Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Army											Date: February 2020	
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army* / BA 3: *Advanced Technology Development (ATD)*					R-1 Program Element (Number/Name) PE 0603001A / *Warfighter Advanced Technology*							
COST ($ in Millions)	**Prior Years**	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**Cost To Complete**	**Total Cost**
Total Program Element	-	40.501	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	40.501
242: *Airdrop Equipment*	-	1.597	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	1.597
C07: *Joint Service Combat Feeding Tech Demo*	-	1.219	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	1.219
FF6: *Individual Protection*	-	11.175	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	11.175
J50: *Future Warrior Technology Integration*	-	21.340	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	21.340
J52: *WARFIGHTER ADVANCED TECHNOLOGY INITIATIVES (CA)*	-	2.500	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	2.500
XW6: *Small Unit Expeditionary Maneuver*	-	2.670	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	2.670

Note

In Fiscal Year 2020 (FY20) this Program Element (PE) was realigned with continuity of effort to the following PE:
* 0603118A Soldier Lethality Advanced Technology

A. Mission Description and Budget Item Justification

This PE provides Soldiers and Small Combat Units with the most effective personal clothing, equipment, combat rations, shelters, and logistical support items with the least weight and sustainment burden. This PE supports the maturation and demonstration of technologies associated with aerial delivery of personnel and cargo, rapid ammunition/munitions deployability and resupply, combat rations and combat feeding equipment, combat clothing and personal equipment (including protective equipment such as personal armor, helmets, and eyewear), and expeditionary base camps with an emphasis on emerging operating environments and missions that require expeditionary maneuver. The Projects focus on the challenge of integrating clothing and individual equipment on the Soldier to effectively bridge the gap between humans, technology, and equipment design. The Projects in this PE adhere to Tri-Service Agreements on clothing, textiles, and food with coordination provided through the Cross-Service Warfighter Equipment Board, the Soldier as a System Integrated Concepts Development Team, and the Department of Defense (DoD) Combat Feeding Research and Engineering Board.

Work in this PE is related to, and fully coordinated with, PE 0602786A (Warfighter Technology), PE 0602105A (Materials Technology), PE 0602618A (Ballistics Technology), PE 0602624A (Weapons and Munitions Technology), PE 0602705A (Electronics and Electronic Devices), PE 0602787A (Medical Technology), PE 0602716A (Human Factors Engineering Technology), PE 0602308A (Advanced Concepts and Simulation), PE 0603015A (Next Generation Training and Simulation Systems), PE 0603004A (Weapons and Munitions Advanced Technology), PE 0603005A (Combat Vehicle and Automotive Advanced Technology), PE 0603710A (Night

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Army	Date: February 2020
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army I* BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603001A *I Warfighter Advanced Technology*

Vision Advanced Technology), PE 0602784A (Military Engineering Technology), PE 0603734A (Military Engineering Advanced Technology), PE 0603125A (Combating Terrorism Technology Development), and PE 0603772A (Advanced Tactical Computer Science and Sensor Technology).

The cited work is consistent with the Under Secretary of Defense for Research and Engineering priority focus areas and the Army Modernization Strategy. All FY20 adjustments align program financial structure to Army Modernization Priorities in support of the National Defense Strategy.

Work in this Project is performed by the United States Army Futures Command (AFC).

B. Program Change Summary ($ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	41.795	0.000	0.000	-	0.000
Current President's Budget	40.501	0.000	0.000	-	0.000
Total Adjustments	-1.294	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.294	-			

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2019	FY 2020
Project: J52: *WARFIGHTER ADVANCED TECHNOLOGY INITIATIVES (CA)*		
Congressional Add: *Non-Centroidal Helmets*	2.500	-
Congressional Add Subtotals for Project: J52	2.500	-
Congressional Add Totals for all Projects	2.500	-

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army			Date: February 2020
Appropriation/Budget Activity 2040 / 3	R-1 Program Element (Number/Name) PE 0603001A / *Warfighter Advanced Technology*	Project (Number/Name) 242 / *Airdrop Equipment*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
242: *Airdrop Equipment*	-	1.597	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	1.597

Note

In Fiscal Year (FY) 2020 this Project is realigned to:
Program Element (PE) 0603118A Soldier Lethality Advanced Technology:
* Project BE5 Personnel & Airdrop Safety Advanced Technology

A. Mission Description and Budget Item Justification

This Project matures and demonstrates equipment and innovative techniques for precision aerial delivery of cargo and personnel. Aerial delivery is a key capability for rapid force projection and global precision delivery. These efforts are designed to advance state of the art precision delivery technologies such as parachutes, guidance, navigation, and control (GNC) components and subsystems, tracking sensors, software algorithms, and safety rigging which integrate with currently equipped aircraft, unmanned aerial systems (UAS), and advanced rotary wing aircraft. These efforts provide the Warfighter with highly accurate, timely cargo/payload delivery and resupply in all terrain and weather conditions. Precision delivery/resupply reduces vulnerability of ground Soldiers, aircraft, and aircrew. Precision aerial delivery supports remote warfare with activities such as placement of battlefield sensors, reduction of Soldier load, and initial delivery of key expeditionary base camp assets. Demonstrated technologies transition to Product Manager (PM) Force Sustainment Systems (PM FSS), PM-Soldier Clothing and Individual Equipment (PM SCIE) as well as other Army PMs.

Work in this Project is fully coordinated with PE 0602786A (Warfighter Technology) and supports Anti-Access/Area Denial (A2/AD) and manned-unmanned teaming (MUM-T) operational concepts by demonstrating precision aerial delivery and airdrop from non-traditional platforms.

The cited work is consistent with the Under Secretary of Defense for Research and Engineering priority focus areas and the Army Modernization Strategy. All FY 2020 adjustments align program financial structure to Army Modernization Priorities in support of the National Defense Strategy.

Work in this Project is performed by the United States Army Futures Command (AFC).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Airdrop/Aerial Delivery	1.597	-	-
Description: This effort matures and demonstrates parachute materials and designs, precision guidance and navigation software and hardware, and tracking sensors and safety devices to increase the accuracy of delivering cargo to remote locations and/or complex terrains. This effort also provides technologies that increase safety during personnel insertions into theaters of operation. This work further evolves breakthroughs from PE 0602786A (Warfighter Technology) / Project 283 (Airdrop Adv Tech) and is coordinated with PE 0602786A (Warfighter Technology) / Project VT4 (Expeditionary Mobile Base Camp Technology). This effort supports capability demonstrations for the Army Top Challenge of easing overburdened Soldiers in small units through the use of			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army		Date: February 2020
Appropriation/Budget Activity 2040 / 3	**R-1 Program Element (Number/Name)** PE 0603001A / *Warfighter Advanced Technology*	**Project (Number/Name)** 242 / *Airdrop Equipment*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
tactical aerial resupply technologies, and supporting A2/AD and MUM-T operational concepts by demonstrating airdrop from non-traditional platforms.			
Accomplishments/Planned Programs Subtotals	1.597	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army			Date: February 2020
Appropriation/Budget Activity 2040 / 3	R-1 Program Element (Number/Name) PE 0603001A / *Warfighter Advanced Technology*	Project (Number/Name) C07 / *Joint Service Combat Feeding Tech Demo*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
C07: *Joint Service Combat Feeding Tech Demo*	-	1.219	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	1.219

Note

In Fiscal Year (FY) 2020 this Project is being realigned to:
Program Element (PE) 0603118A Soldier Lethality Advanced Technology:
* Project BE2 Joint Service Combat Feeding Advanced Technology

A. Mission Description and Budget Item Justification

This Project matures and demonstrates technologies for military combat feeding systems and combat rations. Areas of emphasis include: enhanced nutrient composition to maximize cognitive and physical performance on the battlefield; cutting edge food stabilization and preservation techniques that increase the variety and quality of rations used by the Joint Services; novel ration packaging solutions to minimize degradation of combat rations during storage; field portable biosensors for food-borne pathogen detection and identification as well as predictive modeling tools to protect the Warfighter from food-borne illnesses. This Project demonstrates combat feeding equipment with reduced logistics (in component parts, weight, volume, fuel, and water) and labor requirements, while improving the quality of food service. The Project, a Department of Defense (DoD) program for which the Army has Executive Agent responsibility, provides technology development for Joint Service Combat Feeding. The DoD Combat Feeding Research and Engineering Board provides oversight for this project. Demonstrated field feeding equipment is transitioned to Product Manager Force Sustainment Systems (PM FSS), Product Manager Combat Support Equipment (PM CSE), Naval Sea Systems Command (NAVSEA)/Naval Supply Systems Command (NAVSUP), and/or United States Air Force Basic Expeditionary Airfield Resources (BEAR) Program Office. Demonstrated ration technologies are transitioned to the Combat Feeding Directorate for Advanced Component Development & Prototypes under PE 0603747A (Soldier Support and Survivability).

All FY20 adjustments align program financial structure to Army Modernization Priorities in support of the National Defense Strategy.

Work in this Project complements and is fully coordinated with PE 0602787A (Medical Technology) and PE 0602786A (Warfighter Technology).

Work in this Project is performed by the United States Army Futures Command (AFC).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Joint Service Combat Feeding Technical Demonstration	1.219	-	-
Description: This effort matures and demonstrates novel nutritional biochemistry, food processing, and packaging technologies to enhance nutrition, improve food stabilization, and optimize ration packaging to support Warfighter physical and cognitive performance on the battlefield. This effort will demonstrate technologies in support of the Defense Health Agency Veterinary Services (DHA VS) to improve field detection and identification capabilities of chemical and biological threats in foods. This effort provides new threat detection tools and sensors for food inspectors. This effort also demonstrates equipment and energy			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army		Date: February 2020
Appropriation/Budget Activity 2040 / 3	**R-1 Program Element (Number/Name)** PE 0603001A / *Warfighter Advanced Technology*	**Project (Number/Name)** C07 / *Joint Service Combat Feeding Tech Demo*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
technologies to expand the capability and reduce the logistics footprint of field feeding systems. This work further evolves breakthroughs from PE 0602786A (Warfighter Technology) / Project H99 (Joint Service Combat Feeding Technology) and is coordinated with PE 0602787A (Medical Technology) / Project 869 (Warfighter Health Prot & Perf Stnds).			
Accomplishments/Planned Programs Subtotals	1.219	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army			Date: February 2020
Appropriation/Budget Activity 2040 / 3	R-1 Program Element (Number/Name) PE 0603001A / *Warfighter Advanced Technology*	Project (Number/Name) FF6 / *Individual Protection*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
FF6: *Individual Protection*	-	11.175	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	11.175

Note

In Fiscal Year (FY) 2020 this Project is being realigned to:
Program Element (PE) 0603118A Soldier Lethality Advanced Technology:
* Project AY9 Body Armor & Integrated Headborne Advanced Tech
* Project AZ6 Soldier Signature Management Advanced Technology
* Project AZ8 Soldier Squad Small Arms Armaments Adv Tech
* Project BB3 Dismounted Soldier Survivability Equip/Tech Integ

A. Mission Description and Budget Item Justification

This Project matures, demonstrates, and integrates Soldier protective clothing and equipment required to enhance Soldier survivability from multiple battlefield threats, impact unit readiness, and potentially debilitate Soldiers. Threats are characterized as combat threats (e.g. flame and thermal, blast and ballistic, multispectral sensors, and laser threats), environmental threats (e.g. cold, heat, wet, vector, water contamination, concealment, antimicrobial, etc.), and Soldier system components and system limitations (e.g. size, weight, and bulk). This effort includes the demonstration and validation of integrated technologies, novel subsystems/systems, and test methods related to the development of personnel armor, helmets, hearing protection, eyewear, uniforms, hand-wear, footwear, and other clothing and individual equipment items. Efforts apply human systems integration principles and practices to protective equipment designs to advance the understanding of trade-offs between protection, lethality and mobility.

The cited work is consistent with the Under Secretary of Defense for Research and Engineering priority focus areas and the Army Modernization Strategy. All FY20 realignments to this Project are due to financial restructuring in support of Army Modernization Priorities.

Work in this Project is performed by the United States Army Futures Command (AFC).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Soldier/Small Unit Multi-Threat Protection	3.775	-	-
Description: This effort focuses on maturing and demonstrating multifunctional protective component materials, sub-systems, protection technologies, and test methodologies that have the potential to significantly increase protection afforded by Soldier clothing and individual protective equipment. This effort also focuses on the maturation and demonstration of ballistic, blast, and integrated protection technologies that support tradeoff optimization in component design. Work includes small arms and fragmentation protection, flame and thermal, environmental, and multispectral concealment capabilities as well as novel hydration and water purification technologies for the individual Soldier. This work is fully coordinated with PE 0602786A (Warfighter Technology) / Project H98 (Clothing & Equipm Tech), PE 0602716A (Human Factors Engineering Technology) / Project H70			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army		Date: February 2020
Appropriation/Budget Activity 2040 / 3	**R-1 Program Element (Number/Name)** PE 0603001A / *Warfighter Advanced Technology*	**Project (Number/Name)** FF6 / *Individual Protection*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
(Human Fact Eng Sys Dev), and PE 0602705A (Electronics and Electronic Devices) / Project H94 (Elec & Electronic Dev). Demonstrated technologies transition to various Program Executive Office (PEO) Soldier Product Managers. This effort supports Force Protection capability demonstrations for Soldiers and Small Units.			
Title: Soldier Ballistic and Blast Protection ***Description:*** This effort focuses on maturing and demonstrating ballistic and blast personal protection capabilities worn by the individual Soldier and validating advanced test methods of personal protective equipment against small arms, fragmentation and blast threats. These developmental efforts focus on the objective of significantly increase the survivability afforded by Soldier individual protective equipment by increasing sub-system and system material performance against intended threats, reduce sub-system and system weight and inform future requirements linking threat lethality to Soldier survivability. This work is fully coordinated with PE 0602786A (Warfighter Technology) / Project H98 (Clothing & Equipm Tech), PE 0602716A (Human Factors Engineering Technology) / Project H70 (Human Fact Eng Sys Dev), and PE 0602705A (Electronics and Electronic Devices) / Project H94 (Elec & Electronic Dev). Demonstrated technologies transition to various PEO Soldier Product Managers. This effort supports Force Protection capability demonstrations for Soldiers and Small Units.	7.400	-	-
Accomplishments/Planned Programs Subtotals	11.175	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army											Date: February 2020	
Appropriation/Budget Activity 2040 / 3					R-1 Program Element (Number/Name) PE 0603001A / *Warfighter Advanced Technology*				Project (Number/Name) J50 / *Future Warrior Technology Integration*			
COST ($ in Millions)	**Prior Years**	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**Cost To Complete**	**Total Cost**
J50: *Future Warrior Technology Integration*	-	21.340	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	21.340

Note

In Fiscal Year (FY) 2020 this Project is being realigned to:
Program Element (PE) 0603118A Soldier Lethality Advanced Technology:
* Project BB6 Physical Augmentation: Adv Tech for Field Demo
* Project BB8 Soldier Centric Advanced Technology
* Project BC1 Human Performance Adv Tech for Mobility & Lethality
* Project BD7 Soldier Sys Interfaces/Integration-Sensor Adv Tech
* Project BD9 Soldier & Sm Unit Tactical Energy Adv Tech

A. Mission Description and Budget Item Justification

This Project matures, demonstrates, and integrates lightweight and multifunctional materials and components to provide the Soldier and small units with the most effective protection and mobility systems. This Project also invests in understanding the trade-offs of integrating state-of-the-art technology with Soldiers' personal protection, electronics connectivity, power and energy, user interfaces and display content, and other mission specific equipment that seeks to reduce physical weight, cognitive burden, and sustainment needs of the small unit. This Project develops, matures, and maintains a Soldier Systems Engineering Architecture (SSEA) framework that represents human factors consideration in development of major Army platforms. Efforts in this Project focus on integrating and demonstrating system-level personal protection, durable Soldier protective clothing and individual equipment, environmental threats, and power management solutions. In addition, special focus is on understanding and demonstrating the impacts of physical and cognitive load on Soldier mission performance by implementing strategies to reduce load and/or optimize loads to reduce injuries, and the creation of user interfaces that mitigate the impact of increasing technologies and sensors worn and carried by Soldiers. These efforts integrate geographically dispersed laboratory environments to conduct comprehensive assessments and report the technical viability of Soldier system solutions and conducts field demonstrations to obtain relevant feedback for user acceptance and performance validation. This Project also matures and demonstrates mission command and power and energy technologies for the dismounted Soldier and small unit operating in a networked operating environment.

Efforts in this Project support the Under Secretary of Defense for Research and Engineering Science and Technology (S&T) priorities and the Army Modernization Strategy. All FY20 adjustments align program financial structure to Army Modernization Priorities in support of the National Defense Strategy.

Work in this Project complements and is fully coordinated with Program Element (PE) 0602786A (Warfighter Technology), PE 0602618A (Ballistics Technology), PE 0602105A (Materials Technology), PE 0602787A (Medical Technology), PE 0602716A (Human Factors Engineering Technology), PE 0602308A (Advanced Concepts and Simulation), PE 0603015A (Next Generation Training and Simulation Systems), PE 0602705A (Electronics and Electronic Devices), PE 0603710A (Night Vision Advanced Technology), PE 0602624A (Weapons and Munitions Technology), PE 0603005A (Combat Vehicle and Automotive Advanced Technology), and PE 0603004A (Weapons and Munitions Advanced Technology).

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army		Date: February 2020
Appropriation/Budget Activity 2040 / 3	**R-1 Program Element (Number/Name)** PE 0603001A / *Warfighter Advanced Technology*	**Project (Number/Name)** J50 / *Future Warrior Technology Integration*

Work in this Project is performed by the United States Army Futures Command (AFC).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Soldier and Small Unit Mission Command/Situational Awareness (SA) and Power and Energy Integration ***Description:*** This effort matures and demonstrates mission command and power and energy technologies for the dismounted Soldier and small unit. The goal is to fully support the situational awareness mission information tools and power needs of a dismounted mission in an electronically equipped battlefield. This effort is fully coordinated with PE 0602705A (Electronics and Electronic Devices) / Projects H11 (Tactical And Component Power Technology) and H94 (Elec & Electronic Dev), and PE 0603710A (Night Vision Advanced Technology) / Project K70 (Night Vision Adv Tech).	7.462	-	-
Title: Soldier Interfaces ***Description:*** This effort matures and demonstrates low-cognitive workload user interfaces for display and control of dismounted Soldier mission command systems to enhance interactions of Soldiers and systems required to react effectively on the battlefield. Applies human systems engineering principles to develop design guidelines and techniques for integrating Soldiers and complex technical systems by assessing Soldier responses and capabilities in operational contexts. Matures and validates human performance metrics to design/assess systems and user interfaces to ensure that interactions between humans and machines provides effective operation and control to aid Soldier decision-making processes. Technologies, metrics, and tools developed in this effort will transition to PEO Product Managers and Training and Doctrine Command (TRADOC) and be integrated into the SSEA and Systems Integration Laboratory environment.	6.680	-	-
Title: Soldier Sensors and Robotics Architectures ***Description:*** This effort builds and matures architectures that link dismounted Soldiers to air and ground robotics platforms. Enables small Soldiers-borne and operated autonomous systems that function as scouts, load carriers, resupply platforms, and/or communication nodes to enable greater reach and expeditionary dismounted maneuver. Applies complex Human Soldier Integration principles to air and ground control and teleoperation for emerging robotic vehicles and sensors display content. Integrates reconnaissance and surveillance sensors and robotics with Nett Warrior system. Technologies, metrics, and tools developed in this effort will transition to PEO Product Managers and TRADOC and be integrated into the Soldier Systems architecture and Systems Integration Laboratory environment.	7.182	-	-
Title: FY 2018 NDAA SEC 825 MDAP Cost Overrun ***Description:*** FY 2018 NDAA SEC 825 MDAP Cost Overrun	0.016	-	-
Accomplishments/Planned Programs Subtotals	21.340	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army		Date: February 2020
Appropriation/Budget Activity 2040 / 3	**R-1 Program Element (Number/Name)** PE 0603001A / *Warfighter Advanced Technology*	**Project (Number/Name)** J50 / *Future Warrior Technology Integration*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army			Date: February 2020
Appropriation/Budget Activity 2040 / 3	R-1 Program Element (Number/Name) PE 0603001A / *Warfighter Advanced Technology*	Project (Number/Name) J52 / *WARFIGHTER ADVANCED TECHNOLOGY INITIATIVES (CA)*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
J52: *WARFIGHTER ADVANCED TECHNOLOGY INITIATIVES (CA)*	-	2.500	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	2.500

A. Mission Description and Budget Item Justification

Congressional Interest Item funding for Warfighter Advanced Technology development.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020
Congressional Add: Non-Centroidal Helmets	2.500	-
FY 2019 Accomplishments: Non-Centroidal Helmets		
Congressional Adds Subtotals	2.500	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army			Date: February 2020
Appropriation/Budget Activity 2040 / 3	R-1 Program Element (Number/Name) PE 0603001A / *Warfighter Advanced Technology*	Project (Number/Name) XW6 / *Small Unit Expeditionary Maneuver*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
XW6: *Small Unit Expeditionary Maneuver*	-	2.670	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	2.670

Note

In Fiscal Year (FY) 2020 this Project is being realigned to:
Program Element (PE) 0603118A Soldier Lethality Advanced Technology:
* Project BE5 Personnel & Airdrop Safety Advanced Technology

A. Mission Description and Budget Item Justification

This Project funds the maturation, validation and demonstration of innovative technologies which provide maneuver capabilities such as precision aerial delivery of cargo and personnel and expeditionary maneuver platforms to enable and enhance mission command and human performance in response to emerging operational environments that require expeditionary logistics for aggregated and disaggregated Soldiers and units. Technologies that allow dismounted units to move to positions of advantage rapidly, and then to operate for hours, days, weeks without resupply while sustaining a high tempo for periods of up to seven days. Efforts funded in this Project support all Military Services, the Special Operations Command, and the Defense Logistics Agency. Demonstrated technologies transition to a variety of partners, including Product Manager Force Sustainment Systems (PdM-FSS), Product Manager Combat Support Equipment (PM CSE), and/or Naval Sea Systems Command (NAVSEA)/Naval Supply Systems Command (NAVSUP).

The cited work is consistent with the Under Secretary of Defense for Research and Engineering priority focus areas and the Army Modernization Strategy. All FY20 adjustments align program financial structure to Army Modernization Priorities in support of the National Defense Strategy.

Work in this Project is performed by the United States Army Futures Command (AFC).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Small Unit Expeditionary Maneuver	2.670	-	-
Description: This effort optimizes technologies that enable Soldier and Small Unit survivability, mission readiness and effectiveness during highly mobile, dispersed operations that may occur in the absence of conventional logistics support. This effort matures and demonstrates technologies that enhance equipment, materiel, and personnel aerial delivery in an Anti-Access/ Area Denial (A2/AD) environment; stabilization techniques and nutrient compositions to maximize the Warfighter?s physical and cognitive performance; and technologies to enhance field detection and identification capabilities of chemical and biological threats in foods.			
Accomplishments/Planned Programs Subtotals	2.670	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army		Date: February 2020
Appropriation/Budget Activity 2040 / 3	**R-1 Program Element (Number/Name)** PE 0603001A / *Warfighter Advanced Technology*	**Project (Number/Name)** XW6 / *Small Unit Expeditionary Maneuver*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A