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

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| Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 6: RDT&E Management Support</i> | R-1 Program Element (Number/Name) PE 0605803A / <i>Technical Information Activities</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 | - | 31.174 | 37.652 | 31.327 | - | 31.327 | 32.323 | 35.265 | 33.380 | 33.877 | Continuing | Continuing |
| <i>727: Tech Info Activities</i> | - | 11.242 | 15.386 | 12.834 | - | 12.834 | 12.987 | 13.002 | 13.142 | 13.286 | Continuing | Continuing |
| <i>731: Army High Performance Computing Centers</i> | - | 2.000 | 2.187 | 2.201 | - | 2.201 | 2.223 | 2.225 | 2.250 | 2.274 | Continuing | Continuing |
| <i>733: Acquisition Tech Act</i> | - | 4.611 | 5.057 | 5.169 | - | 5.169 | 5.286 | 5.292 | 5.348 | 5.407 | Continuing | Continuing |
| <i>CC2: Expeditionary Technologies</i> | - | 4.758 | 5.628 | 5.675 | - | 5.675 | 6.193 | 6.199 | 6.265 | 6.333 | Continuing | Continuing |
| <i>DW3: Army Geospatial Enterprise Implementation</i> | - | 8.563 | 9.394 | 5.448 | - | 5.448 | 5.634 | 8.547 | 6.375 | 6.577 | Continuing | Continuing |

A. Mission Description and Budget Item Justification

This Program Element (PE) supports oversight of the development and defense of the Army Science and Technology (S&T) budget, and development of Army S&T strategy, policy and guidance. Additionally, it supports upgrading the accuracy, timeliness, availability, and accessibility of scientific, technical, and management information at all levels of the Army Research and Development (R&D) community. Management of this information is critical to achieve the goals established by the Army's Senior Leadership. Use of accurate and timely technical information is essential to successfully meeting S&T transitions and milestones, allowing Army Science and Technology (S&T) leadership to refine investment strategy and quickly react to emerging opportunities and issues. This PE includes initiatives to improve information derivation, storage, access, display, validation, transmission, distribution, and interpretation, along with initiatives to develop and enhance a single business model for Army S&T knowledge management information technology and to provide for Independent Review Team analysis of technology maturity as part of the Technology Readiness Assessment. Develops and publishes Army S&T strategy and policies, sets Army S&T priorities, establishes and tracks S&T metrics to determine earned value and return on investment, and performs S&T studies in support of the ASA(ALT) in Project 727. Project 731 provides funding for support for Army high performance computing centers. Project 733 provides funding for improvements to the Army's acquisition process. Project CC2 provides funding for Expeditionary Technologies (xTech Search) to evaluate the feasibility and potential application of disruptive technologies to Army capability gaps. Project DW3 supports Army Geospatial Enterprise (AGE) Implementation with systems engineering, architecture, and test and certification of Army Acquisition Systems.

The cited work is consistent with the Under Secretary of Defense for Research and Engineering Science and Technology Critical Technology Areas and the Army Modernization Strategy.

Work in this PE is performed by the Army Corps of Engineers' Engineer Research and Development Center (ERDC), Vicksburg, MS; the Army Geospatial Center (AGC) in Alexandria, VA; the Information Management Office, Arlington, VA; the Office of the Assistant Secretary of the Army, Acquisition, Logistics and Technology (ASA(ALT)), The Pentagon, Arlington, VA; Army Futures Command (AFC) Combat Capabilities Development Command (CCDC) Army Research Laboratory (ARL), Aberdeen Proving Ground, MD; and AFC CCDC Ground Vehicle Systems Center, Warren, MI.

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| Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 6: RDT&E Management Support</i> | R-1 Program Element (Number/Name) PE 0605803A / <i>Technical Information Activities</i> |
|--|---|

| B. Program Change Summary (\$ in Millions) | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total |
|---|----------------|----------------|---------------------|--------------------|----------------------|
| Previous President's Budget | 31.987 | 28.752 | 29.427 | - | 29.427 |
| Current President's Budget | 31.174 | 37.652 | 31.327 | - | 31.327 |
| Total Adjustments | -0.813 | 8.900 | 1.900 | - | 1.900 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | - | 8.900 | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | -0.813 | - | | | |
| • SBIR/STTR Transfer | - | - | | | |
| • Adjustments to Budget Years | - | - | 1.900 | - | 1.900 |

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 727: Tech Info Activities

Congressional Add: *Congressional Add*

Congressional Add Subtotals for Project: 727

Project: DW3: Army Geospatial Enterprise Implementation

Congressional Add: *FY22 Congressional Program Increase*

Congressional Add: *FY23 Congressional Program Increase*

Congressional Add Subtotals for Project: DW3

Congressional Add Totals for all Projects

| | FY 2022 | FY 2023 |
|--|----------------|----------------|
| | - | 3.000 |
| Congressional Add Subtotals for Project: 727 | - | 3.000 |
| | 5.200 | - |
| | - | 5.900 |
| Congressional Add Subtotals for Project: DW3 | 5.200 | 5.900 |
| Congressional Add Totals for all Projects | 5.200 | 8.900 |

Change Summary Explanation

Increased funding due to revised economic assumptions.

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| Exhibit R-2A, RDT&E Project Justification: PB 2024 Army | | | | | | | | | | Date: March 2023 | | |
| Appropriation/Budget Activity 2040 / 6 | | | | | R-1 Program Element (Number/Name) PE 0605803A / <i>Technical Information Activities</i> | | | | Project (Number/Name) 727 / <i>Tech Info Activities</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 |
| <i>727: Tech Info Activities</i> | - | 11.242 | 15.386 | 12.834 | - | 12.834 | 12.987 | 13.002 | 13.142 | 13.286 | Continuing | Continuing |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

A. Mission Description and Budget Item Justification

This Project funds the governance, strategy development and oversight of science, research, and technology investments within the Department of the Army. These efforts include developing strategic direction, policy development, supervision and management of the Army's S&T portfolio including resource allocation. This project includes civilian manpower and contractor support required to implement a set of management decision aids and tools to support technical and budgetary decisions at the Department of the Army (DA). Includes the research and development planning, programming and execution for Army S&T, the Army Applied SBIR program, the Army Manufacturing Technology program, Technology Maturation Initiatives program, Technology Transition policy, and Laboratory Management policy. Covers the development and tracking of S&T metrics across the enterprise and supports development of Army plans, programs and policies for OSD and Congress. Most of the efforts in this project are on-going activities to support Army Research and Development programs. Effective exploitation of Science and Technology (S&T) information is critical to achieving the goals established by Senior Army Leadership for the Army of 2040. Funding in this program supports Independent Review Team analysis of technology maturity as part of the Technology Maturation Initiative and Technology Area Readiness Assessments.

The cited work is consistent with the Under Secretary of Defense for Research and Engineering Science and Technology Critical Technology Areas and the Army Modernization Strategy.

Work in this Project is performed by the Office of the Assistant Secretary of the Army, Acquisition, Logistics and Technology (ASA(ALT)), The Pentagon, Washington, DC.

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

| | FY 2022 | FY 2023 | FY 2024 |
|---|----------------|----------------|----------------|
| Title: Conduct and support S&T program portfolio assessments and analysis. | 4.385 | 4.910 | 5.100 |
| Description: Supports identification, development and demonstration of technology options that inform and enable effective and affordable capabilities for the Soldier Providing Soldiers with the technology supporting the Army of 2040. Supports Aviation, Network, Ground, Soldier, Basic Research, Medical, Weapons, and Sensing & Intel Portfolio Directors, responding to scientific, technical and programmatic challenges. Supports Independent Review Team analysis of technology maturity as part of Technology Area Readiness Assessments. Serves as Office of the Deputy Assistant Secretary of the Army, Research and Technology (DASA(R&T)) central point of contact for S&T Metrics, Army S&T strategy development, Strategic Portfolio Analysis Review, evaluation of technical risks, earned value assessment, and technical and financial health of S&T projects. | | | |
| FY 2023 Plans: | | | |

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| Exhibit R-2A, RDT&E Project Justification: PB 2024 Army | | Date: March 2023 | | |
| Appropriation/Budget Activity 2040 / 6 | R-1 Program Element (Number/Name) PE 0605803A / <i>Technical Information Activities</i> | Project (Number/Name) 727 / <i>Tech Info Activities</i> | | |
| B. Accomplishments/Planned Programs (\$ in Millions) | | FY 2022 | FY 2023 | FY 2024 |
| <p>Provide oversight and programmatic support for laboratory management, basic research, and applied research and advanced technology development efforts across the Army modernization priorities; act as the S&T Portfolio subject matter experts to identify forecasted critical science and technology 'outputs' to align with Programs of Record (PoR); ensure tight alignment and coupling to existing PoRs and identify where misalignment between Portfolio technology projections/timelines and/or emerging technology options are not yet reflected at the PoR level. Perform cross portfolio coordination and assessment; and evaluate and assess cost, schedule and technical progress against metrics to determine project health. Assess progress of S&T projects, conduct portfolio deep dives, evaluate technical risks and assess earned value for S&T projects. Identify technology for effective and affordable capabilities in all the S&T portfolios (Basic Research, Medical, Soldier, Network, Aviation, Weapons, and Ground), and key focus areas (Assured Positioning, Navigation & Timing; Synthetic Training Environment; Electronic Warfare; Sensing & Intelligence; and Contested Logistics & Sustainment). Conduct studies of emerging topics based on Army S&T strategy and senior leader initiatives through the Board on Army Research and Development (BOARD) and the National Academies.</p> <p>FY 2024 Plans: Provide programmatic support and oversight for basic research, applied research, advanced technology development, laboratory management, and technical transition efforts across the Army modernization priorities; perform as the S&T Portfolio subject matter experts to identify forecasted critical science and technology 'outputs' to align with Programs of Record (PoR); ensure tight alignment and coupling to existing PoRs and identify where misalignment between Portfolio technology projections/timelines and/or emerging technology options are not yet reflected at the PoR level. Perform cross portfolio coordination and assessment; and evaluate and assess cost, schedule and technical progress against metrics to determine project health. Assess progress of S&T projects, conduct portfolio deep dives, evaluate technical risks and assess earned value for S&T projects. Identify technology for effective and affordable capabilities in all the S&T portfolios (Basic Research, Medical, Soldier, Network, Aviation, Weapons, and Ground), and key focus areas (Assured Positioning, Navigation & Timing; Synthetic Training Environment; Electronic Warfare; Sensing & Intelligence; and Contested Logistics & Sustainment). Conduct studies of emerging topics based on Army S&T strategy and senior leader initiatives through the Board on Army Research and Development (BOARD) and the National Academies.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase supports the planned lifecycle of the effort.</p> <p>Title: Support Army S&T strategic planning, analysis, and prioritization.</p> <p>Description: Coordinates efforts with and across the Army S&T portfolios; manage proposal nomination and selection process; track and provide oversight of ongoing efforts; recommend resolutions/prioritization in the event of conflicting requirements and/or resource constraints; support the full spectrum of Planning, Programming and Budget Execution (PPBE) as it relates to the Army S&T Program; and supports technology transition. Provide senior level technical and analytical support for the Joint Capability Technology Demonstration (JCTD) program and Technology Maturation Initiative (TMI) by assisting with investment analysis, strategies and oversight. Provide financial management recommendations and insights with regards to JCTDs, TMI,</p> | | | | |
| | | 5.407 | 5.766 | 6.164 |

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| Exhibit R-2A, RDT&E Project Justification: PB 2024 Army | | Date: March 2023 | | |
| Appropriation/Budget Activity 2040 / 6 | R-1 Program Element (Number/Name) PE 0605803A / <i>Technical Information Activities</i> | Project (Number/Name) 727 / <i>Tech Info Activities</i> | | |
| B. Accomplishments/Planned Programs (\$ in Millions) | | FY 2022 | FY 2023 | FY 2024 |
| <p>Manufacturing Technology (ManTech) and Defense Manufacturing Initiatives. A variety of scientific and technical taxonomies applied at the task level allow responsive reporting on S&T programs to Congressional, OSD and Army leadership.</p> <p>FY 2023 Plans: Develop strategic analyses to look across the S&T portfolios and provide recommendations to Army leadership for S&T efficiencies and collaborative opportunities; ensure that resources align to S&T strategy; support S&T policy development; coordinate efforts within and across the Army S&T portfolios and engage in tri service leveraging; support the Program Decision Memorandum process, tasks and guidance for Equipping PEG; develop prioritized decrement lists and recommend alternatives for a balanced portfolio; and support the plan and execution of the S&T program. Evaluate projects within ManTech to support potential joint Service efforts and activities of Joint Defense ManTech. Support Army Technology Maturation planning and execution, and evaluation and implementation of transition agreement policy</p> <p>FY 2024 Plans: Perform strategic analyses to look across the S&T portfolios and provide recommendations to Army leadership for S&T efficiencies and collaborative opportunities across DoD and the larger S&T community; will ensure that resources align to S&T strategy; will support S&T policy development; will coordinate efforts within and across the Army S&T portfolios and engage in tri service leveraging; will support the Program Decision Memorandum process, tasks and guidance for Equipping PEG; will develop prioritized investment opportunities and recommend alternatives for a balanced portfolio; and will support the plan and execution of the S&T program. Evaluate projects within ManTech to support potential joint Service efforts and activities of Joint Defense ManTech. Support Army Technology Maturation planning and execution, and evaluation and implementation of the transition agreement policy to increase technology transition opportunities.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase supports the planned lifecycle of the effort.</p> | | | | |
| <p>Title: Provide funding and support for Army Acquisition Program Technology Readiness Assessments for Program Milestone Decisions.</p> <p>Description: Coordination and alignment with Programs of Record. Demonstrate technical feasibility at system and subsystem level. As technology transitions and spirals to acquisition, ensure a rapid insertion of new technology.</p> <p>FY 2023 Plans: Support the S&T investment strategy for the entire Army; identify options for future modernization to sustain overmatch against adversaries and to create opportunities to meet new challenges and fight in new ways; continue Independent Review Team (IRT) analysis of technology maturity as part of Technology Area Readiness Assessments; provide oversight and management of the</p> | | 1.250 | 1.130 | 1.350 |

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| Appropriation/Budget Activity 2040 / 6 | R-1 Program Element (Number/Name) PE 0605803A / <i>Technical Information Activities</i> | Project (Number/Name) 727 / <i>Tech Info Activities</i> | | |
| B. Accomplishments/Planned Programs (\$ in Millions) | | FY 2022 | FY 2023 | FY 2024 |
| <p>Army's Technology Maturation Initiative; develop and track S&T metrics across the enterprise; identify S&T transitions in the Army SPAR planning forum to identify follow-on funding investments.</p> <p>FY 2024 Plans: Support the S&T investment strategy for the entire Army; identify options for future modernization to sustain overmatch against adversaries and to create opportunities to meet new challenges and support the Army of 2040; continue Independent Review Team (IRT) analysis of technology maturity as part of Technology Area Readiness Assessments; provide oversight and management of the Army's Technology Maturation Initiative; develop and track S&T metrics across the enterprise; identify S&T transitions in the Army SPAR planning forum to identify future funding investments.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase supports the planned lifecycle of the effort.</p> | | | | |
| <p>Title: Provide Army support to Under Secretary of Defense for Research and Engineering Executive Staff for Department of Defense (DoD) wide Science and Technology oversight.</p> <p>Description: Supports Army engagement in DoD/Under Secretary of Defense for Research and Engineering and cross agency Communities of Interest (COI) and committees.</p> <p>FY 2023 Plans: Participate in ongoing DoD Communities of Interest (COI) engagements and awareness of COI Programs with links to Army S&T; support Army S&T Engagements with USDRE Managers and Leadership; and support execution of ongoing programs, events and functional responsibilities, effectively communicating with all Army stakeholders and partners including other services, OSD, industry and academia.</p> <p>FY 2024 Plans: Participate in ongoing DoD Communities of Interest (COI) engagements and awareness of COI Programs with links to Army S&T; support Army S&T Engagements with USDRE leadership; and support execution of ongoing programs, events and functional responsibilities, effectively communicating with all Army stakeholders and partners including other services, OSD, industry and academia.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase supports the planned lifecycle of the effort.</p> | | 0.200 | 0.214 | 0.220 |
| <p>Title: SBIR/STTR Transfer</p> <p>FY 2023 Plans:</p> | | - | 0.366 | - |

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| Exhibit R-2A, RDT&E Project Justification: PB 2024 Army | | Date: March 2023 | | |
| Appropriation/Budget Activity 2040 / 6 | R-1 Program Element (Number/Name) PE 0605803A / <i>Technical Information Activities</i> | Project (Number/Name) 727 / <i>Tech Info Activities</i> | | |
| B. Accomplishments/Planned Programs (\$ in Millions) | | FY 2022 | FY 2023 | FY 2024 |
| Funding transferred in accordance with Title 15 USC §638 | | | | |
| FY 2023 to FY 2024 Increase/Decrease Statement: | | | | |
| Funding transferred in accordance with Title 15 USC §638 | | | | |
| Accomplishments/Planned Programs Subtotals | | 11.242 | 12.386 | 12.834 |
| | | FY 2022 | FY 2023 | |
| Congressional Add: Congressional Add | | - | 3.000 | |
| FY 2023 Plans: Technology transfer efforts. | | | | |
| Congressional Adds Subtotals | | - | 3.000 | |
| C. Other Program Funding Summary (\$ in Millions) | | | | |
| N/A | | | | |
| Remarks | | | | |
| D. Acquisition Strategy | | | | |
| N/A | | | | |

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| Exhibit R-2A, RDT&E Project Justification: PB 2024 Army | | | | | | | | | | Date: March 2023 | | |
| Appropriation/Budget Activity 2040 / 6 | | | | | R-1 Program Element (Number/Name) PE 0605803A / <i>Technical Information Activities</i> | | | | Project (Number/Name) 731 / <i>Army High Performance Computing Centers</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 |
| 731: <i>Army High Performance Computing Centers</i> | - | 2.000 | 2.187 | 2.201 | - | 2.201 | 2.223 | 2.225 | 2.250 | 2.274 | Continuing | Continuing |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

A. Mission Description and Budget Item Justification

This Project provides funding for high performance computing (HPC) research, as well as education, infrastructure sustainment, and outreach support associated with the Army High Performance Computing Center at the United States (U.S.) Army Combat Capabilities Development Command (DEVCOM), specifically, DEVCOM Army Research Laboratory (ARL). The Army High Performance Computing Center provides high fidelity modeling, simulation, and analysis of materials, systems, and operational constructs while working with researchers across the Army to explore new HPC computing environments, algorithms, and supporting technology necessary to support critical efforts in the areas of computational research..

The cited work is consistent with the Under Secretary of Defense for Research and Engineering priority focus areas and the Army Modernization Strategy.

Work is performed by DEVCOM ARL, Aberdeen Proving Ground, MD.

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

| | FY 2022 | FY 2023 | FY 2024 |
|---|----------------|----------------|----------------|
| Title: Sustain the High Performance Computing Environment and Infrastructure in Support of the CCDC Army Research Laboratory (ARL) | 2.000 | 2.154 | 2.201 |
| Description: The HPC center provides levels of computational capacity to support the development and modernization of tactical capabilities that increase the effectiveness of Army Soldiers around the world. Algorithm design and software engineering approaches are investigated to effectively partition and use binary processing cores to reduce time to solution for Army relevant problems. Factors such as performance, portability, and power will be considered in conjunction with developing new models to quantify computing capabilities in hybrid systems to facilitate algorithm signature mapping to available resources. | | | |
| FY 2023 Plans: Will sustain high performance computing computational infrastructure in support of Army relevant problems in physics based applications; expand methods for large-scale data analytic needs using graphic processing units; integrate cloud technologies with core user services; develop tools to assist the Research, Development, Test, Evaluation, and Acquisition communities with artificial intelligence (AI) and machine learning (ML) analysis using computing platforms with inference and training nodes. | | | |
| FY 2024 Plans: Will sustain high performance computing (HPC) computational infrastructure in support of Army relevant problems in deep reinforcement learning, large-scale data analytics, and augmented physics-based simulations; assess emerging processing | | | |

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| Exhibit R-2A, RDT&E Project Justification: PB 2024 Army | | Date: March 2023 | | |
| Appropriation/Budget Activity 2040 / 6 | R-1 Program Element (Number/Name) PE 0605803A / <i>Technical Information Activities</i> | Project (Number/Name) 731 / <i>Army High Performance Computing Centers</i> | | |
| B. Accomplishments/Planned Programs (\$ in Millions) | | FY 2022 | FY 2023 | FY 2024 |
| technologies as well as novel data management technologies to augment emerging high performance data analytic workloads required to exploit simulation results. FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase reflects planned lifecycle of this effort. | | | | |
| Title: SBIR/STTR Description: Funding transferred in accordance with Title 15 USC §638 FY 2023 Plans: Funding transferred in accordance with Title 15 USC §638 FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC §638 | | - | 0.033 | - |
| Accomplishments/Planned Programs Subtotals | | 2.000 | 2.187 | 2.201 |
| C. Other Program Funding Summary (\$ in Millions) N/A | | | | |
| Remarks | | | | |
| D. Acquisition Strategy N/A | | | | |

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| Exhibit R-2A, RDT&E Project Justification: PB 2024 Army | | | | | | | | | | Date: March 2023 | | |
| Appropriation/Budget Activity 2040 / 6 | | | | | R-1 Program Element (Number/Name) PE 0605803A / <i>Technical Information Activities</i> | | | | Project (Number/Name) 733 / <i>Acquisition Tech Act</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 |
| 733: <i>Acquisition Tech Act</i> | - | 4.611 | 5.057 | 5.169 | - | 5.169 | 5.286 | 5.292 | 5.348 | 5.407 | Continuing | Continuing |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

A. Mission Description and Budget Item Justification

This project funds efforts to meet the Defense Acquisition Workforce Improvement Act (DAWIA), as well as Congressional, SECDEF, and SECARMY mandates to provide program management execution tools, systems integration and architectural analysis, information technology infrastructure development, knowledge management, and technical workforce management. Funding also provides the framework for Army business and acquisition transformation for development and enhancement of capabilities to allow data to be readily available, automatically extracted to facilitate DoD-wide analysis and manage business operations, and the establishment of a set of activities that use data analysis, measurement, and evaluation-related methods to improve acquisition program outcomes and inform business re-engineering. These efforts afford stability and improvements to the Army Acquisition programmatic and financial data by integrating major acquisition systems and processes, applying decision support and expert information systems, supporting analysis, ability to measure effectiveness, and evaluation of alternative acquisition strategies in meeting Army modernization strategy requirements. This integrated set of capabilities will provide OSD and Army acquisition leadership insights needed to effectively manage a complex portfolio of acquisition programs through more timely and reliable access to authoritative acquisition data to assist in making acquisition, procurement, and logistics decisions in order to provide quality equipment to the Soldiers.

The cited work is consistent with Section 911-913 of the FY 18 NDAA, the Under Secretary of Defense for Research and Engineering Science and Technology priority focus areas, and the Army Modernization Strategy.

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

| | FY 2022 | FY 2023 | FY 2024 |
|--|----------------|----------------|----------------|
| Title: ACQUISITION TECH ACT | 4.611 | 4.872 | 5.169 |
| Description: Description: This effort supports the Acquisition Domain effort to reduce IT investments in programmatic and financial management tools through data standardization and governance, integration of existing acquisition business systems, and processes supporting key Acquisition capabilities at the enterprise level with the goal of reducing redundancy, improving systems operations, and improving management of data resulting in dramatically improved transparency, efficiency, and effective management of the Acquisition process. This support entails analysis required to develop, upgrade, enhance, deploy, and architect enterprise tools within an integrated program management environment on multiple (unclassified/classified) hosting platforms to support analysis of acquisition programs fiscal programming and budgeting requirements against enacted appropriations, conduct long range programming, planning and policy analysis, resource allocation analysis, cost tracking, and analysis. This support will upgrade the knowledge management and enterprise tools, including Project Management Resource Tools (PMRT), that assist acquisition community and professionals with day-to-day program management tasks throughout the Acquisition program's lifecycle. This support also helps implement standards for data management and service-oriented design | | | |

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| B. Accomplishments/Planned Programs (\$ in Millions) | | FY 2022 | FY 2023 | FY 2024 |
| methodology to facilitate efficiency and interoperability as well as providing some business intelligence services. These standards will help inform changes and creation of domain-level requirements, governance processes, and policies. | | | | |
| <p>FY 2023 Plans: FY2023 efforts expand the capabilities of the current PMRT system by migrating PMRT from a server to a cloud environment. The Army will also continue developing system interfaces with data available through the Acquisition Data Service Broker (ADSB) capability to centralize authoritative Army acquisition data into the PMRT environment to include accounting, contracting, programmatic, and financial data. Additionally, in FY2023, the Army will pursue broader PMRT implementation by incorporating capability to support defense acquisition workforce resources (DAWDA), and multi-service organizations pursuing authoritative acquisition data.</p> <p>FY 2024 Plans: FY2024 efforts expand the capabilities of the server-based PMRT system to full operational capability in a cloud environment. The Army will also continue developing additional system interfaces with data available through the Acquisition Data Service Broker (ADSB) capability to centralize authoritative Army acquisition data into the PMRT environment to include accounting, contracting, programmatic, and financial data. Additionally, in FY2024, the Army will pursue broader PMRT implementation by incorporating capability to support defense acquisition workforce resources (DAWDA), and multi-service organizations pursuing authoritative acquisition data.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase supports the planned lifecycle of the effort.</p> | | | | |
| <p>Title: SBIR/STTR Transfer</p> <p>Description: Funding transferred in accordance with Title 15 USC §638</p> <p>FY 2023 Plans: Funding transferred in accordance with Title 15 USC §638</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC §638</p> | | - | 0.185 | - |
| Accomplishments/Planned Programs Subtotals | | 4.611 | 5.057 | 5.169 |
| C. Other Program Funding Summary (\$ in Millions) | | | | |
| N/A | | | | |
| Remarks | | | | |

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| Exhibit R-2A, RDT&E Project Justification: PB 2024 Army | | Date: March 2023 |
| Appropriation/Budget Activity 2040 / 6 | R-1 Program Element (Number/Name) PE 0605803A / <i>Technical Information Activities</i> | Project (Number/Name) 733 / <i>Acquisition Tech Act</i> |

D. Acquisition Strategy
N/A

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| Exhibit R-2A, RDT&E Project Justification: PB 2024 Army | | | | | | | | | | Date: March 2023 | | |
| Appropriation/Budget Activity 2040 / 6 | | | | | R-1 Program Element (Number/Name) PE 0605803A / <i>Technical Information Activities</i> | | | | Project (Number/Name) CC2 / <i>Expeditionary Technologies</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 |
| CC2: <i>Expeditionary Technologies</i> | - | 4.758 | 5.628 | 5.675 | - | 5.675 | 6.193 | 6.199 | 6.265 | 6.333 | Continuing | Continuing |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

A. Mission Description and Budget Item Justification

This Project evaluates the feasibility and potential application of disruptive technologies to Army capability gaps. Expeditionary Technology Search (xTechSearch) partners with small, non-traditional companies to apply novel techniques and applications to Army problems through a non-dilutive prize competitions, business accelerators, and outreach activities. These programs will uncover novel dual-use technology solutions that otherwise would not be identified by the Department of Defense.

Work in this Project is performed by both the Assistant Secretary of the Army (Acquisition, Logistics and Technology).

The cited work is consistent with the Under Secretary of Defense for Research and Engineering critical technology areas and the Army Modernization Strategy.

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

| | FY 2022 | FY 2023 | FY 2024 |
|--|----------------|----------------|----------------|
| Title: Expeditionary Technology Search (xTechSearch) | 4.758 | 5.423 | 5.675 |
| Description: Funds technical scouting and competition in Army-wide disciplines through rigorous technical assessment, Soldier feedback, mentorship sponsoring, and cash prizes. | | | |
| FY 2023 Plans: Conduct biannual and ad-hoc competitions with small, non-traditional startups and technology firms seeking to apply their product or idea towards a prescribed Army technology focus area. | | | |
| FY 2024 Plans: Will conduct biannual and ad-hoc competitions with small, non-traditional technology innovation firms seeking to apply their product, technology, or concept towards a prescribed focus area supporting Army capability gaps. | | | |
| FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase supports the planned lifecycle of the effort. | | | |
| Title: SBIR/STTR Transfer | - | 0.205 | - |
| FY 2023 Plans: | | | |

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| Appropriation/Budget Activity 2040 / 6 | R-1 Program Element (Number/Name) PE 0605803A / <i>Technical Information Activities</i> | Project (Number/Name) CC2 / <i>Expeditionary Technologies</i> | | |
| B. Accomplishments/Planned Programs (\$ in Millions) | | FY 2022 | FY 2023 | FY 2024 |
| Funding transferred in accordance with Title 15 USC §638 | | | | |
| <i>FY 2023 to FY 2024 Increase/Decrease Statement:</i> | | | | |
| Funding transferred in accordance with Title 15 USC §638 | | | | |
| Accomplishments/Planned Programs Subtotals | | 4.758 | 5.628 | 5.675 |
| C. Other Program Funding Summary (\$ in Millions) | | | | |
| N/A | | | | |
| Remarks | | | | |
| D. Acquisition Strategy | | | | |
| N/A | | | | |

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| Exhibit R-2A, RDT&E Project Justification: PB 2024 Army | | | | | | | | | | Date: March 2023 | | |
| Appropriation/Budget Activity 2040 / 6 | | | | | R-1 Program Element (Number/Name) PE 0605803A / <i>Technical Information Activities</i> | | | | Project (Number/Name) DW3 / <i>Army Geospatial Enterprise Implementation</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 |
| DW3: <i>Army Geospatial Enterprise Implementation</i> | - | 8.563 | 9.394 | 5.448 | - | 5.448 | 5.634 | 8.547 | 6.375 | 6.577 | Continuing | Continuing |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

A. Mission Description and Budget Item Justification

This funding line provides support to network, synthetic training environment and soldier lethality cross functional teams (CFT). This effort provides the geospatial systems engineering, architecture, and geospatial interoperability certification required by AR 115-11 to ensure Army Acquisition Systems meet interoperability requirements and modernization priorities. This effort provides geospatial domain expertise to Mission Command (MC), Synthetic Training Environment (STE) Cross Functional Team (CFT), network and Soldier Lethality CFT in modernizing soldier situational awareness and enabling use of 2D and 3D information across Army and Defense programs and in a Mission Partner Environment (MPE). Enables data sharing, reduces duplication of effort, and enables a common operating picture across the Common Operating Environment, Army Futures Command modernization priorities, National Agencies and Mission Partners. Enables Army systems to consume geospatial data from National-Geospatial Intelligence Agency (NGA) and National System for Geospatial-Intelligence (NSG) partners as required by Department of Defense Instruction (DoDI) 5000.56. Continues implementation of the Army 3D Geospatial Data Integration Strategy as assigned in HQDA EXORD 154-20. Geospatial is a Mission Command Essential Capability and a critical enabler for the Common Operating Environment (COE), Army modernization, multi-domain operations and the warfighter.

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

| | FY 2022 | FY 2023 | FY 2024 |
|--|----------------|----------------|----------------|
| Title: Enterprise Support Branch (formerly Geospatial Acquisition Support Office) | 3.363 | 3.452 | 5.448 |
| <p>Description: This effort provides the geospatial systems engineering, architecture, and geospatial interoperability certification required by AR 115-11 to ensure Army Acquisition Systems meet Common Operating Environment (COE) requirements and modernization priorities. This effort provides geospatial domain expertise to Mission Command (MC) in implementing the Army Geospatial Enterprise (AGE) enabling a common operating picture across the Common Operating Environment, Army Futures Command modernization priorities, National Agencies and Mission Partners. Enables Army systems to consume geospatial data from National-Geospatial Intelligence Agency (NGA) and National System for Geospatial-Intelligence (NSG) partners as required by Department of Defense Instruction (DoDI) 5000.56. Enables an interoperable geospatial baseline system of systems across Army and Defense programs and in a Mission Partner Environment (MPE). Continues execution and implementation of the Army 3D Geospatial Data Integration Strategy as assigned in HQDA EXORD 154-20. Geospatial is a Mission Command Essential Capability and a critical enabler for the Common Operating Environment (COE), Army modernization and the warfighter.</p> <p>Key lines of effort include standardizing geospatial data between echelons, ensuring a Standard, Sharable Geospatial Foundation (a Mission Command Essential Capability) across Mission Command, developing new geospatial standards, evaluating emerging geospatial technologies early in their development processes, and certifying systems as AGE compliant. These critical capabilities</p> | | | |

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| Appropriation/Budget Activity 2040 / 6 | R-1 Program Element (Number/Name) PE 0605803A / <i>Technical Information Activities</i> | Project (Number/Name) DW3 / <i>Army Geospatial Enterprise Implementation</i> | | |
| B. Accomplishments/Planned Programs (\$ in Millions) | | FY 2022 | FY 2023 | FY 2024 |
| <p>enable geospatial interoperability across Mission Command, Cross-Functional Team (CFT) initiatives, and with our National and UAP partners ensuring a common operational picture enhancing soldier situational awareness and increasing mission success.</p> <p>FY 2023 Plans: Key lines of effort this year include enabling multi-domain operations and ensuring a Standard, Sharable Geospatial Foundation (a Mission Command Essential Capability) across Army and Defense programs and in a Mission Partner Environment (MPE). Focus is on developing geospatial systems engineering guidance for army systems, creating new geospatial standards and standards implementation guidance for the National System for Geospatial-Intelligence, evaluating emerging geospatial technologies such as 3D, augmented and virtual reality and geospatial artificial intelligence, against current Army systems to determine feasibility and path to implementing them successfully across the Army, enabling interoperability with our Allied partners, evaluating geospatial capabilities during Joint All Domain Command and Control exercises, maintaining a ground-warfighter geospatial data model for storing geospatial data in a standard way that supports analysis and data sharing, and certifying systems as compliant with geospatial standards ensuring lossless data exchanges. These critical capabilities enable geospatial interoperability across Mission Command, Cross-Functional Team (CFT) initiatives, and with our National and UAP partners ensuring a common operational picture enhancing soldier situational awareness and increasing mission success.</p> <p>FY 2024 Plans: Key lines of effort this year include enabling multi-domain operations and ensuring a Standard, Sharable Geospatial Foundation (a Mission Command Essential Capability) across Army and Defense programs and in a Mission Partner Environment (MPE). Focus through continuing development of Army and the National and Allied systems for geospatial intelligence and DoD geospatial architecture, standards, systems engineering and test and certification. Provides critical capabilities to support army modernization including evaluation and integration of emerging geospatial technologies including 3D data, augmented and virtual reality, artificial intelligence/machine learning and edge computing with current Army systems and processes. Focus is on enabling interoperability across army systems and with other Services and our Allied partners. Continue to evaluate emerging technologies during Joint All Domain Command and Control exercises. These critical capabilities enable geospatial interoperability across Mission Command, Cross Functional Team (CFT) initiatives, and with our National and UAP partners ensuring a common operational picture enhancing soldier situational awareness and increasing mission success."</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Increased funding for the "Engineer C2 Portfolio" with the primary focus on S&T Transition and M-Code migration.</p> | | | | |
| Title: SBIR/STTR | | - | 0.042 | - |
| FY 2023 Plans: Funding transferred in accordance with Title 15 USC §638 | | | | |
| FY 2023 to FY 2024 Increase/Decrease Statement: | | | | |

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| Appropriation/Budget Activity 2040 / 6 | R-1 Program Element (Number/Name) PE 0605803A / <i>Technical Information Activities</i> | Project (Number/Name) DW3 / <i>Army Geospatial Enterprise Implementation</i> | | |
| B. Accomplishments/Planned Programs (\$ in Millions) | | FY 2022 | FY 2023 | FY 2024 |
| Funding transferred in accordance with Title 15 USC §638 | | | | |
| Accomplishments/Planned Programs Subtotals | | 3.363 | 3.494 | 5.448 |
| | | FY 2022 | FY 2023 | |
| Congressional Add: FY22 Congressional Program Increase | | 5.200 | - | |
| FY 2022 Accomplishments: Matured and demonstrated geospatial software on edge computing devices to improve military analyses, visualization, reporting, and decision-making at the tactical edge Matured/optimized next generation geospatial analytical tools for tactical environments applicable to lower echelon and tactical edge exploitation. Provided improve situational awareness, combat planning, and facilitated more rapid decision-making for military forces at the tactical edge | | | | |
| Congressional Add: FY23 Congressional Program Increase | | - | 5.900 | |
| FY 2023 Plans: This effort will accelerate AGE development and implementation of standards and data integration capabilities to support interoperability of Army intelligence sources via broader adoption of Open Geospatial Consortium (OGC) standards. AGC will work with Army Programs of Record and the National System for Geospatial Intelligence (NSG) to align and integrate critical geospatial data for times of national crisis and operational planning. | | | | |
| Congressional Adds Subtotals | | 5.200 | 5.900 | |
| C. Other Program Funding Summary (\$ in Millions) | | | | |
| N/A | | | | |
| Remarks | | | | |
| D. Acquisition Strategy | | | | |
| Project funds are for Civilian Pay only. 100% funds utilized to pay for 12 direct funded Army Civilians to execute this mission. No funding is expended for contracting. | | | | |