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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0303158F: Joint Command and Control							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	3.140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
675216: JC2 Technology and System Development	3.140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

**Note**  
In FY 2010, 5216 JC2 Technology and System Development, Net-Enabled Command Capability (NECC), was terminated. This exhibit reflects an Air Force request for a technical adjustment transferring \$2.157M in FY 2011 from PE 0303158F, R-1 Line No. 179 "Joint Command and Control Program (JC2)" to PE 0303150F, R-1 Line No. 178 "Global Command & Control System."

**A. Mission Description and Budget Item Justification**  
This effort contributes to the next generation of joint command and control (C2) capabilities for the Department of Defense (DOD). The GCCS program includes each of the Component GCCS programs (i.e., GCCS-AF FoS, GCCS-M, GCCS-J and GCCS-A), which are the current programs of record within each component. These GCCS programs will transition in response to a critical need for coordinated and integrated enhancements to joint C2 capabilities.

The Air Force's contribution to joint C2 will be evolved from elements of the GCCS-Air Force Family of Systems (GCCS-AF FoS). GCCS-AF FoS consists of the following programs (each with their own program elements): TBMCS Force Level (TBMCS-FL), Joint Defensive Planner (JDP) - part of TBMCS-FL baseline program element, Joint Targeting Toolkit (JTT), GCCS-AF Infrastructure (GCCS-AF I), Deliberate Crisis Action Planning and Execution Segment (DCAPES) and the Joint Environmental Toolkit (JET). Leveraging the capabilities provided by the Net-Centric Enterprise Services (NCES) program, joint C2 will accelerate the evolution towards a net-centric, web-based, open-system standards approach to providing C2 capabilities and services as the core of the DOD C2 enterprise architecture.

The DOD's joint C2 architecture will deliver capabilities as stated in related Joint Requirements Oversight Council (JROC) validated Capability Development Documents (CDD). This effort enhances the capabilities of the GCCS FoS and includes the migration of capabilities to a more modern, interoperable architecture. The technology development phase encompasses risk reduction activities and engineering analyses with system and architectural analyses. Activities also include studies and analysis to support both current program planning and execution and future program planning. The requested RDT&E funding is critical to support Air Force net-centric transformation efforts in the areas of strategic and operational command and control.

Funding supports acquisition activities related to joint C2 evolution. These activities include development, testing, integration, architecture and systems engineering, and transition planning in coordination and synchronization with DISA and the other Services.

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This effort is Budget Activity 7 and will perform efforts necessary to evaluate integrated technologies, representative modes or prototype joint C2 capabilities that are effective in a common C2 architecture and consistent with established technical standards.					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	3.140	3.087	0.000	0.000	0.000
Current President's Budget	3.140	0.000	0.000	0.000	0.000
Total Adjustments	0.000	-3.087	0.000	0.000	0.000
• Congressional General Reductions		-3.087			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	0.000	0.000	0.000
Change Summary Explanation					
Project Termination: NECC project within PE 0303158F terminated - OUSD(AT&L) ADM - 2 Nov 2009.					
FY 2010 Congressional reduction of \$3.087M due to NECC termination.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0303158F: Joint Command and Control				PROJECT 675216: JC2 Technology and System Development			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
675216: JC2 Technology and System Development	3.140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

**Note**  
In FY 2010, 5216 JC2 Technology and System Development, Net-Enabled Command Capability (NECC), was terminated.

**A. Mission Description and Budget Item Justification**  
Joint Command and Control (JC2) is the next generation of command and control capabilities for the Department of Defense. JC2 will eventually replace the Global Command and Control System (GCCS) Family of Systems (FoS) Program. The GCCS program includes each of the component GCCS programs (i.e., GCCS-AF FoS, GCCS-M, GCCS-J, and GCCS-A), which are the current systems of record within each component. These GCCS programs will eventually transition into a single Joint Command and Control (JC2) Capability effort. JC2 will consist of eight Mission Capability Packages: Situational Awareness, Force Readiness, Force Projection, Intelligence, Force Protection, Force Employment (Air/Space), Force Employment (Land Operations), and Force Employment (Maritime/Littoral Operations).

The Air Force's initial contribution to JC2 will be drawn from the GCCS-Air Force Family of Systems (GCCS-AF FoS). GCCS-AF FoS consists of the following programs (each with their own program elements): TBMCS Force Level (TBMCS-FL), Joint Defensive Planner (JDP), Time Critical Targeting Functionality (TCT-F), Joint Targeting Toolkit (JTT), GCCS-AF Infrastructure (GCCS-AF I), Deliberate Crisis Action Planning and Execution Segment (DCAPES) and the C2 portion of the Joint Environmental Toolkit (JET). Using the concepts and capabilities of Net-Centric Enterprise Services, JC2 will provide a vast range of command and control capabilities to the warfighter. JC2 will begin an accelerated evolution toward a more net-centric, web-based, open system standards approach to providing C2 capabilities and services that will establish JC2 as the core of the DoD Command and Control architecture.

The current GCCS-AF FoS will transition to JC2 in the future. JC2 will deliver the capabilities as stated in the updated Operational Requirements Document (ORD) and complementing Capabilities Development Document (CDD). JC2 expands the capabilities developed and integrated into the GCCS FoS including the migration of capabilities to a more modern architecture. Risk reduction activities and engineering analysis with selected system and architectural analysis will provide the initial steps of the technical development. The requested RDT&E funding is critical to support Air Force Transformation efforts in the area of strategic and operational command and control.

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0303158F: Joint Command and Control		PROJECT 675216: JC2 Technology and System Development		
Funding for FY06 and beyond will support the Air Force contribution to JC2 by establishing the Air Force Program Management Office (PMO) responsible for all AF acquisition activities related to JC2. The AF PMO will be responsible for development, integration, architecture, system engineering, testing and transition planning, as directed by the JC2 Joint Program Office (JPO).						
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: Provide joint C2 technical engineering and systems development  FY 2009 Accomplishments: In FY 2009: Perform systems analysis and architecture concept design for Air Force contribution to the Net-Enabled Command Capability (NECC) program. Provide support services for Air Force component program management office.  FY 2010 Plans: In FY 2010: N/A  FY 2011 Base Plans: In FY 2011: N/A  FY 2011 OCO Plans: In FY 2011 OCO: N/A		3.140	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals		3.140	0.000	0.000	0.000	0.000

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Air Force										<b>DATE:</b> February 2010	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0303158F: <i>Joint Command and Control</i>				<b>PROJECT</b> 675216: <i>JC2 Technology and System Development</i>			
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• PE 0303158F: <i>Air Force Global Command &amp; Control Sytem, (OPAF)</i>	2.120	5.571	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>D. Acquisition Strategy</b>											
The joint C2 acquisition strategy is developed jointly by the Defense Information Systems Agency (DISA), the Services, the Assistant Secretary of Defense for Networks and Information Integration (ASD (NII)), Office of the Under Secretary of Defense for Acquisition, Technology and Logistics (OUSD(AT&L)), and US Joint Forces Command (USJFCOM).											
Each service/component is responsible for awarding new or utilizing existing contracts to develop joint C2 capabilities. All related activities are fully coordinated and integrated among DISA and Service offices.											
<b>E. Performance Metrics</b>											
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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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Air Force</b>											<b>DATE:</b> February 2010			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0303158F: <i>Joint Command and Control</i>				<b>PROJECT</b> 675216: <i>JC2 Technology and System Development</i>						
<b>Support (\$ in Millions)</b>														
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>				
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>	
Technical Engineering Services	FFRDC	MITRE Bedford, MA	1.760	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing	
<b>Subtotal</b>			1.760	0.000		0.000		0.000		0.000				
<b>Remarks</b>														
<b>Management Services (\$ in Millions)</b>														
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>				
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>	
Program Management Support	C/CPFF	350 ELSG Hanscom AFB, MA	1.380	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing	
<b>Subtotal</b>			1.380	0.000		0.000		0.000		0.000				
<b>Remarks</b>														
			<b>Total Prior Years Cost</b>	<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>	
<b>Project Cost Totals</b>			3.140	0.000		0.000		0.000		0.000				

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2011 Air Force							<b>DATE:</b> February 2010	
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	<b>Total Prior Years Cost</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Remarks</b> Total Prior Years Cost may include only FY 2009 data.								

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2011 Air Force</b>		<b>DATE:</b> February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0303158F: <i>Joint Command and Control</i>	<b>PROJECT</b> 675216: <i>JC2 Technology and System Development</i>



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## Joint Command & Control - Schedule

	FY09	FY10	FY11	FY12	FY13	FY14	FY15
<b>NECC</b>							
AF PMO Support							
<b>Joint C2</b>		Transition					

*Integrity - Service - Excellence*

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force			DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0303158F: Joint Command and Control	PROJECT 675216: JC2 Technology and System Development		
Schedule Details				
	Start		End	
Event	Quarter	Year	Quarter	Year
Air Force Program Management Office (PMO) support to NECC	1	2009	4	2009
Transition and support to evolving joint C2 architecture, engineering and acquisition strategy	1	2010	4	2010

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