

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force **Date:** March 2023

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 0208097F / <i>Joint Cyber Command and Control (JCC2)</i>
--	---

COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	78.592	79.955	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	158.547
676045: <i>Foundational Efforts</i>	-	78.592	79.955	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	158.547
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

Note
 In FY 2024, PE 0208097F, (Joint Cyber Command and Control (JCC2)), Project 676045, (Foundational Efforts) efforts were transferred to PE 0208097JCY, (Joint Cyber Command and Control (JCC2)), Project CY02, (Cyber Command and Control), in order to satisfy Congressional requirements in the FY22 NDAA, Section 1507, transferring responsibilities for the planning, programming, budgeting, and execution of the resources to USCYBERCOM.

In FY 2022, PE 0604250D8Z, Advanced Innovative Technologies, Project IKE requirements and funding were transferred to PE 0208097F, Joint Cyber Command and Control (JCC2), Project 676045, Foundational Efforts, in order to operationalize prototype battlespace management capabilities into JCC2 program.

A. Mission Description and Budget Item Justification

Joint Cyber Command and Control (JCC2) provides Combatant Commanders, Joint Force Commanders and Service Component Commanders with enhanced situational awareness and battle management for cyberspace operations missions and forces. JCC2 establishes congressionally directed focal point to provide integrated JCC2 solutions to all echelons for execution of cyberspace operations to enable and accelerate planning/collaboration between Cyber Mission Forces (CMF) and Combatant Commands (CCMD).

It will integrate Cyber Command and Control (C2) with Joint, Coalition and inter-agency C2 to enhance multi-domain operations, reduce planning time, improve decision quality and speed resulting in a shorter kill chain. Capabilities will be developed to address the Cyber Mission Forces used to conduct cyber operations. Additionally, it will leverage and utilize a Continuous Integration/Continuous Deployment (CI/CD) Framework to pace development with warfighter need. JCC2 development activities include, but are not limited to: rapid prototyping, development of software/hardware systems; integration and transition of lab developed cyber capabilities to the warfighter; testing and evaluation; program management, studies, analysis, pilots, and demonstrations; risk reduction for emerging technologies; and development and assessment of operational systems for inclusion into JCC2 to meet capability requirements.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, or 0606398F. In FY22 3.700M was expended for civilian pay expenses in this program element, and in FY23 5.992M is forecasted for civilian pay expenses in this program element.

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.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force	Date: March 2023
--	-------------------------

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 0208097F <i>I Joint Cyber Command and Control (JCC2)</i>
--	---

B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	79.079	80.740	13.933	0.000	13.933
Current President's Budget	78.592	79.955	0.000	0.000	0.000
Total Adjustments	-0.487	-0.785	-13.933	0.000	-13.933
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	2.000	0.000			
• SBIR/STTR Transfer	-2.487	0.000			
• Other Adjustments	0.000	-0.785	-13.933	0.000	-13.933

Change Summary Explanation

In FY24, PE 0208097F (Joint Cyber Command and Control (JCC2)), Project 676045 (Foundational Efforts) efforts were transferred to PE 0208097JCY, (Joint Cyber Command and Control (JCC2)), Project CY02, (Cyber Command and Control), in order to satisfy Congressional requirements in the FY22 NDAA, Section 1507, transferring responsibilities for the planning, programming, budgeting, and execution of the resources to USCYBERCOM.

In FY23, the Other Adjustment is for FFRDC reductions.

In FY22, 0208097F (Joint Cyber Command and Control) received a 2.000M Below Threshold Reprogramming to continue migration of the JCC2 Mission Assurance Decision Support System application into the LevelUp development environment and deliver Mission Relevant Terrain - Cyber (MRT-C) information to operational forces needed to identify and mitigate cyber-related risks.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
Title: Foundational Efforts	78.592	79.955	0.000
Description: Foundational Efforts are program activities, at multiple operating locations, supporting development and evaluations activities and JCC2 baseline efforts to provide capability. Actions include system and software engineering, risk management, developmental framework management, and the execution of acquisition activities.			
FY 2023 Plans:			
- Develop Mission Relevant Terrain in Cyberspace			
- Create, deliver, and integrate the Force Readiness/Presentation capability			
- Develop/improve tools to increase shared situational/battle space awareness, cyber ops planning and cyber sensing capabilities based on real-world use during offensive/defensive cyber operations			

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force	Date: March 2023
--	-------------------------

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 0208097F <i>I Joint Cyber Command and Control (JCC2)</i>
--	---

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
<ul style="list-style-type: none"> - Develop a capability to use a common framework for cyber risk assessments - Create and execute support contract for Help Desk and IT Service Management services - Develop API interface for development and integration of data sources - Develop a framework for expedient and flexible requirements gathering, processing, and capability delivery - Migrate capabilities to cloud service to streamline scaling and support faster delivery - Enhance automation for mapping/monitoring of mission relevant terrain at all domains - Integrate Situational Awareness and Battle Management Minimum Viable Capability Releases coupled with the incorporation of JCWA components - Scale and deliver capability through an agile development model, delivering operational capabilities as determined by governance process <p>FY 2024 Plans: N/A</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred to USCYBERCOM in accordance with FY22 NDAA Section 1507.</p>			
Accomplishments/Planned Programs Subtotals	78.592	79.955	0.000

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

Remarks

E. Acquisition Strategy
JCC2 is in the Software Acquisition Execution Phase which enables continuous integration and delivery of software capability at the speed of relevance. JCC2 will apply agile acquisition tenants to the programmatic, design/engineering, test, and delivery aspects to provide an ability to deliver Situational Awareness/C2 capabilities to the warfighter in a rapid manner. JCC2 is transitioning from a collection of distinct, special-purpose tools to an integrated joint C2 capability to reduce overall lifecycle costs, improve interoperability, and increase information sharing across the CCMDs.

The JCC2 program office is utilizing new and existing contract vehicles and concept, development, risk management, production, or deployment plans as part of a streamlined approach. The JCC2 program office has established a continuous integration/continuous development pipeline to facilitate the rapid development, integration, and fielding of capabilities to remain responsive to evolving warfighter requirements. The JCC2 program will execute the agile development requirements provided by the Army, Navy, Marine Corps, Air Force, and USCYBERCOM stakeholders in accordance with the prioritization provided by the multi-Service JCC2 governance structure.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force **Date:** March 2023

Appropriation/Budget Activity
3600: *Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development*

R-1 Program Element (Number/Name)
PE 0208097F *I Joint Cyber Command and Control (JCC2)*

The JCC2 program office is integrating several C2 mission systems for battle management and situational awareness. Most of the programs are using Agile development efforts, making rapid changes and upgrades to the applications and/or prototypes. In addition to converging the contracting efforts, the multiple mission systems, or applications, will eventually converge onto a shared C2 hosting and transit cloud infrastructure created by the PMO under the new Software Acquisition Pathway program. This approach will deliver an integrated JCC2 capability for Battle Management (BM) and Situational Awareness (SA). The JCC2 baseline capability relies on extensive development and evaluation efforts to analyze integration constraints and opportunities of Service-specific cyber capabilities.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Air Force												Date: March 2023				
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)								
3600 / 7				PE 0208097F / Joint Cyber Command and Control (JCC2)				676045 / Foundational Efforts								
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	
JCC2 CI/CD Infrastructure	Various	Multiple : Multiple	-	3.604	Mar 2022	4.432	Feb 2023	-		-		-	0.000	8.036	-	
JCC2 Agile Capability Development	Various	Multiple : Multiple	-	68.813	Mar 2022	64.501	Feb 2023	-		-		-	0.000	133.314	-	
Subtotal			-	72.417		68.933		-		-		-	0.000	141.350	N/A	
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	
Direct Cite Authority Civilian Pay	TBD	USAF : Hanscom AFB, MA	-	3.700	Oct 2021	5.992	Oct 2022	-		-		-	0.000	9.692	-	
Subtotal			-	3.700		5.992		-		-		-	0.000	9.692	N/A	
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	C/CPAF	Not specified. : TBD	-	-		2.000	Oct 2022	-		-		-	0.000	2.000	-	
Subtotal			-	-		2.000		-		-		-	0.000	2.000	N/A	
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	
JCC2 Acquisition Support	Various	Multiple : Multiple	-	2.475	Nov 2021	3.030	Nov 2022	-		-		-	0.000	5.505	-	
Subtotal			-	2.475		3.030		-		-		-	0.000	5.505	N/A	
Project Cost Totals			-	78.592		79.955		-		-		-	0.000	158.547	N/A	

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Air Force							Date: March 2023			
Appropriation/Budget Activity 3600 / 7			R-1 Program Element (Number/Name) PE 0208097F / <i>Joint Cyber Command and Control (JCC2)</i>			Project (Number/Name) 676045 / <i>Foundational Efforts</i>				
	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract	

Remarks

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0208097F / <i>Joint Cyber Command and Control (JCC2)</i>	Project (Number/Name) 676045 / <i>Foundational Efforts</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Foundational Events				
Transition DOD pilot systems to USAF	1	2022	4	2023
JCC2 CI/CD Infrastructure	1	2022	4	2023
JCC2 Agile Capability Development	1	2022	4	2023
- JCC2 Agile Capability Development of Situational Awareness (SA) MVCR	1	2022	4	2023
- JCC2 Agile Capability Development of Battle Management (BM) MVCR	1	2022	4	2023
JCC2 Acquisition Support	1	2022	4	2023

Note

Situational Awareness (SA) Minimum Viable Capability Release (MVCR):
Development of features that enable automation of data between network, mission, and threat domains.

Battle Management (BM) MVCR:
Development of features that enable Planning, Directing, Monitoring and Assessment capabilities in support of cyberspace operations at all levels of war.