

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Army **Date:** April 2022

Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 6: RDT&E Management Support</i>	R-1 Program Element (Number/Name) PE 0605716A / <i>Army Evaluation Center</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
Total Program Element	-	56.827	65.854	67.058	-	67.058	67.182	68.477	68.482	69.729	0.000	463.609
302: <i>Army Evaluation Center</i>	-	56.827	65.854	67.058	-	67.058	67.182	68.477	68.482	69.729	0.000	463.609

A. Mission Description and Budget Item Justification

This funding line supports test and evaluation (T&E) of Army Modernization Priority Programs.

This Program Element (PE) provides the resources to operate the Army Evaluation Center (AEC), the Army's independent evaluator for Army Futures Command (AFC) Cross Functional Team (CFT) efforts and all other Army and Joint Service programs (currently over 700 programs in total). AEC is the lead agent to plan, direct, and evaluate all required program testing and is the unbiased, independent authority for reporting on system progress. AEC is the focal point in test strategy development, system safety verification, and data analyses from early developmental consumer tests through operational tests. AEC develops Critical Operational Issues and Criteria (COIC) in conjunction with AFC to narrow the focus of testing to what is essential. AEC reviews and shapes system requirements to ensure they do not drive unnecessary testing. AEC provides critical independent assessments on system effectiveness, suitability, survivability, and safety to include cybersecurity and electronic warfare (EW); artificial intelligence (AI); safety of materiel solutions; and viability of emerging technologies and engineering change proposals in order to support major acquisition/fielding decisions including but not limited to acquisition milestones, materiel changes, and materiel releases.

AEC is responsible for all assigned developmental and independent operational evaluations of Army materiel, information, and acquisition systems, an inherently governmental mission. AEC must remain independent from the development community. AEC assists the Chief of Staff of the Army decision making process by supporting Army Capabilities Integration Development System (A-CIDS) processes as well as supporting the AFC through the CFT concept. AEC evaluates operational effectiveness by determining if the system provides intended benefits to the Force. AEC assesses, confirms, and releases system safety for use by Soldiers upon fielding and during government sponsored experiments and demonstrations. AEC determines impacts to readiness through Human Systems Integration (HSI), Unit Systems Integration (USI), and Army Systems Integration (ASI), as well as doctrine, organization, training, materiel, leadership and education, personnel, facilities and policy (DOTMLPF-P) impacts. AEC evaluates ballistics survivability and lethality missions, adversarial assessments/ threat computer network operations (TCNO), cooperative vulnerability and penetration assessments (CVPA), and EW (attack, support) countermeasures in support of the National Defense Authorization Act (NDAA) 2016 Section 1647, establishment of Cybersecurity and Electromagnetic Affects (CEMA). AEC manages, plans, and executes Information Assurance (IA) operational assessments during annual Combatant Command and Army Service exercises in support of the congressionally mandated Office of the Secretary of Defense (OSD) Director, Operational Test and Evaluation (DOT&E) assessment, and performs operational test agency (OTA) duties for the Ballistic Missile Defense System (BMDS).

This PE funds direct civilian labor and minimum non-labor requirements to include: Temporary Duty (TDY) travel, personnel training, career development, supplies and equipment, hardware, software, and other external Other Government Agency (OGA) support as well as methodology development required to evaluate emerging technologies and instrumentation requirements.

AEC consists of seven directorates - Analytics, Artificial Intelligence, and Digital Engineering Evaluation Directorate (AAIDED); Aviation-Fires Evaluation Directorate; Ballistic Missile Defense Evaluation Directorate (primarily funded by the Missile Defense Agency (MDA); Command, Control, Communications, Computers, Intelligence,

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Army	Date: April 2022
---	-------------------------

Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army</i> / BA 6: <i>RDT&E Management Support</i>	R-1 Program Element (Number/Name) PE 0605716A / <i>Army Evaluation Center</i>
---	---

Surveillance and Reconnaissance (C4ISR) Evaluation Directorate; Mounted Systems Evaluation Directorate; Soldier Evaluation Directorate; and Survivability Evaluation Directorate - and a lean headquarters element as AEC receives staff services from the Army Test and Evaluation Command (ATEC) Headquarters (HQ). AEC provides direct support to AFC with personnel geographically co-located with eight CFTs - Long Range Precision Fires; Next Generation Combat Vehicle; Future Vertical Lift; Network; Assured Positioning, Navigation, and Timing; Air and Missile Defense; Soldier Lethality; and Synthetic Training Environment - and the Rapid Capabilities-Critical Technology Office and the Artificial Intelligence Task Force.

The AEC primary competencies are: identify what decision makers need to know; plan and direct T&E strategies; evaluate operational effectiveness, suitability, survivability, and safety; and provide senior leadership unbiased advice on Army and Joint Service programs.

B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	56.827	65.854	0.000	-	0.000
Current President's Budget	56.827	65.854	67.058	-	67.058
Total Adjustments	0.000	0.000	67.058	-	67.058
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	67.058	-	67.058

Change Summary Explanation

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

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2023 Army										Date: April 2022		
Appropriation/Budget Activity 2040 / 6					R-1 Program Element (Number/Name) PE 0605716A / Army Evaluation Center				Project (Number/Name) 302 / Army Evaluation Center			
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
302: Army Evaluation Center	-	56.827	65.854	67.058	-	67.058	67.182	68.477	68.482	69.729	0.000	463.609
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This Project provides the resources to operate the Army Evaluation Center (AEC), the Army's independent evaluator for Army Futures Command (AFC) Cross Functional Team (CFT) efforts and all other Army and Joint Service programs (currently over 700 programs in total). AEC is the lead agent to plan, direct, and evaluate all required program testing and is the unbiased, independent authority for reporting on system progress. AEC is the focal point in test strategy development, system safety verification, and data analyses from early developmental consumer tests through operational tests. AEC develops Critical Operational Issues and Criteria (COIC) in conjunction with AFC to narrow the focus of testing to what is essential. AEC reviews and shapes system requirements to ensure they do not drive unnecessary testing. AEC provides critical independent assessments on system effectiveness, suitability, survivability, and safety to include cybersecurity and electronic warfare (EW); artificial intelligence (AI); safety of materiel solutions; and viability of emerging technologies and engineering change proposals in order to support major acquisition/fielding decisions including but not limited to acquisition milestones, materiel changes, and materiel releases.

AEC is responsible for all assigned developmental and independent operational evaluations of Army materiel, information, and acquisition systems, an inherently governmental mission. AEC must remain independent from the development community. AEC assists the Chief of Staff of the Army decision making process by supporting Army Capabilities Integration Development System (A-CIDS) processes as well as supporting the AFC through the CFT concept. AEC evaluates operational effectiveness by determining if the system provides intended benefits to the Force. AEC assesses, confirms, and releases system safety for use by Soldiers upon fielding and during government sponsored experiments and demonstrations. AEC determines impacts to readiness through Human Systems Integration (HSI), Unit Systems Integration (USI), and Army Systems Integration (ASI), as well as doctrine, organization, training, materiel, leadership and education, personnel, facilities and policy (DOTMLPF-P) impacts. AEC evaluates ballistics survivability and lethality missions, adversarial assessments/ threat computer network operations (TCNO), cooperative vulnerability and penetration assessments (CVPA), and EW (attack, support) countermeasures in support of the National Defense Authorization Act (NDAA) 2016 Section 1647, establishment of Cybersecurity and Electromagnetic Affects (CEMA). AEC manages, plans, and executes Information Assurance (IA) operational assessments during annual Combatant Command and Army Service exercises in support of the congressionally mandated Office of the Secretary of Defense (OSD) Director, Operational Test and Evaluation (DOT&E) assessment, and performs operational test agency (OTA) duties for the Ballistic Missile Defense System (BMDS).

This Project funds direct civilian labor and minimum non-labor requirements to include: Temporary Duty (TDY) travel, personnel training, career development, supplies and equipment, hardware, software, and other external Other Government Agency (OGA) support as well as methodology development required to evaluate emerging technologies and instrumentation requirements.

AEC consists of seven directorates - Analytics, Artificial Intelligence, and Digital Engineering Evaluation Directorate (AAIDED); Aviation-Fires Evaluation Directorate; Ballistic Missile Defense Evaluation Directorate (primarily funded by the Missile Defense Agency (MDA)); Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) Evaluation Directorate; Mounted Systems Evaluation Directorate; Soldier Evaluation Directorate; and Survivability Evaluation Directorate - and a lean headquarters element as AEC receives staff services from the Army Test and Evaluation Command (ATEC) Headquarters (HQ). AEC provides direct support to AFC with personnel geographically co-located with eight CFTs - Long Range Precision Fires; Next Generation Combat Vehicle; Future Vertical Lift;

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2023 Army		Date: April 2022		
Appropriation/Budget Activity 2040 / 6	R-1 Program Element (Number/Name) PE 0605716A / Army Evaluation Center	Project (Number/Name) 302 / Army Evaluation Center		
Network; Assured Positioning, Navigation, and Timing; Air and Missile Defense; Soldier Lethality; and Synthetic Training Environment - and the Rapid Capabilities-Critical Technology Office and the Artificial Intelligence Task Force.				
The AEC primary competencies are: Identify what decision makers need to know; plan and direct test and evaluation (T&E) strategies; evaluate operational effectiveness, suitability, survivability, and safety; and provide senior leadership unbiased advice on Army and Joint Service programs.				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2021	FY 2022	FY 2023
Title: Army Evaluation Center Civilian Pay		56.702	60.530	61.620
<p>Description: AEC provides integrated technical and operational evaluations and continuous evaluation of assigned weapon systems and major automated information systems for major milestone decisions, materiel changes, and materiel releases in support of the Army Acquisition Executive and force development. AEC develops the evaluation strategy, designs technical and operational tests, and evaluates the test results to address the combat effectiveness, suitability, survivability, and safety factors pertinent to the decision process for more than 700 systems/programs across the Army, other Services, and Agencies. AEC prepares integrated System Evaluation Plans and conducts integrated technical and operational evaluations for all assigned systems. In support of Overseas Contingency Operations (OCO) and other real-world events, AEC provides Capability & Limitation Reports and safety verification documents. AEC assists the Chief of Staff of the Army decision making process by supporting the Army Capabilities Integration Development System (A-CIDS) processes.</p> <p>AEC exercises enterprise authority to prioritize, synchronize, and resource evaluations and assessments in support of Army Modernization and in accordance with AFC priorities. As a principle member of the ATEC Board of Directors (BOD), AEC partners with other ATEC organizations to provide enterprise oversight and decision making and coordinate enterprise initiatives to accelerate and reduce the cost of evaluations and assessments. AEC supports the A-CIDS process by reviewing and shaping COIC that are operationally relevant, total system focused, and that can be evaluated while driving essential T&E. AEC provides direct support to AFC by resourcing coordinators geographically co-located with eight CFTs, the Rapid Capabilities Critical Technology Office (RCCTO), and the AI Task Force. AEC resources eight integrators dedicated to each CFT to lead synchronization efforts across the T&E enterprise. AEC enables rapid capability development by partnering with and dedicating coordination efforts with RCCTO. AEC employs innovative and adaptive T&E processes through applying flexibility given limited resources and shifting priorities while leveraging all credible data sources. AEC develops and deploys enhanced T&E capabilities focusing on modernizing T&E capabilities while refining the investment process. AEC partners with analytic and strategic partner organizations to share resources, gain evaluation and assessment efficiencies, and increase capacity to support AFC. AEC applies new and innovative techniques in data mining, data visualization, and presentation of large data sets; and develops methodologies for the evaluation of artificial intelligence and hypersonic weapons.</p> <p>FY 2022 Plans: Will continue to support the costs of civilian labor for AEC PBG authorizations. AEC will continue to lead planning and execution of Project Convergence 2022 (PC22) in the evaluation of system of systems as well as individual system evaluations. AEC will</p>				

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2023 Army	Date: April 2022
--	-------------------------

Appropriation/Budget Activity 2040 / 6	R-1 Program Element (Number/Name) PE 0605716A / Army Evaluation Center	Project (Number/Name) 302 / Army Evaluation Center
--	--	--

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023
---	----------------	----------------	----------------

<p>continue to develop and execute advancement of AI and machine learning (ML) in support of evaluations. AEC will continue to leverage AFC's Top-Down Futures Development Process (TDFDP) to shape requirements continuously. AEC will continue to develop processes and procedures to execute T&E for Army programs leveraging agile development processes for software-centric programs. AEC will continue to develop partnerships with Federally Funded Research and Development Center to jointly advance an Instrumentation Sampling Methodology that provides defensible procedures to minimize test resources and ensure suitable data is available. AEC will continue to develop evaluation metrics in support of Army Modernization priorities for new and emerging technologies such as AI, ML, signature management, hypersonics, directed energy, and human cognition. AEC will continue to provide dedicated integration and on-site coordination support for RCCTO and all eight AFC CFTs. AEC will continue to partner with analytic and strategic organizations through participation in the AI Task Force to develop and define strategies and methodologies for T&E of integrated AI system competencies and capabilities. AEC will continue to develop personnel competencies in cloud computing and data management and will continue to identify opportunities for and invest in efforts to develop cloud computing and data sharing/storage infrastructure. AEC will continue to resource dedicated integration and coordination for Project Convergence and Army Modernization through the Sensor to Shooter Cell. AEC will continue to provide evaluation and assessment of system safety in support for government sponsored experiments and demonstrations to test and evaluate system integration events. AEC will continue to develop talent and culture changes that support organic Army T&E expertise in the modernized environment. Leverage advanced analytics/data mining for knowledge management and transfer. Continue to support a leadership-driven decision making process through resourcing high priority efforts, identifying T&E efficiencies, and identifying and allocating T&E resources required for modernization. Continue to leverage strategic partnerships. Establish processes to ensure enduring change, develop and maintain policy and tools, and provide governance and oversight.</p> <p>FY 2023 Plans: Will continue to fund operational costs for AEC including civilian pay and non-labor costs (approximately 94% of AEC's total budget is civilian labor). Develop and apply new techniques in cloud computing, data mining, data visualization, and presentation of large data sets in support of Army Data Transformation initiatives. Continue to research and develop evaluation metrics for new and emerging technologies in AI/ML, Data Management and Analysis, Virtual/Augmented Reality, Cybersecurity, and aerospace operations. Develop future leaders and invest in improved evaluation tools and capabilities in emerging technologies. Support Army Modernization priorities by providing dedicated support to CFTs, RCCTO, and AI Task Force. Lead Project Convergence 2023 planning and execution activities through its Sensor to Shooter cell. Invest in new modernization efforts to support increasing demands for classified information processing in direct support of Army modernization priorities.</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Increase due to civilian pay raise assumptions. The FY23 funding will continue to support the additional authorizations and tasks as directed by the Acquisition Reform EXORD.</p>			
Title: Army Evaluation Center Operations Support	0.125	5.163	5.438

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2023 Army		Date: April 2022		
Appropriation/Budget Activity 2040 / 6		R-1 Program Element (Number/Name) PE 0605716A / Army Evaluation Center		Project (Number/Name) 302 / Army Evaluation Center
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2021	FY 2022	FY 2023
<p>Description: AEC operational support costs. Contract services include facilities maintenance and repair and custodial support to ensure safety, health and hygiene of the AEC workforce; sustainment services such as grass cutting, snow removal, and security for AEC facilities; software licenses required for scientific and statistical methods in developing rigorous, defensible test plans and evaluating the results; training for the highly technical civilian and military workforce (450 total number); life cycle replacement of IT equipment, printers, VTC equipment, wireless communications; contract support services for IT helpdesk, network, cybersecurity, etc.; and annual consumable supplies.</p> <p>FY 2022 Plans: Funding will continue to support AEC operational support costs including contract support, software licenses, training, life cycle replacement of equipment.</p> <p>FY 2023 Plans: Funding will continue to support AEC operational support costs including contract support, software licenses, training, life cycle replacement of equipment.</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Increase due to inflation rates for non-pay and non-fuel purchases.</p>				
<p>Title: FY2022 SBIR/STTR Transfer</p> <p>Description: Funding transferred in accordance with Title 15 USC ?638.</p> <p>FY 2022 Plans: Funding transferred in accordance with Title 15 USC ?638.</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC ?638.</p>		-	0.161	-
Accomplishments/Planned Programs Subtotals		56.827	65.854	67.058
C. Other Program Funding Summary (\$ in Millions)				
N/A				
Remarks				
D. Acquisition Strategy				
N/A				