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Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 6: RDT&E Management Support</i>	R-1 Program Element (Number/Name) PE 0605326A / <i>Concepts Experimentation Program</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	-	18.757	19.430	25.596	-	25.596	29.339	27.770	57.379	58.473	-	-
312: <i>Army/Joint Experimentation</i>	-	2.361	0.506	0.325	-	0.325	0.329	0.352	0.376	0.378	-	-
317: <i>Current Force Capability Gaps</i>	-	15.282	17.265	23.779	-	23.779	27.491	25.858	55.405	56.462	-	-
33B: <i>Soldier-Centered Analyses For Future Force</i>	-	1.114	1.659	1.492	-	1.492	1.519	1.560	1.598	1.633	-	-

Note

Not Applicable for this item.

A. Mission Description and Budget Item Justification

Army Experimentation program supports current and future concepts and capabilities involving Soldiers and Leaders within live, virtual, and constructive environments of exploring concepts, capability requirements and solution across Doctrine, Organization, Training, Materiel, Leadership and Education, personnel, and Facilities (DOTMLPF) domains in order to learn and mitigate risk for current and future forces. Experiments and projects inform the Army future concepts and assess high-risk conceptual assumptions in order to focus required capabilities and represent the user's requirements in the future Army. Army experiments use the combined resources of Army battle laboratories, operational units, research labs, materiel developers, industry and academia to collaborate in the development, refinements, and assessment of future force concepts - to inform capability developments and validate concepts for current and future force. Due to significant reduction in funding, beginning in FY 2015, Research, Development, Test and Evaluation (RDT&E) funding will on Simulated Experiments (SIMEX) to integrate and assess Army Concepts, Force Designs phases, with Army level issues across the breadth of a campaign that highlights validation and integration of Force 2025 outcomes.

Enables TRADOC Capability Development and Integration Directorates (CDID)/TRADOC Capability Managers (TCM) Joint Capabilities Integration and Development System (JCIDS) development to support Program Executive Offices (PEOs) and Program Managers (PMs) for acquisition milestone decisions. The Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA(ALT) organizational community of PEOs/PMs supplemented manpower shortfalls to TRADOC for many years. This was necessary to ensure work affecting their materiel development programs, specifically the mandated JCIDS process necessary for Milestone acquisition AROC/JROC decisions, was executed in a timely manner. During POM 14-18, the EE PEG funded a strategy for ASA(ALT) to drawdown support as TRADOC received funding in a phased approach, to maintain this workforce. The strategy has been implemented in 25% increments beginning in FY14 with TRADOC being 100% responsible in FY17. Funding ensures TRADOC acts independently as the voice of the warfighter, the user, in complement with the materiel developer in providing total capability management including integration of all doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) consideration for warfighting functional areas. Provides for TRADOC serves as the lead for Accelerated Capability Development (ACD) to address current critical operational needs enabling development and deployment/employment of accelerated capabilities (both materiel and non-materiel) to the current force. Early Synthetic Prototyping enables wargaming, experimentation capability that engages soldiers across the Army through early-fidelity game environments to gain their insights and recommendations in the development of future doctrine, organization, and materiel solutions. Serve as TRADOC central coordinating organization for Headquarters Department of the Army

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(HDA) staff support requirements related to accelerated capabilities developments. Integrate accelerated capabilities development activities between proponent force modernization domains to include Joint/Service coordination. Provides Army Warfighter Assessments (AWA), which will allow TRADOC to physically integrate, assess and evaluate the network, capability sets and other adaptive capabilities to accelerate the systems acquisition process of providing DOTMLPF recommendations to the Army. Provides support to the Army Warfighting Challenges (AWFC) that are used by the Army to frame learning and collaboration.

B. Program Change Summary (\$ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Previous President's Budget	19.430	19.430	33.788	-	33.788
Current President's Budget	18.757	19.430	25.596	-	25.596
Total Adjustments	-0.673	0.000	-8.192	-	-8.192
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.673	-			
• Adjustments to Budget Years	-	-	-8.192	-	-8.192

Change Summary Explanation

2017 Reduction attributed to realignment to other higher priority programs.

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Appropriation/Budget Activity 2040 / 6	R-1 Program Element (Number/Name) PE 0605326A / <i>Concepts Experimentation Program</i>	Project (Number/Name) 312 / <i>Army/Joint Experimentation</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
312: <i>Army/Joint Experimentation</i>	-	2.361	0.506	0.325	-	0.325	0.329	0.352	0.376	0.378	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

Note

Not applicable for this item.

A. Mission Description and Budget Item Justification

Army Experimentation program supports current and future concepts and capabilities involving Soldiers and Leaders within live, virtual, and constructive environments by exploring concepts, capability requirements and solutions across Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities (DOTMLPF) domains in order to learn and mitigate risk for current and future forces. Experiments inform Army future concepts and assess high-risk conceptual assumptions in order to focus required capabilities and represent the user's requirements in the future Army. Army experiments use the combined resources of Army battle laboratories, operational units, research labs, materiel developers, industry and academia to collaborate in the development, refinements, and assessment of future force concepts - to inform capability developments and validate concepts for current and future force. Due to significant reduction in funding, beginning in FY 2015, Research, Development, Test and Evaluation (RDT&E) funding will partially funds the Army's Simulated Experiment to integrate and assess Army Concepts, Force Designs, and Capabilities. Specifically the Army's tool to support Force 2025 and Beyond (F2025B) Maneuvers to develop, refine, and validate requisite Force 2025 and Beyond Concepts, Operational and Organizational Plans, and DOTMLPF solution to achieve the vision of the Army's Force in the near (2014-2020), mid (2020-2030) and far (2030-2040) terms.

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

	FY 2015	FY 2016	FY 2017
Title: Experimentation - High-Fidelity Live-Virtual-Constructive Experiments	2.361	0.506	0.325
Description: Experiments address concept and capability developments including integration of capabilities for all BCT types; development of future Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel and Facilities (DOTMLPF) requirements and solutions; and acceleration and integration of capabilities for current force Brigade Combat Teams (BCTs) and above brigade.			
FY 2015 Accomplishments: Simulated Experiments (SIMEX) become the focus to integrate and assess Army Concepts, Force Designs, and Capabilities.			
FY 2016 Plans: Simulated Experiments (SIMEX) will become the focus to integrate and assess Army Concepts, Force Designs, and Capabilities.			
FY 2017 Plans: Simulated Experiments (SIMEX) will become the focus to integrate and assess Army Concepts, Force Designs, and Capabilities to support Force 2025B Maneuvers to develop, refine, and validate requisite Force 2025 and Beyond Concepts, Operational			

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Appropriation/Budget Activity 2040 / 6	R-1 Program Element (Number/Name) PE 0605326A / <i>Concepts Experimentation Program</i>	Project (Number/Name) 312 / <i>Army/Joint Experimentation</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
and Organizational Plans, and DOTMLPF solutions to achieve the vision of the Army's Force in the near (2014-2020), mid (2020-2030), and far (2030-2040) terms.				
Accomplishments/Planned Programs Subtotals		2.361	0.506	0.325
C. Other Program Funding Summary (\$ in Millions) N/A				
Remarks				
D. Acquisition Strategy N/A				
E. Performance Metrics N/A				

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army										Date: February 2016		
Appropriation/Budget Activity 2040 / 6					R-1 Program Element (Number/Name) PE 0605326A / <i>Concepts Experimentation Program</i>				Project (Number/Name) 317 / <i>Current Force Capability Gaps</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
317: <i>Current Force Capability Gaps</i>	-	15.282	17.265	23.779	-	23.779	27.491	25.858	55.405	56.462	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Programs not funded in FY 2017: Army Expeditionary Warrior Experiment (AEWE), Maneuver Fires Center Integration Exercise (MFIEX), Manned Unmanned Teaming Ground (MUM-T(G)), CDID/TCM Joint Capabilities and Integration Development Systems (JCIDS, and Operational Energy (Net Zero Expeditionary Base Camp).

A. Mission Description and Budget Item Justification

Army Experimentation program supports current and future concepts and capabilities involving Soldiers and Leaders within live, virtual, and constructive environments of exploring concepts, capability requirements and solution across Doctrine, Organization, Training, Materiel, Leadership and Education, personnel, and Facilities (DOTMLPF) domains in order to learn and mitigate risk for current and future forces. Experiments and projects inform the Army future concepts and assess high-risk conceptual assumptions in order to focus required capabilities and represent the user's requirements in the future Army. Army experiments use the combined resources of Army battle laboratories, operational units, research labs, materiel developers, industry and academia to collaborate in the development, refinements, and assessment of future force concepts - to inform capability developments and validate concepts for current and future force. Due to significant reduction in funding, beginning in FY 2015, Research, Development, Test and Evaluation (RDT&E) funding will on Simulated Experiments (SIMEX) to integrate and assess Army Concepts, Force Designs phases, with Army level issues across the breadth of a campaign that highlights validation and integration of Force 2025 outcomes.

Enables TRADOC Capability Development and Integration Directorates (CDID)/TRADOC Capability Managers (TCM) Joint Capabilities Integration and Development System (JCIDS) development to support Program Executive Offices (PEOs) and Program Managers (PMs) for acquisition milestone decisions. The Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA(ALT) organizational community of PEOs/PMs supplemented manpower shortfalls to TRADOC for many years. This was necessary to ensure work affecting their materiel development programs, specifically the mandated JCIDS process necessary for Milestone acquisition AROC/JROC decisions, was executed in a timely manner. During POM 14-18, the EE PEG funded a strategy for ASA(ALT) to drawdown support as TRADOC received funding in a phased approach, to maintain this workforce. The strategy has been implemented in 25% increments beginning in FY14 with TRADOC being 100% responsible in FY17. Funding ensures TRADOC acts independently as the voice of the warfighter, the user, in complement with the materiel developer in providing total capability management including integration of all doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) consideration for warfighting functional areas. Provides for TRADOC serves as the lead for Accelerated Capability Development (ACD) to address current critical operational needs enabling development and deployment/employment of accelerated capabilities (both materiel and non-materiel) to the current force. Early Synthetic Prototyping enables wargaming, experimentation capability that engages soldiers across the Army through early-fidelity game environments to gain their insights and recommendations in the development of future doctrine, organization, and materiel solutions. Serve as TRADOC central coordinating organization for Headquarters Department of the Army (HDA) staff support requirements related to accelerated capabilities developments. Integrate accelerated capabilities development activities between proponent force modernization domains to include Joint/Service coordination. Provides Army Warfighter Assessments (AWA), which will allow TRADOC to physically integrate, assess

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and evaluate the network, capability sets and other adaptive capabilities to accelerate the systems acquisition process of providing DOTMLPF recommendations to the Army. Provides support to the Army Warfighting Challenges (AWFC) that are used by the Army to frame learning and collaboration.				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
<p>Title: Counter Improvised Explosive Device Adapt the Force (AtF) (formerly Improvised Explosive Device (IED) Integrated Concept Development Team (ICDT))</p> <p>Description: The IED ICDT is responsible for conducting Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities (DOTMLPF) assessments; performs gap analyses identified by HQDA and Joint Urgent Operational Needs Statement (JUONS).</p> <p>FY 2015 Accomplishments: Lead the Adapt the Force efforts under Army Counter-IED (CIED) Strategy supporting development and maintenance of AtF CIED database and resolution of DOTMLPF issues associated with integration of various CIED initiatives. Responsible for coordination and facilitating IED-Defeat Council of Colonels and General Officer Steering Committees producing guidance and directives for Army-wide IED-Defeat Training initiative and systems. Support TRADOC CoEs with CIED SMEs and products for all CIED Lines of Effort.</p>		1.000	-	-
<p>Title: Operational Energy (formerly Demo/Assess Operational Power and Energy)</p> <p>Description: Funding is needed for Operational Power and Energy</p> <p>FY 2015 Accomplishments: Continued acceleration of Operational Energy initiative for remote Combat Outposts and Soldier Power initiatives. Operational Energy provides the warfighter with increased levels of agility, flexibility, and interoperability when operating in the expeditionary environment. Operational energy solutions approach extends combat and tactical systems' mission endurance and resilience, ensure uninterrupted and optimal energy to systems within the mission command network, and mitigate force risk by reducing energy demand. Phase two of multi-phased approach supports development of integrated operational energy solutions, which require a system-of-systems engineering approach. This approach ensures that designs identify and address effects on the force when delivering solutions provide necessary employment guidance and assess impacts on operational effectiveness.</p>		1.000	-	-
<p>Title: Army Expeditionary Warrior Experiment (AEWE) (formerly Prototype Solution Demonstrations)</p> <p>Description: AEWE addresses live, prototype experimentation requirements.</p> <p>FY 2015 Accomplishments: This campaign of experiments was critical at the Maneuver Center as we conduct research, development, and experimentation to ensure our future Maneuver Force is prepared and equipped to fight and win in a complex operating environment. Through doctrine development, leveraging emerging technology and partnering with industry, the Maneuver Center is an advocate for the</p>		0.420	0.153	-

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
<p>Maneuver Force. FY15 campaign of experiments, Spiral J, will be focused on technologies to support five primary study areas: Cellular Communications, Robotics, Solider Load and Protection, Power Solutions and Resupply.</p> <p>FY 2016 Plans: This series of experiments is critical to promote research, development, and experimentation associated with Force 2025 and Beyond (F2025B) efforts. AEWE provides a live prototype experimentation venue to address current operational needs and F2025B requirements. FY16 campaign of experiments, Spiral K, is focused on technologies to support five primary study areas: Cellular Communications, Robics, Solider Load and Protection, Power Solutions, and Resupply.</p>				
<p>Title: Robotics</p> <p>Description: Testing and demonstration of increased unmanned ground vehicle capabilities.</p> <p>FY 2015 Accomplishments: Supported the Army robotics Campaign Plan development, and resolution of DOTMLPF issues associated with integration of various Robotics initiatives. Was responsible for the Joint Ground Robotics Integration Team meetings. Produced guidance/directives for Army-wide Robotic SMEs and products for applicable initiative being resourced and assessed. Included initiatives directly related to robotics such as operational control units (OCUs) like Tactical Robotic Controller and systems linked to the controllers.</p>		1.000	-	-
<p>Title: Tunnel Detection (TD)</p> <p>Description: Test and demonstration of sensor technology.</p> <p>FY 2015 Accomplishments: Test and demonstrate a suite of sensor technology systems capable of detecting, exploiting, and remediating, clandestine purpose-built tunnels.</p>		1.000	-	-
<p>Title: Exploitation</p> <p>Description: Document and Media Exploitation (DOMEX) is the collection and exploitation of captured equipment, documents, and media.</p> <p>FY 2015 Accomplishments: Document and Media Exploitation (DOMEX) enables tactical, operational, and strategic leaders with accurate information about enemy forces through the rapid and accurate extraction, exploitation, and analysis of captured enemy documents, media, and materiel. Tactically, DOMEX is the collection and exploitation of captured equipment, documents, and media to generate actionable intelligence. The DOMEX is a critical part of target exploitation, especially as it relates to actions on the objective</p>		1.000	-	-

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
during site exploitation activities. Efforts in exploitation also support Special Operations Command (SOCOM) with DOTMLPF assessments of classified solutions supporting technical reconnaissance, and information operations associated with exploitation.				
<p>Title: Non Standard Training Gap Initiative (formerly Non-Standard Capability Training Gaps)</p> <p>Description: Training for accelerated capabilities is accomplished primarily through mandated New Equipment Training (NET) with no process for follow on efforts. This incongruity is detrimental to effective and consistent training for the force.</p> <p>FY 2015 Accomplishments: Lead the Non Standard Equipment (NSE) training process initiative supporting the development, execution, evaluation, and maintenance of the 2nd pilot program to develop a standardized and effective NSE training process for deployed units. ARCIC Accelerated Capabilities Division (ACD) responsible for facilitating and coordinating stakeholders in the execution, evaluation, and maintenance of Pilot Program 2 on the NSE training process.</p>		1.162	-	-
<p>Title: Squad Dismounted Non-Network Enabled</p> <p>Description: Provides integration and assessment support across DOTMLPF.</p> <p>FY 2015 Accomplishments: TRADOC Accelerated Capability Developments initiative provides integration and assessment support across DOTMLPF domains to equip, train, and deploy capability support for OEF problem of isolated maneuver elements at Command Outposts (COPs)/ Forward Operating Bases (FOBs) which have difficulty locating ground targets and lack timely response to engage these targets in organic, lethal, effects while minimizing collateral damage and exposure of Soldiers to unnecessary risk.</p>		1.000	-	-
<p>Title: Maneuver Fires Center Integration Exercise (MFI)</p> <p>Description: Maneuver Fires Center Integration Exercise (MFI) will conduct Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities (DOTMLPF) assessments.</p> <p>FY 2016 Plans: MFI to conduct DOTMLPF assessments; test and certification training in support of small units across 5 domains (lethality, mission command, training and leader development, mobility and force protection). MFI to integrate efforts to allow small units to operate in complex and uncertain environments, see and fight across a wide area, make contact with the enemy under favorable conditions, overmatch the enemy in encounter actions, maneuver rapidly to seize and retain the initiative, identify and act on opportunities, adapt rapidly to changing battle conditions, and operate as part of a combined arms, air-ground and Joint Team.</p>		-	0.200	-
<p>Title: Net Zero Expeditionary Base Camp (NET 0) (Formerly Operational Energy)</p> <p>Description: Continue acceleration of Operational Energy initiative for remote Combat Outposts and Soldier Power initiatives.</p>		-	0.275	-

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
<p>FY 2016 Plans: Continue acceleration of Operational Energy initiative for remote Combat Outposts and Soldier Power initiatives. Operational Energy provides the Warfighter with increased levels of agility, flexibility, and interoperability when operating in the expeditionary environment. Operational energy solutions will extend combat and tactical system's mission endurance and resilience, ensure uninterrupted and optimal energy to systems within the mission command network, and mitigate force risk by reducing energy demand. Phase two of multi-phased approach will support development of integrated operational energy solutions requiring a system-of-systems engineering approach. This approach will ensure that capability impacts are identified and addressed prior to delivering solutions, and that necessary employment guidance is provided and operational impacts are assessed.</p>				
<p>Title: Manned Unmanned Teaming Ground (MUM-T(G))</p> <p>Description: Follow-on focused assessment to test interoperability, assess integration with manned systems, and evaluate advanced technologies.</p> <p>FY 2016 Plans: Follow-on focused assessment to test interoperability, assess integration with manned systems, and evaluate advanced technologies. MUM-T (G) capabilities will provide greater automation, improved performance, flexible use profiles, and greater survivability in contested environments. In addition, system will demonstrate improved communications, security from tampering, and streamlined system design. Capabilities must also demonstrate a reduction in manpower requirements to operate and support unmanned systems.</p>		-	0.203	-
<p>Title: CDID/TCM Joint Capabilities Integration and Development System (JCIDS) Development in support of PEOs and PMs for acquisition milestone decisions.</p> <p>Description: The Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA (ALT) organizational community of PEOs/PMs supplemented manpower shortfalls to TRADOC for many years. This was necessary to ensure work affecting their materiel development programs, specifically the mandated JCIDS process necessary for Milestone Acquisition AROC/JROC decisions, was executed in a timely manner. Beginning in FY 2014 Army funded a strategy for ASA (ALT) to drawdown support as TRADOC received funding in a phased approach, to maintain this workforce. This strategy has been implemented in 25% increments beginning in FY14 with TRADOC being 100% responsible in FY17. Funding ensures TRADOC acts independently as the voice of the warfighter, the user, in complement with the materiel developer in providing total capability management including integration of all doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) considerations for warfighting functional areas.</p> <p>FY 2015 Accomplishments:</p>		7.700	16.434	-

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
<p>Provided approximately 45 CMEs to CDIDs across TRADOC to develop and integrate the capabilities for which the ASA(ALT) community is developing and fielding materiel solutions. FY14 would have been the first year of incremental funding until 100% of the requirement is funded in FY 2017 and beyond.</p> <p>FY 2016 Plans: Provides approximately 87 CMEs to CDIDs across TRADOC to develop and integrate the capabilities for which the ASA(ALT) community is developing and fielding materiel solution. FY 2014 would have been the first year of incremental funding until 100% of the requirement is funded in FY 2017 and beyond.</p>				
<p>Title: CDID/TCM Joint Capabilities Integration and Development System (JCIDS) Development in support of PEOs and PMs for acquisition milestone decisions</p> <p>Description: The Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA (ALT) organizational community of PEOs/PMs supplemented manpower shortfalls to TRADOC for many years. This was necessary to ensure work affecting their materiel development programs, specifically the mandated JCIDS process necessary for Milestone Acquisition AROC/JROC decisions, was executed in a timely manner. Beginning in FY 2014 Army funded a strategy for ASA (ALT) to drawdown support as TRADOC received funding in a phased approach, to maintain this workforce. This strategy has been implemented in 25% increments beginning in FY14 with TRADOC being 100% responsible in FY17. Funding ensures TRADOC acts independently as the voice of the warfighter, the user, in complement with the materiel developer in providing total capability management including integration of all doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) considerations for warfighting functional areas.</p> <p>FY 2017 Plans: Will provide approximately 87 CMEs to CDIDS across TRADOC to develop and integrate the capabilities for which the ASA (ALT) community is developing and fielding materiel solution. FY14 would have been the first year of incremental funding until 100% of the requirement is funded in FY17 and beyond.</p>		-	-	21.779
<p>Title: Accelerated Capabilities Initiatives in support of Force 2025 and Beyond</p> <p>Description: Provide for TRADOC to serve as the lead Accelerated Capability Developments (ACD) to address current critical operational needs in enabling development and deployment/employment of accelerated capabilities (both materiel and non-materiel) to the current force. Serve as TRADOC central coordinating organization for Headquarters Department of the Army (HQDA) staff support requirements related to accelerated capabilities developments. Integrate ACD activities to ensure unity and priority of effort and synchronization and optimization of resources. Integrate accelerated capabilities development activities between proponent force modernization domains to include Joint/Service coordination.</p> <p>FY 2017 Plans:</p>		-	-	2.000

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
Will provide for TRADOC to serve as the lead Accelerated Capability Developments (ACD) to address current critical operational needs in enabling development and deployment/employment of accelerated capabilities (both materiel and non-materiel) to the current force. Serve as TRADOC central coordinating organization for Headquarters Department of the Army (HQDA) staff support requirements related to accelerated capabilities developments. Integrate ACD activities to ensure unity and priority of effort and synchronization and optimization of resources. Integrate accelerated capabilities development activities between proponent force modernization domains to include Joint/Service coordination.			
Accomplishments/Planned Programs Subtotals	15.282	17.265	23.779

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

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

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Appropriation/Budget Activity 2040 / 6					R-1 Program Element (Number/Name) PE 0605326A / <i>Concepts Experimentation Program</i>				Project (Number/Name) 33B / <i>Soldier-Centered Analyses For Future Force</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
33B: <i>Soldier-Centered Analyses For Future Force</i>	-	1.114	1.659	1.492	-	1.492	1.519	1.560	1.598	1.633	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project will provide early application of human performance and human figure modeling tools in the development of Soldier-focused requirements to shape technology for Future Force development. Design analyses, constructive simulations and Soldier-in-the-loop assessments will ensure that manpower requirements and workload and skill demands are considered to avoid information and physical task overloads, and take optimum advantage of aptitudes, individual and collective training, and numbers of Soldiers for an affordable Future Force. The cited work is consistent with the Strategic Planning Guidance, the Army Science and Technology Master Plan (ASTMP), the Army Modernization Plan, and the Defense Technology Area Plan (DTAP). Work in this project is performed by the Army Research Laboratory (ARL).

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

	FY 2015	FY 2016	FY 2017
Title: Manpower and Personnel Integration (MANPRINT)	1.114	1.659	1.492
<p>Description: Provide dedicated modeling and analysis cell for early and accurate MANPRINT estimates to Army Materiel Command (AMC), Research, Development, and Engineering Command (RDECOM) and its Research, Development, and Engineering Centers (RDECs), TRADOC Centers, Schools and Centers of Excellence (CoEs), Army Test and Evaluation Command (ATEC) and other service laboratories.</p> <p>FY 2015 Accomplishments: Developed analysis methodologies to quantitatively predict (in dollars and/or mission success) the effect of manpower, personnel, and training issues in system acquisition to inform optimization of Soldier-system performance and affordability.</p> <p>FY 2016 Plans: Develop model-based predictive analyses of Dismounted Infantry (DI) missions that will provide DOD leadership with analytic data to inform requirements development and trade-off decisions as early as Milestone A. This analyses will integrate Human Systems Integration (HSI) and Systems Engineering (SE) inputs to generate critical tasks combinations that provide the necessary analytical data to support cognitive workload measurement, Measures of Effectiveness and Measures of Performance for DI. Expand digital library by developing 3D models of Air Soldier Clothing and equipment items to perform early human figure modeling assessments of future aviation platform designs. Develop 3D models of mounted and dismounted Soldier clothing and equipment items that are sized and fitted to ANTHRO II based human figure model sets for early assessments of future ground vehicle platform designs.</p> <p>FY 2017 Plans:</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army	Date: February 2016
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Appropriation/Budget Activity 2040 / 6	R-1 Program Element (Number/Name) PE 0605326A / <i>Concepts Experimentation Program</i>	Project (Number/Name) 33B / <i>Soldier-Centered Analyses For Future Force</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
Will conduct analysis to determine appropriate parameters to capture Soldier information for system engineering that will improve system design and analysis progresses; expand scenario development and model based decision analysis framework to support Soldier system engineering methodology; develop and expand human performance apps for HSI data collection and analysis; expand the digital library by developing 3D models of vehicle Soldier clothing and equipment items to perform early human figure modeling assessments of future vehicle platform designs and enhancements; and demonstrate a virtual physical accommodation analysis concept by integrating a virtual human figure embedded in a space with a CAD representation.			
Accomplishments/Planned Programs Subtotals	1.114	1.659	1.492

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

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

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