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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Office of the Secretary Of Defense **Date:** April 2022

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 6: RDT&E Management Support</i>	R-1 Program Element (Number/Name) PE 0605804D8Z I <i>Development Test & Evaluation</i>
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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	139.751	26.240	27.280	26.652	0.000	26.652	27.264	27.707	28.290	28.855	Continuing	Continuing
804: <i>Development Test & Evaluation</i>	139.751	19.485	20.391	19.431	0.000	19.431	20.029	20.470	20.900	21.318	Continuing	Continuing
048: <i>Cybersecurity DT&E for Weapon Systems</i>	0.000	6.755	6.889	7.221	0.000	7.221	7.235	7.237	7.390	7.537	Continuing	Continuing

Note

New Start (Y/N): No

A. Mission Description and Budget Item Justification

This program supports the Department's initiatives to Build Sustainable and Long-Term Advantage, and Build a Resilient Joint Force and Defense Ecosystem.

Program Element (PE) 0605804D8Z establishes the dedicated funding line to carry out the duties in accordance with Title 10 U.S.C. Section 133a, National Defense Authorization Act (NDAA) for 2018 section 838, and the Department of Defense (DoD) Directive 5137.02 dated July 15, 2020. In FY 2020, Under Secretary of Defense for Research and Engineering (USD, R&E) established the office of the Director, Developmental Test, Evaluation, and Assessments (DTE&A) to provide consolidated Developmental Test and Evaluation (DT&E) and Independent Technical Assessment functions in a single office. The Director, DTE&A, is the principal advisor to the Secretary of Defense; (OUSD(R&E)); and the Under Secretary of Defense, Acquisition and Sustainment (USD(A&S)) on DT&E and Technical Risk Assessments in the Department of Defense (DoD).

The OUSD(R&E) engages with acquisition and rapid prototype programs to provide test planning expertise, including cybersecurity DT&E, and decision-quality data at major program reviews to help them succeed in modernizing key capabilities to Build a More Lethal Force. OUSD(R&E) ensures programs meet interoperability requirements to deepen interoperability and Strengthen Alliances. Finally, OUSD(R&E) works with Director, Operational Test and Evaluation to streamline T&E policy and guidance to improve test efficiency, and reduce acquisition cost and schedule to Reform the Department for Greater Performance and Affordability.

Program Element (PE) 0605804D8Z supports and improves the DT&E efforts of Major Defense Acquisition Program (MDAP), Rapid Prototyping/Fielding efforts, and other Special Interest (SI) acquisition programs designated by USD(R&E) or USD(A&S) as they progress through the acquisition/development lifecycle; supports development of the defense acquisition workforce Test and Evaluation (T&E) career field; and supports development of policy and guidance for the conduct of DT&E within the DoD. This PE also provides dedicated resources to support MDAP and Rapid Prototyping/Fielding Program Managers, Chief Developmental Testers, and Lead DT&E Organizations in the development of comprehensive, efficient, and innovative Cybersecurity DT&E strategies/plans to support key acquisition milestones and engineering/programmatic decisions.

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B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	27.198	27.366	0.000	0.000	0.000
Current President's Budget	26.240	27.280	26.652	0.000	26.652
Total Adjustments	-0.958	-0.086	26.652	0.000	26.652
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.953	-			
• Adjustments to Budget Year	-	-	25.734	0.000	25.734
• Other Program Adjustments	-0.005	-	0.000	0.000	0.000
• Program Adjustments	-	-	0.918	0.000	0.918
• FFRDC Reduction	-	-0.086	-	-	-

Change Summary Explanation

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

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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 0605804D8Z / <i>Development Test & Evaluation</i>				Project (Number/Name) 804 / <i>Development Test & Evaluation</i>			
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
804: <i>Development Test & Evaluation</i>	139.751	19.485	20.391	19.431	0.000	19.431	20.029	20.470	20.900	21.318	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Project 804 provides resources to support MDAP and Rapid Prototyping/Fielding Program Managers, Chief Developmental Testers, and Lead DT&E Organizations in the development of comprehensive, efficient, and innovative DT&E strategies to support key acquisition milestones and engineering decisions. This project also supports the OUSD(R&E) to manage the Test & Evaluation (T&E) career field and curriculum for the DoD acquisition workforce, and develop policy and guidance for the conduct of DT&E within DoD. On behalf of the OUSD(R&E) this project executes the following activities:

- Support acquisition programs in the development of comprehensive, efficient, and innovative test strategies. Ensure that developmental test strategies are documented in Test and Evaluation Master Plans (TEMPs). For ACAT ID programs, review and approve/disapprove the DT&E strategy within the TEMP. For ACAT IB/IC programs, review the DT&E strategy within the TEMP and provide a recommendation to the Service Milestone Decision Authority as to whether or not the strategy is adequate.
- Support rapid prototyping, rapid fielding, and technology demonstrations efforts in the development of tailored comprehensive, efficient, and innovative DT&E strategies.
- For ACAT ID programs, provide independent DT&E Sufficiency Assessments prior to Milestone B and C decisions with the goal of reducing discovery of performance issues later in the acquisition cycle.
- When requested by the Secretary or Deputy Secretary of Defense, provide independent developmental test assessments in support of USD(A&S) and Service Major Defense Acquisition Programs.
- Support the development of independent technical risk assessments and advise the Secretary on the progress toward meeting Key Performance Parameters, technology maturation, reliability growth projections, interoperability, and cybersecurity posture before any decision to grant Milestone A or B approval, or enter into low-rate initial production or full-rate production for ACAT ID programs or when requested by the Secretary.
- Manage the Scientific Test and Analysis Techniques Center of Excellence (STAT COE).
- Identify the DoD test infrastructure gaps and support development of the OUSD(R&E) test resources strategic plan.
- Evolve the DT&E 'state of practice' to keep pace with emerging technologies and improve test efficiency to field systems faster.
- Coordinate with Director, Operational Test and Evaluation to improve T&E efficiency and make best use of integrated testing.

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

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Development Test and Evaluation	19.485	20.391	19.431	0.000	19.431

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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 0605804D8Z / <i>Development Test & Evaluation</i>	Project (Number/Name) 804 / <i>Development Test & Evaluation</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Description: This program supports and improves the DT&E efforts of Major Defense Acquisition Program (MDAP), Rapid Prototyping efforts, and other Special Interest (SI) acquisition programs as they progress through the acquisition lifecycle; lead the defense acquisition workforce T&E career field; and support development of policy and guidance for the conduct of DT&E within the DoD.</p> <p>FY 2022 Plans:</p> <ul style="list-style-type: none"> - Work with Acquisition Program Managers, Chief Developmental Testers, and Lead DT&E organizations to improve DT&E planning and develop comprehensive and efficient DT&E strategies/plans through the use of disciplined Developmental Evaluation Framework Matrices and Scientific Test and Analysis Techniques (STAT). - Continue to support rapid prototyping, rapid fielding, and technology demonstrations efforts in the development of tailored comprehensive, efficient, and innovative DT&E strategies/plans. - Continue to implement the OUSD(R&E) 'Shift Left' initiative that focuses on ensuring DT&E strategies are developed in advance of releasing Technology Maturation and Risk Reduction (TMRR) and Engineering and Manufacturing Development (EMD) RFPs, and increasing the amount and quality of data available to support production decisions with specific focus on cybersecurity, interoperability, and reliability. - For ACAT ID programs, review/approve all TEMPs submitted to support milestone reviews. Ensure DT&E planning is complete prior to the start of DT&E activities. For ACAT IB/IC programs, review the DT&E strategy within the TEMP and provide a recommendation to the Service Milestone Decision Authority as to whether or not the strategy is adequate. - For ACAT ID programs, publish independent DT&E Sufficiency Assessments prior to Milestone B and C decisions with the goal of reducing discovery of performance issues later in the acquisition cycle. - When requested by the Secretary or Deputy Secretary of Defense, provide independent developmental test assessments in support of USD(A&S) and Service Major Defense Acquisition Programs. - Refine DT&E policies and methodologies addressing DT&E across all Acquisition programs. - Promote the application of sound DT&E and related technical disciplines across the Department's acquisition community and programs. - Implement initiatives that evolve the DT&E 'state of practice' to keep pace with emerging technologies and improve test efficiency to field systems faster. <p>FY 2023 Base Plans:</p> <ul style="list-style-type: none"> - Work with Acquisition Program Managers, Chief Developmental Testers, and Lead DT&E organizations to improve DT&E planning and develop comprehensive and efficient DT&E strategies through the use of disciplined Developmental Evaluation Framework Matrices and Scientific Test and Analysis Techniques (STAT). 					

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Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605804D8Z / <i>Development Test & Evaluation</i>	Project (Number/Name) 804 / <i>Development Test & Evaluation</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<ul style="list-style-type: none"> - Continue to support rapid prototyping, rapid fielding, and technology demonstrations efforts in the development of tailored comprehensive, efficient, and innovative DT&E strategies. - Continue to implement the OUSD(R&E) 'Shift Left' initiative that focuses on ensuring DT&E strategies are developed in advance of releasing Technology Maturation and Risk Reduction (TMRR) and Engineering and Manufacturing Development (EMD) RFPs, and increasing the amount and quality of data available to support production decisions with specific focus on cybersecurity, interoperability, and reliability. - For ACAT ID programs, review/approve all TEMPs submitted to support milestone reviews. Ensure DT&E planning is complete prior to the start of DT&E activities. For ACAT IB/IC programs, review the DT&E strategy within the TEMP and provide a recommendation to the Service Milestone Decision Authority as to whether or not the strategy is adequate. - For ACAT ID programs, publish independent DT&E Sufficiency Assessments prior to Milestone B and C decisions with the goal of reducing discovery of performance issues later in the acquisition cycle. - When requested by the Secretary or Deputy Secretary of Defense, provide independent developmental test assessments in support of USD(A&S) and Service Major Defense Acquisition Programs. - Refine DT&E policies and methodologies addressing DT&E across all Acquisition programs. - Promote the application of sound DT&E and related technical disciplines across the Department's acquisition community and programs. - Implement initiatives that evolve the DT&E 'state of practice' to keep pace with emerging technologies and improve test efficiency to field systems faster. <p>FY 2023 OCO Plans: N/A.</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Changes reflect the conclusion of a three year funding increase across FY 2020 through FY 2022 to provide additional funding for efforts at the Statistical Test and Analysis Techniques Center of Excellence.</p>					
Accomplishments/Planned Programs Subtotals	19.485	20.391	19.431	0.000	19.431

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

Remarks
N/A

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Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605804D8Z / <i>Development Test & Evaluation</i>	Project (Number/Name) 804 / <i>Development Test & Evaluation</i>

D. Acquisition Strategy
N/A

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Appropriation/Budget Activity 0400 / 6					R-1 Program Element (Number/Name) PE 0605804D8Z / Development Test & Evaluation				Project (Number/Name) 048 / Cybersecurity DT&E for Weapon Systems			
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
048: Cybersecurity DT&E for Weapon Systems	0.000	6.755	6.889	7.221	0.000	7.221	7.235	7.237	7.390	7.537	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project provides dedicated resources to support MDAP and Rapid Prototyping Program Managers, Chief Developmental Testers, and Lead DT&E Organizations in the development of comprehensive, efficient, and innovative Cybersecurity DT&E strategies to support key acquisition milestones and engineering/programmatic decisions. On behalf of the OUSD(R&E) this project executes the following activities:

- Support acquisition programs in the development of comprehensive, efficient, and innovative Cybersecurity DT&E strategies. Ensure that Cybersecurity DT&E strategies are documented in Test and Evaluation Master Plans (TEMPs). For ACAT ID programs, review and approve/disapprove the Cybersecurity DT&E strategy/plans within the TEMP.
- Support rapid prototyping, rapid fielding, and technology demonstrations efforts in the development of tailored comprehensive, efficient, and innovative Cybersecurity DT&E strategies/plans.
- Support the development of independent technical risk assessments and advise the Secretary on the Cybersecurity, cyber survivability, and resilience posture before any decision to grant Milestone A or B approval, or enter into low-rate initial production or full-rate production for ACAT ID programs or when requested by the Secretary.
- Identify DoD Cybersecurity test infrastructure gaps and support development of the OUSD(R&E) test resources strategic plan.
- Evolve the Cybersecurity DT&E 'state of practice' to keep pace with emerging technologies and improve test efficiency to field systems faster.
- Coordinate with Director, Operational Test and Evaluation to improve Cybersecurity T&E efficiency and make best use of integrated testing.

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

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Cybersecurity DT&E for Weapon Systems	6.755	6.889	7.221	0.000	7.221
Description: This program supports and improves the Cybersecurity DT&E efforts of Major Defense Acquisition Program (MDAP), Rapid Prototyping/Fielding efforts, and other Special Interest (SI) acquisition programs as they progress through the acquisition/development lifecycle; and support development of policy and guidance for the conduct of Cybersecurity DT&E within the DoD.					
FY 2022 Plans:					
- Work with Acquisition Program Managers, Chief Developmental Testers, and Lead DT&E organizations to improve Cybersecurity DT&E planning and develop comprehensive and efficient DT&E strategies/plans through the use of disciplined Developmental Evaluation Framework Matrices and Scientific Test and Analysis					

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

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Techniques (STAT). Help programs develop Cybersecurity T&E objectives that align cybersecurity requirements for security standards, cyber survivability, and operational resilience.</p> <ul style="list-style-type: none"> - Support rapid prototyping, rapid fielding, and technology demonstrations efforts in the development of tailored comprehensive, efficient, and innovative Cybersecurity DT&E strategies/plans. - Implement the OUSD(R&E) 'Shift Left' initiative that focuses on ensuring Cybersecurity DT&E strategies/plans are developed in advance of releasing Technology Maturation and Risk Reduction (TMRR) and Engineering and Manufacturing Development (EMD) RFPs, and increasing the amount and quality of data available to support production decisions. - Refine Cybersecurity DT&E policies and methodologies addressing Cybersecurity DT&E across all Acquisition programs. - When requested by the Secretary or Deputy Secretary of Defense, provide independent Cybersecurity developmental test assessments in support of USD(A&S) and Service Major Defense Acquisition Programs. - Provide Cybersecurity DT&E subject matter experts to assist programs in building Developmental Evaluation Frameworks (DEFs), conducting Cybersecurity Table Top Exercises to identify potential threat vectors, and assist programs with exercising Phases 1 and 2 of the DoD Cybersecurity T&E Process. - Promote the application of sound Cybersecurity DT&E and related technical disciplines across the Department's acquisition community and programs. - Implement initiatives that evolve the Cybersecurity DT&E 'state of practice' to keep pace with emerging technologies and improve test efficiency to field systems faster. - Implement initiatives to guide acquisition programs for how to use Cybersecurity T&E planning and analysis and Cybersecurity tests to identify and mitigate cyber risk in supply chains, development environments, tools and processes. - Collaborate with the Intelligence communities to improve cyber intelligence support to Cybersecurity DT&E. - Work with Lead DT&E organizations to improve Cybersecurity DT&E workforce capability and retention as well as capacity to support earlier integrated contractor and government Cybersecurity DT&E. <p>FY 2023 Base Plans:</p> <ul style="list-style-type: none"> - Work with Acquisition Program Managers, Chief Developmental Testers, and Lead DT&E organizations to improve Cybersecurity DT&E planning and develop comprehensive and efficient DT&E strategies/plans through the use of disciplined Developmental Evaluation Framework Matrices and Scientific Test and Analysis Techniques (STAT). Help programs develop Cybersecurity T&E objectives that align cybersecurity requirements for security standards, cyber survivability, and operational resilience. 					

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

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<ul style="list-style-type: none"> - Support rapid prototyping, rapid fielding, and technology demonstrations efforts in the development of tailored comprehensive, efficient, and innovative Cybersecurity DT&E strategies/plans. - Implement the OUSD(R&E) 'Shift Left' initiative that focuses on ensuring Cybersecurity DT&E strategies are developed in advance of releasing Technology Maturation and Risk Reduction (TMRR) and Engineering and Manufacturing Development (EMD) RFPs, and increasing the amount and quality of data available to support production decisions. - Refine Cybersecurity DT&E policies and methodologies addressing Cybersecurity DT&E across all Acquisition programs. - When requested by the Secretary or Deputy Secretary of Defense, provide independent Cybersecurity developmental test assessments in support of USD(A&S) and Service Major Defense Acquisition Programs. - Provide Cybersecurity DT&E subject matter experts to assist programs in building Developmental Evaluation Frameworks (DEFs), conducting Cybersecurity Table Top Exercises to identify potential threat vectors, and assist programs with exercising Phases 1 and 2 of the DoD Cybersecurity T&E Process. - Promote the application of sound Cybersecurity DT&E and related technical disciplines across the Department's acquisition community and programs. - Implement initiatives that evolve the Cybersecurity DT&E 'state of practice' to keep pace with emerging technologies and improve test efficiency to field systems faster. - Implement initiatives to guide acquisition programs for how to use Cybersecurity T&E planning and analysis and Cybersecurity tests to identify and mitigate cyber risk in supply chains, development environments, tools and processes. - Collaborate with the Intelligence communities to improve cyber intelligence support to Cybersecurity DT&E. - Work with Lead DT&E organizations to improve Cybersecurity DT&E workforce capability and retention as well as capacity to support earlier integrated contractor and government Cybersecurity DT&E. <p>FY 2023 OCO Plans: N/A.</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: There is no significant change between FY 2022 and FY 2023.</p>					
Accomplishments/Planned Programs Subtotals	6.755	6.889	7.221	0.000	7.221

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

N/A

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

Remarks

D. Acquisition Strategy

N/A.