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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Defense Information Systems Agency **Date:** May 2021

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 8: Software and Digital Technology Pilot Programs</i>	R-1 Program Element (Number/Name) PE 0604532K / <i>Joint Artificial Intelligence</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	0.000	186.639	-	186.639	-	-	-	-	Continuing	Continuing
JAIC: JA1	-	0.000	0.000	186.639	-	186.639	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

The JAIC was established to preserve and expand our military advantage in support of the Department’s 2018 National Defense Strategy (NDS). As a primarily executing body it will accelerate the delivery of Artificial Intelligence (AI) enabled capabilities, scale the Department-wide impact of AI, and synchronize Department of Defense (DoD) AI activities to expand Joint Force advantages. The JAIC mission is to accelerate the delivery of AI to achieve impact scaled across the DoD at relevant speed to transform the DoD and ensure the nation maintains a competitive advantage. JAIC capitalizes on Project Maven’s efforts as the pathfinder AI initiative for the DoD to further critical AI architecture and prototyping to rapidly expand AI to other mission areas. As JAIC efforts prove relevant, they will expedite technology transition from the laboratory to operational use, and increase Joint Force capability. Most military data storage, utilization, and analytic tools and systems were designed pre-AI and require specialized integration to enable the insertion of algorithms into their software baseline. JAIC capabilities are commercial technology initiatives that insert commercial AI into existing programs of record.

JAIC will execute an initial sequence of cross-functional use cases to demonstrate value and create momentum, called National Mission Initiatives (NMI). NMIs will rapidly develop and deploy AI across the Joint Force for selected high-priority, pressing operational or business reform challenges. Additionally, JAIC will work closely with individual components to help identify, shape, and accelerate component-specific AI deployments. NMI efforts will include selecting commercial and academic partners for prototypes, and develop standardized processes with respect to data, testing and evaluation, and cybersecurity. JAIC will use lessons learned from these initial projects to establish new processes and standards that will be repeatable across additional projects and immediately relevant to the Joint Force. This will be done in collaboration with partners across technology companies, consulting firms, academia, government labs, Federally Funded Research and Development Centers (FFRDC), services, and international partners.

To support NDS, the JAIC will catalyze and develop AI capabilities to enhance readiness and lethality and ensure DoD maintains an advantage over adversaries. JAIC will spearhead this unique opportunity to expand the competitive space across all domains with AI. JAIC efforts will directly contribute to increased military readiness towards a more lethal Joint Force, it will strengthen alliances and attract new partners by focusing on global problems, and it will enable Departmental reform to increase performance and affordability. JAIC will cultivate workforce talent by recruiting, developing, and retaining high-quality personnel to enable the development and delivery of AI. This will bring critical skills into the department by drawing outside expertise, and leveraging small companies, start-ups, and universities. Implementing AI at a speed of relevance hinges on the ability to integrate AI better than our adversaries, and the JAIC will enable the Department to adapt AI into how it fights. JAIC will focus on speed of delivery, continuous adaptation, and frequent capability delivery sprints. To fully realize this potential, the JAIC will pioneer AI approaches across the full scale of the global enterprise in a manner that is jointly interoperable with allies, partners, military Services, and agencies. Specifically, JAIC will identify and implement new organizational approaches, establish key AI building blocks and standards, develop and attract AI talent, and introduce new operational models that will enable DoD to systematically take advantage of AI at enterprise scale. The JAIC will fulfill the National Security Strategy and NDS to ensure conventional overmatch through dual-use commercial technology and partnered DoD-developed AI. The JAIC will collaborate with non-governmental organizations, corporations, strategic influencers, and partners and allies. JAIC will seize the initiative to lead the world in the development and adoption of transformative defense AI solutions that are safe, ethical, and secure. JAIC will spearhead this effort, engaging with the best minds in government, the private sector, academia, and international community.

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Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 8: Software and Digital Technology Pilot Programs</i>	R-1 Program Element (Number/Name) PE 0604532K / <i>Joint Artificial Intelligence</i>
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B. Program Change Summary (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	0.000	0.000	186.639	-	186.639
Total Adjustments	0.000	0.000	186.639	-	186.639
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustment	-	-	186.639	-	186.639

Change Summary Explanation

The increase of +\$186.639 in FY 2022 reflects a realigning of from O&M (+\$72.724) and RDT&E BA7 (+\$106.434) to the newly created BA 8: Software and Digital Technology for the Software Pilot Program. This also includes an increase of +\$8.040 received for the COVID-19 for requirements to support the health of the Warfighter predictive analytics/forecasting platform; for use by the COCOMS NORAD, NORTHCOM (North American Aerospace Defense Command, and Northern Command). Increase is offset by a decrease of -\$0.559 due to a technical adjustment.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Information Systems Agency										Date: May 2021		
Appropriation/Budget Activity 0400 / 8					R-1 Program Element (Number/Name) PE 0604532K / <i>Joint Artificial Intelligence</i>				Project (Number/Name) JAIC / JA1			
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
JAIC: JA1	-	0.000	0.000	186.639	-	186.639	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

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To support the National Defense Strategy (NDS), the JAIC will catalyze and develop AI capabilities to enhance readiness and lethality and ensure DoD maintains an advantage over adversaries. JAIC will spearhead this unique opportunity to expand the competitive space across all domains with AI. JAIC efforts will directly contribute to increased military readiness towards a more lethal Joint Force, it will strengthen alliances and attract new partners by focusing on global problems, and it will enable Departmental reform to increase performance and affordability. JAIC will cultivate workforce talent by recruiting, developing, and retaining high-quality personnel to enable the development and delivery of AI. This will bring critical skills into the department by drawing outside expertise, and leveraging small companies, start-ups, and universities. Implementing AI at a speed of relevance hinges on the ability to integrate AI better than our adversaries, and the JAIC will enable the Department to adapt AI into how it fights. JAIC will focus on speed of delivery, continuous adaptation, and frequent capability delivery sprints. To fully realize this potential, the JAIC will pioneer AI approaches across the full scale of the global enterprise in a manner that is jointly interoperable with allies, partners, military Services, and agencies. Specifically, JAIC will identify and implement new organizational approaches, establish key AI building blocks and standards, develop and attract AI talent, and introduce new operational models that will enable DoD to systematically take advantage of AI at enterprise scale. The JAIC will fulfill the National Security Strategy and NDS to ensure conventional overmatch through dual-use commercial technology and partnered DoD-developed AI. The JAIC will collaborate with non-governmental organizations, corporations, strategic influencers, and partners and allies. JAIC will seize the initiative to lead the world in the development and adoption of transformative defense AI solutions that are safe, ethical, and secure. JAIC will spearhead this effort, engaging with the best minds in government, the private sector, academia, and international community.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Defense Information Systems Agency		Date: May 2021
Appropriation/Budget Activity 0400 / 8	R-1 Program Element (Number/Name) PE 0604532K / <i>Joint Artificial Intelligence</i>	Project (Number/Name) JAIC / JA1

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022
<p>Title: Joint Artificial Intelligence Center (JAIC)</p> <p>Description: JAIC develops, tests, prototypes and demonstrates innovative AI, Machine Learning (ML), data infrastructure, and model/algorithm test and assessment capabilities to integrate AI capabilities across numerous domains and technical areas including maintenance and supply chain, personnel recovery, infrastructure assessment, geospatial monitoring during disaster, and cyber sense making. JAIC develops and evaluates integrated prototype technologies in realistic operating environments with DoD entities to assess the performance or cost reduction potential of applying such advanced technology to scale across multiple services. JAIC does this by aligning rapid prototype projects under NMI and leverages existing commercial technology for DoD use, built upon a common architecture that enables the DoD to rapidly scale AI capability.</p> <p>FY 2022 Plans: FY 2021 O&M Plans: \$72.724 In FY22, In order to lead the adoption and scaling of AI throughout the Department of Defense, the JAIC will continue to acquire highly technical expertise for Program Management; Data Management; Capability Delivery Development Teams; AI Test and Evaluation; AI Protect and Counter Intelligence Research and Analysis and JCF administrative and logical support. The JAIC will seek vendor services to advance systemic data stewardship practices in all AI related capability development, which will require vendors with technical experts in data engineering, and data science. The JAIC will also continue operation and sustainment efforts for the Joint Common Foundation. Funds Joint Common Foundation computing and cloud services in addition to enterprise AI tools that enable users to import data, build and test AI models, and deploy models into production environments.</p> <p>FY 2021 RDT&E Plans: \$106.434 In FY22, Joint Information Warfare formally Cyber Sensemaking/ JAIC will further support integration of AI/ML MISO solutions for effective understanding, messaging, and influencing within the changing information environment. The JAIC will also align resources to kick off new AI capability lines of effort in accordance with the direction of the DOD AI Executive Steering Group (ESG). The JAIC will continue development of AI/ML products ANMVIS, BlueVector, MADHAT, Cyber Data Framework, Analytic Support Officers (ASO) Ecosystem Concept, and Medifor. The Threat Reduction and Protection formally the Humanitarian Assistance/Disaster Relief (HA/DR) will continue efforts building AI Capability in the areas of Damage Assessment, Full Motion Video, and Search and Rescue and continue development of Damage Assessment and Road Obstruction Product Line. JAIC will continue development efforts and work towards a Joint Common Foundation (JCF) Enterprise Environment and Full Operating Capability (FOC) by FY22. In FY22, the Joint Warfighting Operations Initiative will continue to develop and begin to transition AI/ML products lines Target Development, Wargaming, Gargoyle, Precision Targeting, and The Assistant Secretary of the Air Force (Acquisition, Technology and Logistics) (SAF/AQ) to mission partners. The JAIC will also continue resourcing AI/ML products in the areas of Electromagnetic Spectrum Operations (EMSO) and Strategic Mobility in accordance with the direction of the DOD AI Executive Steering Group (ESG). In FY22, The Joint Warfighting Operations mission initiative will deliver the Terrestrial Reconnaissance</p>	-	-	186.639

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022
<p>and Surveillance and sUAS product to partners for field-testing, complete field testing and deliver to Army G-Boss Program office and service program. Integrate Strategy Robot into ATO, Joint Staff J8 - User Interface for existing air-to-air Force Structure Planning Tool and Joint Staff J8 - All-Domain Force Structure Planning Tool. Project Smart Sensor - Full- onboard processing and navigation and transition to U.S. Air Force Special Operations Command Program Executive Office Fixed Wing (AFSCO PEO FW) and MQ-9 Reaper Drone (MQ-9) System Program Office (SPO).</p> <p>In FY22, The Warfighter Health mission initiative will work with the Defense Health Agency (DHA) to transition the initial rollout of Medical Imagery Analysis to Military medical diagnosis facilities. The JAIC will continue work in Medical Imaging, Suicide Intervention & Prevention, Point of Injury Decision Support, and Data Commons AI/ML products.</p> <p>In FY22, The JAIC's Business Process Transformation initiative will work with the DoD Comptroller's Advanced Analytics (ADVANA) Team, Data Insights Directorate, and Undersecretary Defense for Intelligence USD(I) and will begin to test and integrate GAMECHANGER with multiple user groups. The JAIC will also continue to development of Humanless Unmatched Transactions (HUnT), Acquisition Alert, MyNavy HR, and Army Talent Assignment Recommender and begin transition efforts to partners.</p> <p>FY 2022 RDT&E Plans: \$7.481</p> <p>Increased COVID-19 requirements for the health of the Warfighter resulted in the need for a predictive analytics/forecasting platform for use by the COCOMS (NNC, INDOPACOM) to provide predictive analytics associated with COVID planning and response.</p> <p><i>FY 2021 to FY 2022 Increase/Decrease Statement:</i></p> <p>The increase of +\$186.639 from FY 2021 to FY 2022 reflects a realigning of from O&M (+\$72.724) and RDT&E BA7 (+\$106.434) to the newly created BA 8: Software and Digital Technology for the Software Pilot Program. This also includes an increase of +\$8.040 received for the COVID-19 for requirements to support the health of the Warfighter predictive analytics/forecasting platform; for use by the COCOMS NORAD, NORTHCOM (North American Aerospace Defense Command, and Northern Command). Increase is offset by a decrease of -\$0.559 due to a technical adjustment.</p>			
Accomplishments/Planned Programs Subtotals	-	-	186.639

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

Remarks

D. Acquisition Strategy
The JAIC acquisition, management, and contracting strategy follows guidance outlined in the DoD 5000 series directives, Federal Acquisition Regulation (FAR) and FAR supplement policies and procedures. Management uses project management tools and meetings to ensure delivery of stated capabilities and performance criteria.

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Exhibit R-4, RDT&E Schedule Profile: PB 2022 Defense Information Systems Agency **Date:** May 2021

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FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026			
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

<i>Joint Artificial Intelligence Center (JAIC)</i>	
Joint Artificial Intelligence Center (JAIC)	[REDACTED]

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Exhibit R-4A, RDT&E Schedule Details: PB 2022 Defense Information Systems Agency **Date:** May 2021

Appropriation/Budget Activity 0400 / 8	R-1 Program Element (Number/Name) PE 0604532K / <i>Joint Artificial Intelligence</i>	Project (Number/Name) JAIC / JA1
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Joint Artificial Intelligence Center (JAIC)</i>				
Joint Artificial Intelligence Center (JAIC)	4	2022	3	2026