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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 The Joint Staff **Date:** May 2021

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 6: RDT&E Management Support</i>	R-1 Program Element (Number/Name) PE 0603829J / <i>Joint Capability Experimentation</i>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	0.000	10.971	11.239	8.444	-	8.444	-	-	-	-	-	-
001: <i>Joint Capability Experimentation</i>	0.000	10.971	11.239	8.444	-	8.444	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

The FY2019 National Defense Authorization Act (NDAA) amends the Chairman’s responsibilities to address experimentation on future concepts and the 2018 National Defense Strategy Implementation Guidance directs that rigorous experimentation take place on concepts to ensure Department investments adequately address future requirements as well as those of today. Accordingly, the Joint Staff requires an experimentation capability to analyze and validate priority joint concept required capabilities. The Joint Staff will support the Global Integrated Wargame (GIWG) 21 events to examine the Joint Warfighting Concept (JWC) 2.0 operational logic and identified gaps to support delivery of a tested concept to the Secretary of Defense.

Concept analysis and validation will have a multi-faceted nature to meet the Chairmen’s Title 10 responsibility of, “identifying new joint military capabilities based on advances in technology and concepts of operation, and recommending investments and experiments in such capabilities.” Wargames will assess baseline mission and campaign level outcomes of the concepts as well as identify a tradespace of potential new capabilities. This tradespace of capabilities is further explored with quantitative models and software that identify the most efficient cost and capability tradeoffs to help meet the Title 10 responsibility of “advising the Secretary on new and alternative joint military capabilities, and alternative program recommendations and budget proposals, within projected resource levels.”

The National Defense Strategy directs “early design tradeoffs in the requirements process to increase the speed of delivery.” The Joint Staff approach to tradespace exploration follows that guidance by providing a cost conscious and operationally relevant prioritization tradeoff technique early in the portfolio design process. Using this rigorous prioritization approach, the capability development cycle can efficiently focus resources on more detailed experimentation of specific capabilities to inform the requirements process. The analysis from the experimentation program will be used to provide foundational evidence to directly inform the Joint Military Net Assessment (JMNA), the Chairman’s Program Recommendation (CPR), and ultimately the Defense Planning Guidance for Joint Force development and design.

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B. Program Change Summary (\$ in Millions)	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022 Base</u>	<u>FY 2022 OCO</u>	<u>FY 2022 Total</u>
Previous President's Budget	10.971	11.239	11.006	-	11.006
Current President's Budget	10.971	11.239	8.444	-	8.444
Total Adjustments	0.000	0.000	-2.562	-	-2.562
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Total Other Adjustments	-	-	-2.562	-	-2.562

Change Summary Explanation

Reductions to inflation and other defense wide economic adjustments.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 The Joint Staff										Date: May 2021		
Appropriation/Budget Activity 0400 / 6					R-1 Program Element (Number/Name) PE 0603829J / <i>Joint Capability Experimentation</i>				Project (Number/Name) 001 / <i>Joint Capability Experimentation</i>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
001: <i>Joint Capability Experimentation</i>	0.000	10.971	11.239	8.444	-	8.444	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The FY2019 NDAA amended the Chairman’s responsibilities to include experimentation on future concepts. The 2018 National Defense Strategy Implementation Guidance directed rigorous experimentation on concepts as a means to ensure Department investments adequately address future requirements, not just near term. Given this, the Joint Staff must establish an experimentation capability suitable for analysis and validation of priority joint concept required capabilities. The base of experimentation and wargaming will expand through the initial operating capability to full operating capability. This will provide the necessary capacity and capability. The combination will allow the Chairman to identify cost efficient and effective capability tradeoffs. This capability will enable the Chairman to fulfill his Title 10 responsibility, “advising the Secretary on new and alternative joint military capabilities, and alternative program recommendations and budget proposals, within projected resource levels.” This capability more fully supports the Chairman’s production of the Joint Military Needs Assessment (JMNA), the Chairman’s Program Recommendation (CPR) and ultimately the Defense Planning Guidance for Joint Force development and design.

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

	FY 2020	FY 2021	FY 2022
Title: Joint Capability Experimentation	10.971	11.239	8.444
Description: The FY 2019 NDAA amended the Chairman’s responsibilities to address experimentation on future concepts and the 2018 National Defense Strategy Implementation Guidance directed vigorous experimentation take place on concepts to ensure department investments are adequately addressing future requirements as well as those today. The project will deliver analytically rigorous, resource-conscious and operationally-validated portfolio investment strategies for the CJCS to ensure an enduring competitive advantage.			
FY 2021 Plans: The synergized and synchronized way forward accelerates the integration of new concepts and capabilities into the Joint Force by developing a continuously adapting Joint Force Development and Design (JFDD) enterprise that can inform Service force development and design efforts. To facilitate this initiative requires several lines of effort (LOE):			
1) Developing and executing Globally Integrated Exercises (GIE);			
2) Developing and executing a new series of Globally Integrated Wargames (GIWGs) and the associated development of concepts;			

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2020	FY 2021	FY 2022
<p>3) Developing and deploying the Information Technology (IT) architecture to collect and share data and information (i.e. exercises, experimentation, wargaming, analysis) that supports Joint Force Development and Design (JFDD) including Globally Integrated Exercises GIE, Globally Integrated Wargame (GIWG), and Joint Warfighting Concepts;</p> <p>4) Conducting JFDD Enterprise Integration and Testing to inform key decisions and evaluate GIWGs and other JFDD activities including in the near-term JADC2, Contested Logistics, Global Fires, and Information Advantage; and</p> <p>5) Employing red teaming at all levels, implementing reforms to Professional Military Education (PME) for JFDD and incorporating emerging concepts into Joint Doctrine.</p> <p>Funding allows for alignment and coordination of disparate activities across the Department and establishes a capability for joint experimentation and wargaming focused on JFDD that will enhance the capability of the Joint Staff to provide the Chairman with sound analysis of the future environment, concepts, and joint capabilities.</p> <p>FY 2022 Plans: Execute joint experimentation and wargaming focused on Joint Force Development and Design (JFDD) that will enhance the capability of the Joint Staff to provide the Chairman with sound analysis of the future environment, concepts, and joint capabilities.</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: Adjustments for Defense-wide economic assumptions.</p>				
Accomplishments/Planned Programs Subtotals		10.971	11.239	8.444
C. Other Program Funding Summary (\$ in Millions)				
N/A				
Remarks				
D. Acquisition Strategy				
N/A				