.437	7.580	7.724	7.862	Continuing	Continuing
675220: <i>Unit Level</i>	0.000	5.569	8.757	7.263	-	7.263	7.742	7.891	8.039	8.183	Continuing	Continuing
675221: <i>Personnel Recovery Command and Control (PRC2)</i>	0.000	2.139	2.325	2.418	-	2.418	2.416	2.462	2.508	2.553	Continuing	Continuing

Program MDAP/MAIS Code: N42

⁽⁺⁾ The sum of all Prior Years is \$264.584 million less than the represented total due to several projects ending

A. Mission Description and Budget Item Justification

The Air and Space Operations Center Weapon System (AOC WS) program element provides development of Command and Control (C2) capabilities across the entire spectrum of air and space operations from the strategic to the tactical level. There are three funded projects within the AOC WS program element:

Applications Development provides worldwide operational level C2 capabilities, which include: air battle planning, management, and execution; operational level C2 of Integrated Air and Missile Defense (IAMD); in support of DoD, Coalition Partners, and other government agencies.

Unit Command and Control (UC2) provides both the scheduling and mission preparation activities at the wing and squadron level and the capabilities to report and track the success of each mission and influence decisions on future Air Battle Planning.

Personnel Recovery Command and Control (PRC2): Provides an adaptive, networked, decentralized and situationally-appropriate personnel recovery command and control system which supports personnel accountability and recovery missions worldwide. PRC2 delivers a globally accessible, collaborative, interoperable and integrated system to prevent, prepare for and respond to isolating events across the Range of Military Operation in the joint/coalition operating environment. The system collects, stores and delivers personnel/identity biometric data, emergency locator beacon registrations, isolated personnel reports, evasion plans of action, incident reports and other information management capabilities for predictive, preventive and personnel vulnerability analysis/assessment in support of Personnel Recovery across Department of Defense and other national and international entities.

This program is in Budget Activity 7, Operational System Development, these budget activities 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.

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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: Operational Systems Development		PE 0207410F I Air & Space Operations Center (AOC)			
B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	22.332	41.066	21.333	-	21.333
Current President's Budget	18.332	25.662	21.193	-	21.193
Total Adjustments	-4.000	-15.404	-0.140	-	-0.140
• Congressional General Reductions	-	-1.004			
• Congressional Directed Reductions	-	-14.400			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-4.000	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	-0.140	-	-0.140
Change Summary Explanation					
Reprogrammed \$4.000M FY14 from C2AOS-C2IS 0207410F to AOC 10.2 0604458F.					
Congressional Mark of \$14.400M FY15 to maintain program affordability - unjustified increase					

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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 0207410F / Air & Space Operations Center (AOC)				Project (Number/Name) 675218 / Applications 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
675218: Applications Development	-	10.624	14.580	11.512	-	11.512	7.437	7.580	7.724	7.862	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project funds operational development necessary to acquire, modify, and sustain segments of Air Force's Command and Control (C2) capabilities and services. Applications Development provides worldwide operational capabilities for AF C2 in support of DoD, Coalition Partners, and other government agencies. These efforts focus on, but are not limited to, support of the Joint Forces Air Component Commander (JFACC) that provides air, space and cyber support as presented to the AOC and to other C2 systems. Applications Development efforts deliver capabilities identified in the Joint Command and Control (JC2) Capability Development Document (CDD) (2013). Applications Development activities include but are not limited to the following: 1) Command and Control Air Operations Suite-Command and Control Information Services (C2AOS-C2IS) needs identified in the Capability Definition Package (CDP) (2012). C2AOS-C2IS I creates web-enabled information services to expose air operations data using standardized schemas, such as those developed by the Air Operations Community of Interest (AO COI). C2AOS-C2IS I also develops, matures, fields, and maintains modular net-centric C2 applications for air battle planning, execution, and management functions to include Network Enabled Weapons (NEW); C2AOS-C2IS I will focus on but not be limited to, the remainder of CDP and Theater Battle Management Core Systems-Force Level (TBMCS-FL) functionality along with the capabilities to include applications and services to support air mission and Friendly Order of Battle (FrOB) execution, Alerting, Publish and Subscribe, Content Management and Reporting; and integration with a Joint Command and Control (JC2) Reference Architecture (RA) host infrastructure environment.

In FY16, core activities for Applications Development include but are not limited to the following: 1) developing capabilities to support planning and replanning of the Air Battle Plan; generation and dissemination of the Air Tasking Order; defense planning and execution; targeting; weaponeering; personnel recovery tasks; other applications and services supporting C2 in the joint environment; 2) providing support to and participating in the Air Operations Community of Interest (AO COI) to improve air operations information interoperability among all joint and coalition systems within the Air Operations (AO) domain; 3) developing and assessing C2 air, space, intelligence, surveillance, reconnaissance, and cyber technologies that will improve joint and coalition warfighter interoperability; 4) transitioning existing C2 capabilities to a net-centric environment; and 5) improving operational level C2 of Integrated Air and Missile Defense (IAMD). Applications Development efforts include evaluation and maturation of future air, space, and cyber C2 concepts identified through research, risk reduction, prototyping, current operations, exercises, and demonstrations.

Activities also include studies and analysis to support both current program planning and execution, as well as future program planning.

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.

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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 0207410F / <i>Air & Space Operations Center (AOC)</i>	Project (Number/Name) 675218 / <i>Applications Development</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016
Title: NATO Description: NATO and International Cooperation Research and Development. Efforts to develop air, space, intelligence, surveillance, reconnaissance and cyber Information Exchange Requirements and capabilities between U.S. and NATO / Coalition systems to promote interoperability. FY 2014 Accomplishments: Developed technologies that improved joint and coalition warfighter capability. FY 2015 Plans: Develop requirements and capabilities between U.S. and NATO / Coalition systems to promote interoperability. FY 2016 Plans: In FY 2016, PE 0207410F, (Air & Space Operations Center (AOC)), Project 675218, (Application Development) efforts were transferred to PE 0604281, (Tactical Data Networks Enterprise), Project 655050, (TDL System Integration) as the requirements do not exist for Application Development.		0.381	0.442	-
Title: C2AOS-C2IS I Description: C2AOS-C2IS I develops modular net-centric C2 applications for air battle planning, execution and management functions and creates web-enabled information services to expose air operations data in TBMCS applications and systems using standardized schemas including Capability Packages (CP) 1, 2 & 3 - CP 1: Air Tasking Order Management System (ATOMS), Request Information Services for Command and Control (RISC2) & Network Enabled Weapons (NEW) - CP 2: IAMD Planner and Airspace Management Application - Airspace Information Service (ASMA - ASIS) FY 2014 Accomplishments: Continued development of ATOMS, RISC2, ASMA-ASIS and C2 of IAMD capabilities. Conducted multiple Warfighter Assessments FY 2015 Plans: Finish the development of ATOMS, RISC2, ASMA-ASIS and C2 of IAMD capabilities and begin testing. FY 2016 Plans: Conduct Development and Operational Testing of C2AOS-C2IS I.		9.015	11.239	2.611
Title: C2AOS-C2IS II		-	-	7.092

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Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207410F / Air & Space Operations Center (AOC)	Project (Number/Name) 675218 / Applications Development	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015
Description: C2AOS-C2IS II develops modular net-centric C2 applications for air battle planning, execution and management functions and creates web-enabled information services to expose air operations data in TBMCS applications and systems using standardized schemas. As well as providing new C2 capabilities for planning, execution and interoperability with other evolving GCCS FoS and other Service programs, and for Force Level data migration including execution of 4th & 5th Generation Fighter Platforms. - CP 3: Air Execution Information System (AXIS) FY 2014 Accomplishments: N/A FY 2015 Plans: Fine tune AXIS (CP-3) requirements of 4th & 5th Generation Platforms and plan for development of new delivery order. FY 2016 Plans: Execute the award and development of AXIS (CP-3)			
Title: Test and Evaluation Description: Test and Evaluation FY 2014 Accomplishments: Test and Evaluation focused on DT&E and OT&E strategy and restructure of test program , which included test planning, conduct and documentation review. FY 2015 Plans: Test and Evaluation continuing to focus on DT&E and OT&E, to include test planning, conduct and documentation review. Participate in multiple Government Acceptance Tests (GAT) and Risk Reduction Tests. FY 2016 Plans: Test and Evaluation will participate and/or conduct DT&E and OT&E, and participate in GAT.		1.228	2.899
Accomplishments/Planned Programs Subtotals		10.624	14.580
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			

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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 0207410F / <i>Air & Space Operations Center (AOC)</i>	Project (Number/Name) 675218 / <i>Applications Development</i>
D. Acquisition Strategy Projects will be awarded following full and open competition and will use an evolutionary acquisition strategy based on incremental development leveraging the C2 Applications and Information Services Development (C2AD) Indefinite Delivery/Indefinite Quantity (ID/IQ) contract.		
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.		

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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 0207410F / Air & Space Operations Center (AOC)				Project (Number/Name) 675218 / Applications Development					
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
Air Tasking Order Management System (ATOMS)	C/Various	Lockheed Martin : Colorado Springs, CO	0.000	0.016	May 2014	3.863	Mar 2015	0.200	Mar 2016	-		0.200	-	4.079	-
Request Information Services for Command and Control (RISC2)	C/Various	Science Applications International Corporation : McLean, VA	0.000	1.204	Feb 2014	0.349	Dec 2014	0.100	Dec 2015	-		0.100	-	1.653	-
Air Space Management Application/Air Space Information Service (ASMA/ASIS)	C/Various	Leidos, Inc. : Reston, VA	0.000	1.736	Mar 2014	0.736	Mar 2015	0.100	Mar 2016	-		0.100	-	2.572	-
Command and Control of Integrated Air and Missile Defense (C2 of IAMD)	C/Various	Lockheed Martin : Colorado Springs, CO	0.000	0.543	Feb 2015	0.500	Feb 2015	-		-		-	-	1.043	-
Air Execution Infomation System (AXIS)	C/TBD	TBD : TBD,	0.000	-		-		2.903	Dec 2015	-		2.903	-	2.903	-
Subtotal			0.000	3.499		5.448		3.303		-		3.303	-	12.250	-
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
Test Support	MIPR	Reliability Information Analysis Center : Fort Belvoir, VA	0.000	0.350	Aug 2014	-		-		-		-	-	0.350	-

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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 0207410F / Air & Space Operations Center (AOC)				Project (Number/Name) 675218 / Applications Development					
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
Test and Evaluation.	PO	46th Test Squadron : Eglin AFB, FL	0.000	0.878	Nov 2013	2.899	Jan 2015	1.809	Jan 2016	-		1.809	-	5.586	-
Subtotal			0.000	1.228		2.899		1.809		-		1.809	-	5.936	-
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
Systems Engineering	SS/ Various	MITRE : Bedford, MA	0.000	3.310	Oct 2013	3.527	Oct 2014	3.600	Oct 2015	-		3.600	-	10.437	-
Program Management Administration	C/Various	Various : Hanscom AFB, MA	0.000	2.587	Oct 2013	2.706	Oct 2014	2.800	Oct 2015	-		2.800	-	8.093	-
Subtotal			0.000	5.897		6.233		6.400		-		6.400	-	18.530	-
			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	10.624		14.580		11.512		-		11.512	-	36.716	-
Remarks															

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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 0207410F / Air & Space Operations Center (AOC)		
			Project (Number/Name) 675218 / Applications Development		

	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
ATOMS CP 1 Rel 1 Fielding																												
ATOMS CP 1 Rel 2 Development																												
ATOMS CP 1 Rel 2 Testing																												
ATOMS CP 1 Rel 3a Development																												
ATOMS CP 1 Rel 3a Testing																												
ATOMS CP 1 Rel 3b Development																												
ATOMS CP 1 Rel 3b Testing																												
ATOMS CP 1 Rel 3b Fielding																												
Request Information Services for C2 (RISC2) CP 1 Development																												
RISC2 CP 1 Testing																												
RISC2 CP 1 Fielding																												
Integrated Air and Missile Defense (IAMD) Planner CP 2 Rel 1 Development																												
IAMD Planner CP 2 Rel 2 Development																												
IAMD Planner CP 2 Rel 2 Testing																												
IAMD Planner CP 2 Rel 2 Fielding																												
Air Space Management Application (ASMA)/Air Information Services (ASIS) Development																												
ASMA / ASIS Testing																												
ASMA / ASIS Fielding																												
AXIS CP 3 Rel 1 Development																												
AXIS CP 3 Rel 1 Testing																												
AXIS CP 3 Rel 1 Fielding																												

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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 0207410F / <i>Air & Space Operations Center (AOC)</i>	Project (Number/Name) 675218 / <i>Applications Development</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
ATOMS CP 1 Rel 1 Fielding	1	2014	2	2014
ATOMS CP 1 Rel 2 Development	1	2014	2	2014
ATOMS CP 1 Rel 2 Testing	2	2014	2	2014
ATOMS CP 1 Rel 3a Development	3	2014	1	2015
ATOMS CP 1 Rel 3a Testing	2	2015	2	2015
ATOMS CP 1 Rel 3b Development	2	2015	1	2016
ATOMS CP 1 Rel 3b Testing	1	2016	2	2016
ATOMS CP 1 Rel 3b Fielding	2	2016	3	2016
Request Information Services for C2 (RISC2) CP 1 Development	1	2014	3	2015
RISC2 CP 1 Testing	3	2015	2	2016
RISC2 CP 1 Fielding	2	2016	3	2016
Integrated Air and Missile Defense (IAMD) Planner CP 2 Rel 1 Development	1	2014	3	2014
IAMD Planner CP 2 Rel 2 Development	3	2014	3	2015
IAMD Planner CP 2 Rel 2 Testing	3	2015	2	2016
IAMD Planner CP 2 Rel 2 Fielding	2	2016	3	2016
Air Space Management Application (ASMA)/Air Information Services (ASIS) Development	1	2014	4	2015
ASMA / ASIS Testing	4	2015	2	2016
ASMA / ASIS Fielding	2	2016	3	2016
AXIS CP 3 Rel 1 Development	4	2016	2	2017
AXIS CP 3 Rel 1 Testing	3	2017	3	2017
AXIS CP 3 Rel 1 Fielding	4	2017	1	2018

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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 0207410F / Air & Space Operations Center (AOC)				Project (Number/Name) 675220 / Unit Level			
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
675220: Unit Level	-	5.569	8.757	7.263	-	7.263	7.742	7.891	8.039	8.183	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
Project funds are used to develop, integrate, field, and maintain Unit Command and Control (UC2) as an evolving sequence of increasing software capabilities that support the execution of the air battle plan and the air tasking order message received from the AOC. UC2 operations software systems meet needs identified in the TBMCS Operational Requirements Document (ORD) (2001), the UC2 Baseline Systems Requirement Document (SRD) and the UC2 SRD 106 Appendix, by providing both the scheduling and mission preparation activities at the wing, group and squadron level, and the capabilities to report and track the success of each mission and influence decisions on future air battle planning. Unit Command and Control (UC2) is fielded to the Wing Operations Center (WOC), the Maintenance Operations Center (MOC), the Squadron Operations Center (SOC), and many other work-centers. UC2 requirements will be identified using the system modification request process.												
Activities also include studies and analysis to support both current program planning and execution, as well as future program planning.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2014	FY 2015	FY 2016	
Title: Software Development									5.382	7.972	6.665	
Description: UL/UC2 and UC2 capabilities development/integration.												
FY 2014 Accomplishments: Completed the UC2 System Requirements Document and program office cost estimate. In process of awarding of the contract for UC2. UC2 will provide service oriented infrastructure capable of meeting the Net-Ready key performance parameters. Accelerating should cost initiatives for virtualization and open source replacement of application server software into Inc2 Service Pack 3 (SP3).												
FY 2015 Plans: Development of UC2 Rel 1.1. Prepare for testing of 1.1 and fielding of UC2 1.1.												
FY 2016 Plans: Complete development of UC2 Rel 1.1. Test and field UC2 1.1. Start development of UC2 1.2												
Title: Testing and Test Support									0.187	0.785	0.598	
Description: Testing and test support activities.												
FY 2014 Accomplishments:												

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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 0207410F / Air & Space Operations Center (AOC)	Project (Number/Name) 675220 / Unit Level	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016
Continue tested,evaluated, and fielded UL/UC2 Inc 2 SP2. Starting Inc 2 SP3 testing.			
FY 2015 Plans: Will continue testing and evaluation of UL/UC2 Inc 2 SP3, field Inc2 SP3, and start early user testing on UC2 Release 1.1 to support agile development.			
FY 2016 Plans: Support UC2 warfighter assessments, complete testing of UC2 Rel 1.1, and start testing UC2 Rel 1.2.			
Accomplishments/Planned Programs Subtotals	5.569	8.757	7.263

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 # 834520: Theater Battle Management C2 System	3.247	3.825	3.129	-	3.129	3.320	3.377	3.437	3.499	Continuing	Continuing
Remarks											
D. Acquisition Strategy Projects will be awarded following full and open competition and will use an evolutionary acquisition strategy based on incremental development while incorporating agile development and testing principals.											
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.											

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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 0207410F / Air & Space Operations Center (AOC)				Project (Number/Name) 675220 / Unit Level					
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
Increment Development	C/CPFF	Lockheed Martin : Hampton, VA	0.000	1.623	Jan 2014	0.310		-		-		-	-	1.933	13.861
Third Party Integration	Various	Various : Various,	0.000	0.563	Dec 2013	0.100	Dec 2014	0.100		-		0.100	Continuing	Continuing	TBD
Unit Command & Control (UC2)	C/CPFF	Leidos Inc. : Reston, VA	0.000	1.810	Sep 2014	6.120	Jan 2015	5.166		-		5.166	7.000	20.096	10.530
Subtotal			0.000	3.996		6.530		5.266		-		5.266	-	-	-
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
Test Support	PO	46TS : Eglin AFB, FL	0.000	0.187	Dec 2013	0.785	Dec 2014	0.598		-		0.598	Continuing	Continuing	TBD
Subtotal			0.000	0.187		0.785		0.598		-		0.598	-	-	-
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
Systems Engineering	C/CPAF	MITRE : Bedford, MA	0.000	0.705	Oct 2013	0.796	Oct 2014	0.750		-		0.750	Continuing	Continuing	TBD
Program Management Administration	C/Various	Various : Hanscom AFB, MA	0.000	0.681	Oct 2013	0.646	Oct 2014	0.649		-		0.649	Continuing	Continuing	TBD
Subtotal			0.000	1.386		1.442		1.399		-		1.399	-	-	-

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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 0207410F / Air & Space Operations Center (AOC)					Project (Number/Name) 675220 / Unit Level			
	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	5.569		8.757		7.263		-		7.263	-	-	-
Remarks													

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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 0207410F / Air & Space Operations Center (AOC)					Project (Number/Name) 675220 / Unit Level			

	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
UC2 Rel 1.1 Planning																												
Inc 2 SP2																												
UC2 Rel 1.1 Development																												
Inc2 SP3																												
UC2 Rel 1.1 Testing																												
UC2 Rel 1.1 Fielding Decision																												
UC2 Rel 1.1 Fielding																												
UC2 Rel 1.2 Planning																												
UC2 Rel 1.2 Development																												
UC2 Rel 1.2 Testing																												
UC2 Rel 1.2 Fielding Decision																												
UC2 Rel 1.2 Fielding																												
UC2 Rel 1.3 Development																												
UC2 Rel 1.3 Testing																												
UC2 Rel 1.3 Fielding Decision																												
UC2 Rel 1.3 Fielding																												
UC2 Rel 1.4 Development																												
UC2 Rel 1.4 Testing																												
UC2 Rel 1.4 Fielding Decision																												
UC2 Rel 1.4 Fielding																												

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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 0207410F / Air & Space Operations Center (AOC)	Project (Number/Name) 675220 / Unit Level	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
UC2 Rel 1.1 Planning	1	2014	3	2014
Inc 2 SP2	2	2014	2	2015
UC2 Rel 1.1 Development	4	2014	4	2015
Inc2 SP3	2	2015	2	2016
UC2 Rel 1.1 Testing	1	2016	1	2016
UC2 Rel 1.1 Fielding Decision	2	2016	2	2016
UC2 Rel 1.1 Fielding	2	2016	4	2016
UC2 Rel 1.2 Planning	4	2015	1	2016
UC2 Rel 1.2 Development	2	2016	4	2016
UC2 Rel 1.2 Testing	1	2017	1	2017
UC2 Rel 1.2 Fielding Decision	2	2017	2	2017
UC2 Rel 1.2 Fielding	2	2017	4	2017
UC2 Rel 1.3 Development	2	2017	4	2017
UC2 Rel 1.3 Testing	1	2018	1	2018
UC2 Rel 1.3 Fielding Decision	2	2018	2	2018
UC2 Rel 1.3 Fielding	2	2018	4	2018
UC2 Rel 1.4 Development	2	2018	4	2018
UC2 Rel 1.4 Testing	1	2019	1	2019
UC2 Rel 1.4 Fielding Decision	2	2019	2	2019
UC2 Rel 1.4 Fielding	2	2019	4	2019

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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 0207410F / Air & Space Operations Center (AOC)				Project (Number/Name) 675221 / Personnel Recovery Command and Control (PRC2)			
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
675221: Personnel Recovery Command and Control (PRC2)	-	2.139	2.325	2.418	-	2.418	2.416	2.462	2.508	2.553	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project funds operational development necessary to acquire, modify, and sustain a segment of Air Force's C2 capabilities and services associated with Personnel Recovery. The Personnel Recovery Command and Control (PRC2) program develops and delivers tools and services for planning, collaborating and managing search and rescue efforts, as well as disseminating related information to all personnel recover mission coordinators across PR network. PRC2 provides an adaptive, networked, decentralized and timely situational awareness information for personnel recovery supporting personnel accountability and recovery missions worldwide. PRC2 delivers a globally accessible, collaborative, interoperable and integrated system to prevent, prepare for and respond to isolating events across a broad spectrum of US government which may include in the joint/coalition military and civilian rescue mission. The Joint Personnel Recovery (JPR) Initial Capability Document (ICD) (2012) articulates capabilities needed for PRC2.

The system collects, stores and delivers personnel/identity biometric data, emergency locator beacon registrations, isolated personnel reports, evasion plans of action, incident reports and other information management capabilities. The information is used for predictive, preventive and personnel vulnerability analysis and assessment in support of Personnel Recovery across Department of Defense and other national and international entities.

Activities also include studies and analysis to support both current program planning and execution, as well as future program planning.

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

	FY 2014	FY 2015	FY 2016
Title: PRC2	2.099	2.175	2.218
Description: Personnel Recovery Command and Control (PRC2) developing and delivering tools and services for planning and managing search and rescue efforts, and disseminating related information.			
FY 2014 Accomplishments: Developed and delivered PRC2 Build 2.1.7 Maintenance Release;; Provided compatibility with Internet Explorer 9/10. Developed and delivered PRC2 Build 2.1.8 web services to enable net-centric capability exposing data to joint users and to support future PR Mission Manager (PRMM) development. Continued development on Build 3.0.0, Mission Manager Inc 1 Search and Map Overlay Widgets: Provided the capability to query the PRMS/Joint SARSAT Electronic Tracking System (JSETS) database without logging into the PRMS website. Search Widgets also provide advanced search definitions not available via the PRMS website.			
FY 2015 Plans:			

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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 0207410F / Air & Space Operations Center (AOC)			Project (Number/Name) 675221 / Personnel Recovery Command and Control (PRC2)					
B. Accomplishments/Planned Programs (\$ in Millions)							FY 2014	FY 2015	FY 2016		
Complete development and field Build 3.0.0. PRC2 Build 4.0.0 Application Tech Refresh and Virtualization development will continue in FY15. Tech Refresh will normalize the PRMS database and will provide an increased net- centric capability while reducing lifecycle costs. Virtualization will provide increased availability and more robust security while decreasing sustainment costs. Will develop Build 5.0.0 Mission Manager Inc 2 creating an environment for the AOC Personnel Recovery Coordinator Cell to access situational awareness data to recover isolated personnel. This will provide situational awareness including geo-spatial visualization of IP location, weather, threat environment, airspace, and Air Tasking Order data. FY 2016 Plans: Complete development and field Builds 4.0.1and 4.0.2 Maintenance Releases and Build 5.0.0 Mission Manager Inc 2 capability. In FY16 follow on activities will focus on concept and risk reduction activities to support the development of Mission Manager in the Joint environment											
Title: Test and Evaluation Description: Test and Evaluation FY 2014 Accomplishments: Test and Evaluation focused on testing activities to integrate PRC2 Inc 2 capabilities. Bringing test suites up to Build 2.1.8 baseline. Follow on activities focusing on finalizing test documentation to support the development of Mission Manager. FY 2015 Plans: Test and Evaluation will focus on test activities to field Build 4.0 Tech Refresh/Virtualization. Follow on activities will focus on finalizing test documentation to support the development of Build 5.0.0 Mission Manager Inc 2. FY 2016 Plans: Test and Evaluation will focus on test activities to field Build 4.0.1 and 4.0.2 Mx Releases and Build 5.0.0 Mission Manager Inc 2 capability.							0.040	0.150	0.200		
Accomplishments/Planned Programs Subtotals							2.139	2.325	2.418		
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 # 834520: Theater Battle Management C2 System	1.040	1.250	1.255	-	1.255	1.262	1.284	1.307	1.330	Continuing	Continuing

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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 0207410F / Air & Space Operations Center (AOC)				Project (Number/Name) 675221 / Personnel Recovery Command and Control (PRC2)			
C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2016</u>	<u>FY 2016</u>	<u>FY 2016</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Complete</u>	<u>Total Cost</u>
<u>Remarks</u>											
D. Acquisition Strategy											
Projects will be awarded following full and open competition and will use an evolutionary acquisition strategy based on incremental development.											
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.											

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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 0207410F / Air & Space Operations Center (AOC)						Project (Number/Name) 675221 / Personnel Recovery Command and Control (PRC2)			
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
PRC2 Follow on Development	PO	Ogden ALC : Hill AFB, UT	0.000	0.712	Mar 2014	1.081	Dec 2014	1.118	Dec 2015	-		1.118	Continuing	Continuing	TBD
Subtotal			0.000	0.712		1.081		1.118		-		1.118	-	-	-
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
Test and Evaluation.	PO	46th Test Squadron : Eglin AFB, FL	0.000	0.040	Oct 2013	0.150	Oct 2014	0.200	Oct 2015	-		0.200	Continuing	Continuing	TBD
Subtotal			0.000	0.040		0.150		0.200		-		0.200	-	-	-
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
Systems Engineering	SS/ Various	MITRE : Bedford, MA	0.000	0.584	Oct 2013	0.330	Oct 2014	0.330	Oct 2014	-		0.330	Continuing	Continuing	TBD
Program Management Administration	C/Various	Various : Hanscom AFB, MA	0.000	0.803	Oct 2013	0.764	Dec 2014	0.770	Dec 2015	-		0.770	Continuing	Continuing	TBD
Subtotal			0.000	1.387		1.094		1.100		-		1.100	-	-	-

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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 0207410F / Air & Space Operations Center (AOC)				Project (Number/Name) 675221 / Personnel Recovery Command and Control (PRC2)						
			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	2.139		2.325		2.418		-		2.418	-	-	-

Remarks

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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 0207410F / Air & Space Operations Center (AOC)			Project (Number/Name) 675221 / Personnel Recovery Command and Control (PRC2)

	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
PRC2 Inc 3 Build 3.0.0 Mission Manager Inc 1 Development																												
PRC2 Inc 3 Build 3.0.0 Mission Manager Inc 1 Testing																												
PRC2 Inc 3 Build 3.0.0 Mission Manager Inc 1 Fielding																												
PRC2 Inc 4 Build 4.0.0 Virtualization Development																												
PRC2 Inc 4 Build 4.0.0 Virtualization Testing																												
PRC2 Inc 4 Build 4.0.0 Virtualization Fielding																												
PRC2 Inc 4 Build 4.0.1 Mx Release Development																												
PRC2 Inc 4 Build 4.0.1 Mx Release Testing																												
PRC2 Inc 4 Build 4.0.1 Mx Release Fielding																												
PRC2 Inc 4 Build 4.0.2 Mx Release Development																												
PRC2 Inc 4 Build 4.0.2 Mx Release Testing																												
PRC2 Inc 4 Build 4.0.2 Mx Release Fielding																												
PRC2 Inc 5 Build 5.0.0 Mission Manager Inc 2 Development																												
PRC2 Inc 5 Build 5.0.0 Mission Manager Inc 2 Testing																												
PRC2 Inc 5 Build 5.0.0 Mission Manager Inc 2 Fielding																												
PRC2 Inc 5 Build 5.0.1 Mx Release Development																												
PRC2 Inc 5 Build 5.0.1 Mx Release Testing																												

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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 0207410F / Air & Space Operations Center (AOC)										Project (Number/Name) 675221 / Personnel Recovery Command and Control (PRC2)																	
										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				
PRC2 Inc 5 Build 5.0.1 Mx Release Fielding																																					
PRC2 Inc 6 Build 6.0.0 Mission Manager Inc 3 Development																																					
PRC2 Inc 6 Build 6.0.0 Mission Manager Inc 3 Testing																																					
PRC2 Inc 6 Build 6.0.0 Mission Manager Inc 3 Fielding																																					
PRC2 Inc 6 Build 6.0.1 Mx Release Development																																					
PRC2 Inc 6 Build 6.0.1 Mx Release Testing																																					
PRC2 Inc 6 Build 6.0.1 Mx Release Fielding																																					

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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 0207410F / Air & Space Operations Center (AOC)	Project (Number/Name) 675221 / Personnel Recovery Command and Control (PRC2)	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
PRC2 Inc 3 Build 3.0.0 Mission Manager Inc 1 Development	2	2014	2	2015
PRC2 Inc 3 Build 3.0.0 Mission Manager Inc 1 Testing	2	2015	2	2015
PRC2 Inc 3 Build 3.0.0 Mission Manager Inc 1 Fielding	2	2015	2	2015
PRC2 Inc 4 Build 4.0.0 Virtualization Development	4	2014	2	2015
PRC2 Inc 4 Build 4.0.0 Virtualization Testing	3	2015	3	2015
PRC2 Inc 4 Build 4.0.0 Virtualization Fielding	4	2015	4	2015
PRC2 Inc 4 Build 4.0.1 Mx Release Development	3	2015	4	2015
PRC2 Inc 4 Build 4.0.1 Mx Release Testing	1	2016	1	2016
PRC2 Inc 4 Build 4.0.1 Mx Release Fielding	1	2016	1	2016
PRC2 Inc 4 Build 4.0.2 Mx Release Development	1	2016	3	2016
PRC2 Inc 4 Build 4.0.2 Mx Release Testing	3	2016	3	2016
PRC2 Inc 4 Build 4.0.2 Mx Release Fielding	3	2016	3	2016
PRC2 Inc 5 Build 5.0.0 Mission Manager Inc 2 Development	1	2015	3	2016
PRC2 Inc 5 Build 5.0.0 Mission Manager Inc 2 Testing	3	2016	4	2016
PRC2 Inc 5 Build 5.0.0 Mission Manager Inc 2 Fielding	4	2016	1	2017
PRC2 Inc 5 Build 5.0.1 Mx Release Development	3	2016	1	2017
PRC2 Inc 5 Build 5.0.1 Mx Release Testing	1	2017	1	2017
PRC2 Inc 5 Build 5.0.1 Mx Release Fielding	2	2017	2	2017
PRC2 Inc 6 Build 6.0.0 Mission Manager Inc 3 Development	1	2017	4	2019
PRC2 Inc 6 Build 6.0.0 Mission Manager Inc 3 Testing	4	2019	1	2020
PRC2 Inc 6 Build 6.0.0 Mission Manager Inc 3 Fielding	1	2020	1	2020
PRC2 Inc 6 Build 6.0.1 Mx Release Development	4	2019	2	2020

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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 0207410F / Air & Space Operations Center (AOC)		Project (Number/Name) 675221 / Personnel Recovery Command and Control (PRC2)	
	Start		End	
Events	Quarter	Year	Quarter	Year
PRC2 Inc 6 Build 6.0.1 Mx Release Testing	2	2020	2	2020
PRC2 Inc 6 Build 6.0.1 Mx Release Fielding	2	2020	2	2020