Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Office of the Secretary Of Defense	Date: April 2022
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 6: *RDT&E Management Support*	**R-1 Program Element (Number/Name)** PE 0605100D8Z / *Joint Mission Environment Test Capability (JMETC)*

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	434.042	76.146	71.410	126.079	-	126.079	187.421	195.786	198.188	195.534	-	-
087: *JMETC Distributed Test*	212.641	31.136	13.505	53.403	-	53.403	114.899	124.752	125.855	122.255	-	-
088: *JMETC National Cyber Range (NCR) Complex*	221.401	45.010	57.905	72.676	-	72.676	72.522	71.034	72.333	73.279	-	-

Note

New Start (Y/N): No

A. Mission Description and Budget Item Justification

This program supports the Department's initiatives to defend the homeland, deter strategic attacks and aggression while prevailing in conflict, building enduring advantage, and building a resilient Joint Force and defense ecosystem. The Joint Mission Environment Test Capability (JMETC) program provides a Department of Defense (DoD) enterprise-wide test capability to support system-to-system interoperability testing, mission-level environment testing, and cyber event operations, including cyber testing, cyber training, cyber experimentation, and cyber mission rehearsal. The JMETC program implements the infrastructure capabilities defined in the DoD “Testing in a Joint Environment Roadmap” to provide acquisition program managers a robust nation-wide capability to “test like we fight”. The JMETC program provides a persistent, distributed test and evaluation (T&E) capability that supports system development to measure and improve interoperability performance and cyber resiliency, which otherwise would not be readily available to Service/Component acquisition programs. The JMETC program is funded within the Research, Development, Test and Evaluation (RDT&E) Management Support Budget Activity because it provides test capability in support of RDT&E programs. By linking distributed facilities, as well as providing the necessary tools, services and subject matter expertise, the JMETC program allows acquisition programs to efficiently evaluate their warfighting capability in a realistic joint mission environment. The JMETC program has been aligned to advance the National Defense Strategy (NDS), to test the development of resilient, survivable, federated networks and information ecosystems from the tactical level up to strategic planning, as well as test and assess cyber defenses, building a more lethal force.

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Office of the Secretary Of Defense	Date: April 2022
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 6: *RDT&E Management Support*	**R-1 Program Element (Number/Name)** PE 0605100D8Z *I Joint Mission Environment Test Capability (JMETC)*

B. Program Change Summary ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	76.146	71.410	0.000	-	0.000
Current President's Budget	76.146	71.410	126.079	-	126.079
Total Adjustments	0.000	0.000	126.079	-	126.079
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustment	-	-	-1.601	-	-1.601
• Test and Resource Management Center Multi-Domain Testbeds	-	-	32.024	-	32.024
• Joint Artificial Intelligence Test and Evaluation Infrastructure Capability	-	-	8.940	-	8.940
• Budget Year Adjustment	-	-	86.716	-	86.716

Change Summary Explanation

FY 2023 funding increase reflects the fact that the FY 2022 President's Budget request did not include out-year funding.

FY 2023 increase reflects funding to 1) accelerate implementation and testing of Joint All Domain Command and Control (JADC2) and the testing of kill webs, and 2) testing the cyber vulnerabilities and integration of trusted artificial intelligence (AI) and autonomous systems in partnership with the Joint Artificial Intelligence Center.

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense			Date: April 2022
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605100D8Z / *Joint Mission Environment Test Capability (JMETC)*	Project (Number/Name) 087 / *JMETC Distributed Test*	

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
087: *JMETC Distributed Test*	212.641	31.136	13.505	53.403	-	53.403	114.899	124.752	125.855	122.255	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Joint Mission Environment Test Capability (JMETC) program provides a Department of Defense (DoD) enterprise-wide test capability to support system-to-system interoperability testing, mission-level environment testing, and cyber event operations, including cyber testing, cyber training, cyber experimentation, and cyber mission rehearsal. The JMETC program implements the infrastructure capabilities defined in the DoD "Testing in a Joint Environment Roadmap" to provide acquisition program managers a robust nation-wide capability to "test like we fight". The JMETC program provides a persistent, distributed test and evaluation (T&E) capability that supports system development to measure and improve interoperability performance and cyber resiliency, which otherwise would not be readily available to Service/Component acquisition programs. The JMETC program is funded within the Research, Development, Test and Evaluation (RDT&E) Management Support Budget Activity because it provides test capability in support of RDT&E programs. By linking distributed facilities, as well as providing the necessary tools, services and subject matter expertise, the JMETC program allows acquisition programs to efficiently evaluate their warfighting capability in a realistic joint mission environment. The JMETC Program has been aligned to advance the National Defense Strategy (NDS), to test the development of resilient, survivable, federated networks and information ecosystems from the tactical level up to strategic planning, as well as test and assess cyber defenses, building a more lethal force.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Title: JMETC Distributed Test	31.136	13.505	53.403
Description: The JMETC Distributed Test project continued expansion of the JMETC Secret Network (JSN) infrastructure to meet requirements. The JMETC Distributed Test project supported DoD distributed test and training events to include: system interoperability certification; system interoperability assessments; command and control systems; air and missile defense; 4th and 5th Generation Aircraft; unmanned aircraft; precision-guided bombs; munitions; missile tracking and guidance; infrared countermeasures; Joint Fires; Joint Close Air Support; and coalition exercises. The JMETC Distributed Test project provided test planning support to users and organizations to conduct interoperability testing on numerous DoD systems including: command and control systems; information warfare; air and missile defense; intelligence, surveillance, and sensor systems; surface ships; anti-surface warfare; anti-submarine warfare; tactical radar systems; precision-guided bombs; unmanned aircraft; autonomous aircraft; manned fixed wing aircraft; helicopters; and enterprise information systems. The JMETC Distributed Test project assisted customers with the use of distributed test tools and troubleshooting of the end-to-end network infrastructures. In addition, the JMETC team provided on-site support for the execution of large-scale, complex distributed events.			

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense		Date: April 2022
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605100D8Z / *Joint Mission Environment Test Capability (JMETC)*	**Project (Number/Name)** 087 / *JMETC Distributed Test*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
The JMETC Distributed Test project continued to develop post-test enterprise service capabilities, to include Knowledge Management and Big Data Analytics tools and technologies, in support of JMETC customer needs and requirements. The JMETC Distributed Test project released a common data analytics framework (CHEETAS) that reduces data access time from weeks to hours and enables big data analytics, data mining, and machine learning application for large T&E data sets. ***FY 2022 Plans:*** - The JMETC Distributed Test project will continue to optimize the JMETC Secret Network (JSN) infrastructure to meet requirements. - The JMETC Distributed Test project will continue supporting DoD distributed test and training events. - The JMETC Distributed Test project will continue providing test planning support to users and organizations to conduct interoperability testing on numerous DoD systems. - The JMETC Distributed Test project will continue to assist customers with the use of distributed test tools and troubleshooting of the end-to-end network infrastructures. Initial T&E tools will be developed as a service offering in the GovCloud. In addition, the JMETC team will provide on-site support for the execution of large-scale, complex distributed events. - The JMETC Distributed Test project will continue to provide updated Big Data Analytics tools and technologies, in support of JMETC customer needs and requirements. An updated CHEETAS analytics capability will be released, including a DoD Analytics “App Store” for technical data. The expansion of T&E as a Service in the GovCloud will continue. - The JMETC Distributed Test project will continue to support new and emerging acquisition programs. ***FY 2023 Plans:*** - The JMETC Distributed Test Project will initiate the establishment of an All-Domain Test Range to meet the joint test and evaluation needs of the Services and the in-theater experimentation campaign needs of the Combatant Commands. - The JMETC Distributed Test Project will initiate transition of a DARPA capability for testing simulated and live fielded weapon systems from all operational domains together in a common, distributed environment to evaluate and integrate new joint command and control (C2) systems, novel operational concepts, experimental weapon systems and capabilities. - The JMETC Distributed Test Project will initiate expansion of existing RDT&E networks across the DoD to meet new in-theater test and experimentation needs.			

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense		Date: April 2022
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605100D8Z / *Joint Mission Environment Test Capability (JMETC)*	**Project (Number/Name)** 087 / *JMETC Distributed Test*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
- The JMETC Distributed Test Project will initiate a reference implementation of Modular Open Systems Architecture and data-centric approaches to C2 both to enable testing new versions of those standards as well as to serve as the test repository for universal C2 interfaces. - The JMETC Distributed Test project will continue to optimize the JMETC Secret Network (JSN) infrastructure to meet requirements, adding or removing sites as necessary. - The JMETC Distributed Test project will continue supporting DoD distributed test and training events. - The JMETC Distributed Test project will continue providing test planning support to users and organizations to conduct interoperability testing on numerous DoD systems. - The JMETC Distributed Test project will continue to assist customers with the use of distributed test tools and troubleshooting of the end-to-end network infrastructures, to include continued expansion of T&E tools as a service in the GovCloud. In addition, the JMETC team will provide on-site support for the execution of large-scale, complex distributed events. - The JMETC Distributed Test project will continue to modernize post-test enterprise service capabilities, to include Knowledge Management and an enterprise framework for updated Big Data Analytics tools and technologies, in support of JMETC customer needs and requirements. - The JMETC Distributed Test project will initiate the development of a federated enterprise T&E data repository to support the evaluation of large data sets, including Artificial Intelligence (AI) data. The JMETC Distributed Test project will also initiate the build out of digital engineering tools and infrastructure to support the development of multi-Service, modernized warfighting capabilities in a digital environment, to include digital engineering infrastructure to support AI development. - The JMETC Distributed Test project will continue to support new and emerging acquisition programs. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** FY 2023 increase to address all-domain, joint C2 test, experimentation, and integration infrastructure, along with multi-Service artificial intelligence digital engineering infrastructure and enterprise data repository needs.			
Accomplishments/Planned Programs Subtotals	31.136	13.505	53.403

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense		Date: April 2022
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605100D8Z / *Joint Mission Environment Test Capability (JMETC)*	**Project (Number/Name)** 087 / *JMETC Distributed Test*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense			Date: April 2022
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605100D8Z / *Joint Mission Environment Test Capability (JMETC)*	Project (Number/Name) 088 / *JMETC National Cyber Range (NCR) Complex*	

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
088: *JMETC National Cyber Range (NCR) Complex*	221.401	45.010	57.905	72.676	-	72.676	72.522	71.034	72.333	73.279	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The National Cyber Range Complex (NCRC) is comprised of cyber ranges and a secure distributed network infrastructure to service the cyber range user community. The NCRC currently consists of five functional cyber ranges, including the National Cyber Range in Florida as well as four Regional Service Delivery Points (RSDP) located in Hawaii, Alabama, Maryland, and Massachusetts. To enhance DoD cyber range test and training capability and capacity, the NCRC is being expanded with additional cyber ranges co-located with key Service organizations to support an increase of cyber testing of DoD systems as well as training of cyber warfighters. The JMETC Multiple Independent Level of Security (MILS) Network (JMN) currently links 67 sites across the DoD, industry, and academia, providing secure access between cyber ranges, laboratories, and facilities. Both the cyber ranges and the network infrastructure are accredited to support multiple levels of security classifications, specifically configured to meet particular cyber event requirements. The NCRC investments have been aligned to support the National Defense Strategy in improving cyber defense, cyber resilience, cyber lethality, and the continued integration of cyber capabilities into the full spectrum of military operations.

The NCRC conducts cyberspace test and training events for the full spectrum of DoD customers including research, development, acquisition, testing, training and operational Cyber Mission Forces (CMF). The NCRC executes wide variety of event types including science and technology (S&T) demonstrations, developmental test and evaluation (DT&E), operational test and evaluation (OT&E), security controls assessments, capability assessments, cyberspace operations training, development and refinement of cyberspace tactics, techniques, and procedures (TTP), cyber forensics/malware analysis) and cyberspace operations mission rehearsal. The NCRC enables acquisition programs to conduct cybersecurity test and evaluation in an operationally representative cyberspace environment enabling identification, validation and mitigation of vulnerabilities. The NCRC also supports training, mission rehearsal and certification of the CMF in support of US Cyber Command by enabling operational forces to efficiently evaluate cyber warfighting capability in a realistic joint mission environment to include bi-lateral and multi-national exercises.

The NCRC provides secure facilities, technology, processes, and workforce to rapidly create hi-fidelity, mission-representative friendly, neutral, and adversarial cyberspace environments.

The NCRC also facilitates integration of distributed organizations with different missions and workforce relevant to cyber operations (e.g., cyber operators, penetrations testers, cyber assessors, cyber observers, cyber analysts, etc.). The NCRC supports cyber activities across of a full spectrum of DoD systems, including weapon platforms, C4I systems, business systems, network devices, and other systems vulnerable to a cyber-attack. The NCRC extensively utilizes automation to minimize human error, to reduce the time required to set-up for a cyber event, and to ensure repeatable results. In addition, the NCRC employs post-event sanitization techniques on all assets after exposure to malicious code to restore back to a known, clean state, which allows for reuse in future events. The National Cyber Range Complex (NCRC) is comprised of cyber ranges and a secure distributed network infrastructure to service the cyber range user community. The NCRC currently consists of five functional cyber ranges, including the National Cyber Range in Florida as well as four Regional Service Delivery Points (RSDP) located in Hawaii, Alabama, Maryland, and Massachusetts. To enhance DoD cyber range test and training capability and capacity, the NCRC is being expanded with additional cyber ranges co-located

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense		Date: April 2022
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605100D8Z / *Joint Mission Environment Test Capability (JMETC)*	**Project (Number/Name)** 088 / *JMETC National Cyber Range (NCR) Complex*

with key Service organizations to support an increase of cyber testing of DoD systems as well as training of cyber warfighters. The JMETC Multiple Independent Level of Security (MILS) Network (JMN) currently links 67 sites across the DoD, industry, and academia, providing secure access between cyber ranges, laboratories, and facilities. Both the cyber ranges and the network infrastructure are accredited to support multiple levels of security classifications, specifically configured to meet particular cyber event requirements. The NCRC investments have been aligned to support the National Defense Strategy in improving cyber defense, cyber resilience, cyber lethality, and the continued integration of cyber capabilities into the full spectrum of military operations.

The NCRC conducts cyberspace test and training events for the full spectrum of DoD customers including research, development, acquisition, testing, training and operational Cyber Mission Forces (CMF). The NCRC executes wide variety of event types including science and technology (S&T) demonstrations, developmental test and evaluation (DT&E), operational test and evaluation (OT&E), security controls assessments, capability assessments, cyberspace operations training, development and refinement of cyberspace tactics, techniques, and procedures (TTP), cyber forensics/malware analysis) and cyberspace operations mission rehearsal. The NCRC enables acquisition programs to conduct cybersecurity test and evaluation in an operationally representative cyberspace environment enabling identification, validation and mitigation of vulnerabilities. The NCRC also supports training, mission rehearsal and certification of the CMF in support of US Cyber Command by enabling operational forces to efficiently evaluate cyber warfighting capability in a realistic joint mission environment to include bi-lateral and multi-national exercises.

The NCRC provides secure facilities, technology, processes, and workforce to rapidly create hi-fidelity, mission-representative friendly, neutral, and adversarial cyberspace environments.

The NCRC also facilitates integration of distributed organizations with different missions and workforce relevant to cyber operations (e.g., cyber operators, penetrations testers, cyber assessors, cyber observers, cyber analysts, etc.). The NCRC supports cyber activities across of a full spectrum of DoD systems, including weapon platforms, C4I systems, business systems, network devices, and other systems vulnerable to a cyber-attack. The NCRC extensively utilizes automation to minimize human error, to reduce the time required to set-up for a cyber event, and to ensure repeatable results. In addition, the NCRC employs post-event sanitization techniques on all assets after exposure to malicious code to restore back to a known, clean state, which allows for reuse in future events.

The NCRC has a multidisciplinary workforce with software, systems, network, virtualization, automation, system administration, and cybersecurity subject matter expertise. In support of successful planning and execution of hosted events, the NCRC workforce helps users define and refine their event objectives, assists with identifying and prioritizing potential vulnerabilities, designs virtualized cyber environments, develops customized traffic generation and instrumentation solutions, integrates 3rd party hardware and software, executes cyber events on behalf of the user, provides cooperative vulnerability and penetration assessments, performs detailed cyber analysis, and delivers detailed reports with actionable information to decision makers. In addition, the NCRC workforce supports both the Executive Agent for Cyber Test Ranges and the Executive Agent for Cyber Training Ranges, to identify and address relevant needs, define and promulgate standards, and seek efficiencies through focused investments.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Title: JMETC National Cyber Range (NCR) Complex	45.010	57.905	72.676

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense		Date: April 2022
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605100D8Z / *Joint Mission Environment Test Capability (JMETC)*	**Project (Number/Name)** 088 / *JMETC National Cyber Range (NCR) Complex*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Description: The NCRC continued support for over a hundred cyber events, providing cybersecurity T&E support to Major Defense Acquisition Programs (MDAP), Major Automated Information Systems (MAIS) Acquisition Programs, and smaller acquisition programs, as well as cybersecurity training to multiple COCOMS and Service organizations. The NCRC continued support for cyber testing of systems and subsystems across multiple domains (land, air, sea, and space) relevant to manned and unmanned aircraft, surface ships, command and control systems, data management platforms, weapons platforms, satellites, radars, and missile defense systems. The NCRC continues to support Cyber Table Tops (CTT) which help acquisition programs identify and prioritize potential vulnerabilities for further assessment and mitigation early in the acquisition lifecycle. The NCRC continued support to Service Cyber Mission Forces (CMF) with training, certification, mission rehearsal and TTP development focused events. The NCRC continued support to numerous DoD organizations in cyber activities, including Director, Operational Test & Evaluation (DOT&E); Director, Developmental Test & Evaluation (DT&E); USCYBERCOM; USINDOPACOM; USCENTCOM; US SOCOM; Joint Staff J-7; US Space Force; Defense Intelligence Agency with a host of other intelligence agencies; Army Intelligence and Security Command; Naval Information Warfare Systems Command (NAVWARSYSCOM; Army Cyber Command; Army Cyber National Mission Forces/Cyber Protection Battalions; Naval Information Forces/Fleet Cyber; Naval Air Systems Command (NAVAIR); Naval Sea Systems Command (NAVSEA); Air Force Air Combat Command; Army Space and Missile Defense Command; Army Test and Evaluation Command; Army PEO Aviation; Army PEO Simulation Training and Instrumentation; Navy PEO for Enterprise Information Systems; Navy PEO for Command, Control, Communications, Computers and Intelligence; Navy PEO Ships; Naval Air Warfare Center Training Systems Division; Marine Corps Tactical Systems Support Activity; Naval Criminal Investigative Service; Joint Capability Technology Demonstrations (JCTD); and several partner nations. The NCRC supported the Army's Rapid Cyber Development Environment (RCDN) by dramatically reducing time to put Cyberspace Attack & Enabling Capabilities (CAEC) developed tools into the hands of operators, a critical link in the Cyberspace operations kill chain. The NCRC also addressed Navy cyber test needs by assessing operational impacts of cyber-attacks on manufacturing devices discovered by the vulnerabilities routinely found on the same manufacturing devices. Results from these assessments were used to inform new processes, and to identify operational security (OPSEC), physical security (PHYSEC), and cybersecurity mitigations to secure both Navy manufacturing control systems and associated RDT&E network infrastructure.			

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense		Date: April 2022
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605100D8Z / *Joint Mission Environment Test Capability (JMETC)*	**Project (Number/Name)** 088 / *JMETC National Cyber Range (NCR) Complex*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Activities continued to establish new government-controlled cyber range facilities, to include facility conversion work, procurement of computing resources, physical security accreditation, and development of training courseware for utilization of core NCRC cyber range tools by new NCRC workforce members. The NCRC continued activities to establish a multi-award IDIQ contract to expand the pool of NCRC contractor workforce members with a diverse set of required knowledge and skills to perform key functions at each NCRC location. The NCRC began implementation of an NCRC unclassified (NCRC-U) capability to provide increased access by government, academia, and industry to cyber range resources. ***FY 2022 Plans:*** The NCRC will continue implementing improvements needed to increase capacity to support increased demand at the current and future cyber ranges. The NCRC will continue to build out additional dedicated Persistent Testing and Training Environments to support testing and training customers. This includes newly established NCRC facilitates at Central Research Park, Orlando, FL; Joint Base Charleston, SC; and (U) Naval Air Station, Patuxent River, MD (NAVAIR). The NCRC will continue to operate in support of the growing acquisition program cybersecurity T&E requirements. The NCRC will continue to provide Cyber Table Top support for acquisition programs to help identify and prioritize potential vulnerabilities early in the development lifecycle. The NCRC will continue to provide support to US Cyber Command, Joint Staff, and other training and certification events by developing representative blue, red and gray environments. The NCRC will continue to support DOT&E cyber assessments. The NCRC will continue to support US Cyber Command and other COCOMS with their training, team certification and mission rehearsal activities. The NCRC will continue collaboration with Partner Nations by supporting large scale bi-lateral and multi-national training exercises tailored to focus on refinement of joint tactics, techniques and procedures and cyber related operations. The NCRC will conduct engineering activities to plan for technical refresh of emerging end of life and end of service computing assets.			

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense		Date: April 2022
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605100D8Z / *Joint Mission Environment Test Capability (JMETC)*	**Project (Number/Name)** 088 / *JMETC National Cyber Range (NCR) Complex*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
The NCRC will continue to assess cyber range requirements in close cooperation with the Executive Agents for Cyber Test Ranges and Cyber Training Ranges to build priority cyber range capability and capacity to meet identified RDT&E community and CMF needs. This includes enhanced knowledge repositories for cyber tools, environments, and threats shared across the DoD acquisition and training community. The NCRC will continue to assist the Executive Agents for Cyber Test Ranges and Cyber Training Ranges to determine requirements and standards needed to integrate these cyber range facilities with existing acquisition system hardware-in-the-loop, software-in-the-loop, and systems integration laboratories to test systems and train operators in a realistic cyber contested environment. The NCRC will continue to expand the JMN connectivity as needed to provide access to cyber range resources. The NCRC will continue to initiate new cyber range capability and development to directly address United States Army Cyber Command test and training needs. The NCRC will continue activities to establish new government-controlled cyber range facilities, to include facility conversion work, procurement and installation of computing resources, physical security accreditation, and information system security accreditation. The NCRC will continue implementation of an NCRC unclassified (NCRC-U) capability with the establishment of a workforce development training course to start on a continuous basis and assessments of cyber test range innovation challenges.			
FY 2023 Plans: The NCRC will continue implementing improvements needed to increase capacity to support increased demand at the current and future cyber ranges. The NCRC will continue to build out additional dedicated Persistent Testing and Training Environments to support testing and training customers. The NCRC will continue to operate in support of the growing acquisition program cybersecurity T&E requirements. The NCRC will continue to provide Cyber Table Top support for acquisition programs to help identify and prioritize potential vulnerabilities early in the development lifecycle.			

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense		Date: April 2022
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605100D8Z / *Joint Mission Environment Test Capability (JMETC)*	**Project (Number/Name)** 088 / *JMETC National Cyber Range (NCR) Complex*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
The NCRC will continue to provide support to US Cyber Command, Joint Staff, and other training and certification events by developing representative blue, red and gray environments. The NCRC will continue to support DOT&E cyber assessments. The NCRC will continue to support US Cyber Command and other COCOMS with their training, team certification and mission rehearsal activities. The NCRC will conduct engineering activities to plan for technical refresh of emerging end of life and end of service computing assets. The NCRC will continue to assess cyber range requirements in close cooperation with the Executive Agents for Cyber Test Ranges and Cyber Training Ranges to build priority cyber range capability and capacity to meet identified RDT&E community and CMF needs. The NCRC will continue to assist the Executive Agents for Cyber Test Ranges and Cyber Training Ranges to determine requirements and standards needed to integrate these cyber range facilities with existing acquisition system hardware-in-the-loop, software-in-the-loop, and systems integration laboratories to test systems and train operators in a realistic cyber contested environment. The NCRC will continue to expand the JMN connectivity as needed to provide access to cyber range resources. The NCRC will continue to initiate new cyber range capability and development to directly address United States Army Cyber Command test and training needs. The NCRC will continue activities to establish new government-controlled cyber range facilities, to include facility conversion work, procurement and installation of computing resources, physical security accreditation, and information system security accreditation. The NCRC will continue implementation of an NCRC unclassified (NCRC-U) capability.			
FY 2022 to FY 2023 Increase/Decrease Statement:			

Exhibit R-2A, RDT&E Project Justification: PB 2023 Office of the Secretary Of Defense		Date: April 2022
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605100D8Z / *Joint Mission Environment Test Capability (JMETC)*	**Project (Number/Name)** 088 / *JMETC National Cyber Range (NCR) Complex*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
FY 2023 increase to testing cyber vulnerabilities associated with trusted artificial intelligence systems.			
Accomplishments/Planned Programs Subtotals	45.010	57.905	72.676

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A