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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Army **Date:** March 2019

Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 Program Element (Number/Name) PE 0603747A / Soldier Support and Survivability							
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	-	15.759	11.735	6.514	3.000	9.514	9.042	9.020	9.812	10.252	0.000	75.134
610: Food Adv Development	-	6.286	4.593	3.721	-	3.721	3.223	3.175	3.972	4.133	0.000	29.103
C08: Rapid Equipping Force	-	9.043	5.796	2.793	3.000	5.793	5.819	5.845	5.840	6.119	0.000	44.255
EL1: Army Field Feeding Programs	-	0.430	1.346	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	1.776

A. Mission Description and Budget Item Justification

This Program Element (PE) supports component development and prototyping for organizational equipment, improved individual clothing and equipment that enhance Soldier battlefield effectiveness, survivability, and sustainment. This PE also supports the component development and prototyping of joint service food and combat feeding equipment designed to reduce logistics burden.

B. Program Change Summary (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	13.157	11.746	7.402	-	7.402
Current President's Budget	15.759	11.735	6.514	3.000	9.514
Total Adjustments	2.602	-0.011	-0.888	3.000	2.112
• Congressional General Reductions	-0.007	-0.011			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	3.000	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.391	-			
• Adjustments to Budget Years	-	-	-0.888	3.000	2.112

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

Project: C08: Rapid Equipping Force

Congressional Add: Soldier Enhancement Program

	FY 2018	FY 2019
	3.000	-
Congressional Add Subtotals for Project: C08	3.000	-
Congressional Add Totals for all Projects	3.000	-

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Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 Program Element (Number/Name) PE 0603747A I Soldier Support and Survivability	
<div>Change Summary Explanation</div> <div>Fiscal Year 2018 Congressional Add of \$3.000 Million for "Program Increase" applied to Project C08.</div>		

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Army										Date: March 2019		
Appropriation/Budget Activity 2040 / 4					R-1 Program Element (Number/Name) PE 0603747A / Soldier Support and Survivability				Project (Number/Name) 610 / Food Adv Development			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
610: Food Adv Development	-	6.286	4.593	3.721	-	3.721	3.223	3.175	3.972	4.133	0.000	29.103
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
This Project provides for the advanced component development and prototyping of Joint Service combat ration components/platforms and field feeding equipment designed to improve warfighter performance and reduce the logistics burden of subsistence support. Efforts funded in this Project support all four Services, the Special Operations Command, and the Defense Logistics Agency. The Army serves as the Executive Agent for this Department of Defense (DoD) program, with oversight and coordination provided by the DoD Combat Feeding Research and Engineering Board as required by DoD Directive (DoDD) 3235.02E. Centralized execution of the DoD Combat Feeding Research and Engineering Program (CFREP) with Joint Service review and approval eliminates unnecessary duplication of efforts across the Services and maximizes use of common materiel solutions. Prototypes validated within this effort transition to 0604713A/Project 548 for System Development and Demonstration.												
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: Fielded Individual Ration Improvement Project (FIRIP)								0.641	-	-	-	-
Description: Continuous product improvement for the Meal, Ready to Eat (MRE) through the advanced development of novel nutrition, processing and packaging technologies to improve operational effectiveness and improve logistics.												
Title: Assault/Special Purpose Ration Improvement Project (ASPIP)								0.441	-	-	-	-
Description: Continuous product improvement of special purpose rations through the advanced development of novel nutrition, processing and packaging technologies to improve operational effectiveness and improve logistics. Special purpose rations include the Meal, Cold Weather (MCW), First Strike Ration (FSR), and Modular Operational Ration Enhancement (MORE).												
Title: Fielded Group Ration Improvement Project (FGRIP)								0.474	-	-	-	-
Description: Continuous product improvement to update/improve group ration components, menus, and packaging by integrating state-of-the-art military/commercial packaging and technology base transitions. The family of Unitized Group Rations (UGRs) includes the Unitized Group Ration - Heat & Serve (UGR-H&S), Unitized Group Ration - Express (UGR-E), Unitized Group Ration - A (UGR-A), and Unitized Group Ration - M (UGR-M).												
Title: US Navy Standard Core Menu (NSCM) Continuous Product Improvement Project								0.708	-	-	-	-

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Appropriation/Budget Activity 2040 / 4		R-1 Program Element (Number/Name) PE 0603747A / Soldier Support and Survivability		Project (Number/Name) 610 / Food Adv Development		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Description: Provide recommendations to the Naval Supply Systems Command (NAVSUP) for upgrading/improving Navy Standard Core Menu (NSCM) components by introducing new preparation techniques to enhance menu acceptance and effectiveness while reducing labor requirements.						
Title: Multi-Purpose Individual Heating Technology (MIT) Description: Develop a disposable, lightweight heating mechanism as a low-cost component of the Meal, Cold Weather (MCW) to facilitate MCW preparation in extreme environments with reduced resource requirements and increased ease of use.		0.658	-	-	-	-
Title: Joint Intuitive Multi-function Kitchen Equipment (JIMKE) Description: Reduce logistics burden associated with life cycle management of Navy (USN), Air Force (USAF) and Marine Corps (USMC) foodservice equipment. Integrate diagnostic technologies to predict maintenance, reduce labor associated with troubleshooting equipment in the field and increase mean time between failures (MTBF).		0.724	-	-	-	-
Title: Navy Galley and Scullery Upgrades Description: Continuously modernize foodservice operations by adding capabilities to provide optimized feeding, standardizing foodservice equipment assets fleet-wide, improving space utilization, and facilitating the continued use of the NSCM. Design, processes and equipment insertions will be implemented on legacy platforms during overhaul periods and during the new construction process on future vessels.		0.670	-	-	-	-
Title: Defense Logistics Agency (DLA) Description: Support management of the Department of Defense (DoD) Electronic Document Access (EDA) and Wide Area Workflow (WAWF) programs.		0.548	-	-	-	-
Title: Tray Ration Heater ? Improved (TRH-I) Description: Develop an updated and compact Tray Ration Heater to meet the requirements of the smaller, up-armored HMMWV cargo beds. Reduce the overall weight, improve man-portability, heat transfer efficiency, thermal storage efficiency, and reduce water consumption. Meet USMC-approved Statement of Need requirement for a Modernized Tray Ration Heat System.		0.485	-	-	-	-
Title: Inflatable Refrigerated Space (IRefS)		0.609	-	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Description: Develop a pallet sized, rapidly deployable, air deliverable field refrigeration system for safe storage of UGR-A rations to units located in austere environments with little to no ability to obtain rigid refrigerated containers.						
Title: Navy Mobile Feeding Galley Description: Develop a mobile feeding system for shore bases that is equipped with innovative cooking technology. The platform will have the capability to produce a rotating menu of fresh and healthy cuisine that will appeal to the millennial generation of sailors.		0.328	-	-	-	-
Title: Joint Service Combat Ration Advanced Development Description: This effort matures and integrates combat ration technologies and prototypes that enable warfighter maneuver, readiness and effectiveness during highly mobile, dispersed operations. Technologies are transitioned from PE 0603001A/Project C07 to provide individual and group combat rations and components with improved capabilities including improved warfighter physical and cognitive performance through optimized nutrition and a reduced logistics burden through weight and cube reduction. FY 2019 Plans: Mature and integrate applied nutrition, food engineering, and food packaging innovations into individual and group ration platforms to increase operational effectiveness; identify suitable COTS/NDI candidate items to enhance warfighter acceptability, increase consumption and improve nutritional intake; conduct pilot scale in-house production to support engineering design, technology insertion, and commercial producibility; conduct accelerated storage studies to validate candidate components meet or exceed shelf-life requirements; develop test menus for warfighter evaluations; and transition validated prototypes to 6.5 for operational testing. Identify top-level system and end item user requirements for the developmental Close Combat Assault Ration (CCAR) to accelerate concepts for Test and Evaluation (T&E). FY 2020 Base Plans: Will continue to validate and integrate S&T innovations and COTS/NDI candidate items into existing ration platforms (e.g. Meal, Ready-to-Eat, Unitized Group Ration) to increase operational effectiveness; will conduct T&E of S&T innovations and food component/packaging optimization efforts for integration into prototype CCARs to enable 7-day operations in the absence of resupply and improve readiness through significantly reduced weight, cube, and energy density; will initiate T&E of technologies for integration into prototype Expeditionary		-	1.751	2.483	-	2.483

UNCLASSIFIED

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Group Rations (EGRs) to decrease the logistics burden and enable group feeding in austere environments; will transition validated prototypes to PE 0604713A/Project 548 for operational testing.						
FY 2019 to FY 2020 Increase/Decrease Statement: Change in funding supports development/acceleration of new CCAR prototypes.						
Title: Joint Service Field Feeding Equipment and Menu Development		-	2.674	1.238	-	1.238
Description: This effort matures and integrates field feeding equipment technologies and prototypes in support of the Navy, Air Force, and Marine Corps that reduce the logistics burden, improve efficiency, and decrease operation and support costs as directed by the DoD CFREB. This effort also conducts test and evaluation (T&E) on Navy Standard Core Menu components and preparation techniques to enhance efficiency through standardization across the fleet and reduce labor requirements.						
FY 2019 Plans: Conduct T&E of prototype equipment with diagnostic and predictive capabilities to decrease sustainment life-cycle costs and decrease equipment downtime; conduct design reviews and fabricate prototypes that improve the heating efficiency of rations while reducing overall weight, cube and total lifecycle costs; design and fabricate a rapidly deployable field refrigeration prototype to reduce resupply requirements to units in austere locations; test and evaluate new products and food preparation techniques to enhance menu acceptance and reduce labor requirements; and transition prototypes to PE 0604713A/Project 548 for System Development and Demonstration.						
FY 2020 Base Plans: Will fabricate prototypes that improve the heating efficiency of rations while reducing overall weight, cube and total lifecycle costs; will initiate T&E of energy conservation technologies for Air Force (USAF) BEAR kitchens; will initiate T&E of upgrades to USMC Expeditionary Field Kitchen (EFK) and new kitchen for shore-based Navy expeditionary units; will initiate T&E of new products and food preparation techniques to enhance menu acceptance and reduce labor requirements; and will transition prototypes to PE 0604713A/Project 548 for operational test and evaluation (OT&E).						
FY 2019 to FY 2020 Increase/Decrease Statement: FY20 funds shifted to support the Army's modernization priorities in support of the National Defense Strategy.						
Title: FY2019 SBIR/STTR Transfer		-	0.168	-	-	-
Description: FY2019 SBIR/STTR Transfer						

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Appropriation/Budget Activity 2040 / 4		R-1 Program Element (Number/Name) PE 0603747A / <i>Soldier Support and Survivability</i>		Project (Number/Name) 610 / <i>Food Adv Development</i>	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
<i>FY 2019 Plans:</i> FY2019 SBIR/STTR Transfer					
<i>FY 2019 to FY 2020 Increase/Decrease Statement:</i> FY2019 SBIR/STTR Transfer					
Accomplishments/Planned Programs Subtotals	6.286	4.593	3.721	-	3.721

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020 Base</u>	<u>FY 2020 OCO</u>	<u>FY 2020 Total</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• 548: <i>Mil Subsistence Sys</i>	0.678	1.092	2.393	-	2.393	2.817	1.817	1.531	1.611	0.000	11.939
Remarks											
D. Acquisition Strategy Validated prototypes will transition to System Development and Demonstration for operational test and evaluation.											
E. Performance Metrics N/A											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Army												Date: March 2019			
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603747A / Soldier Support and Survivability				Project (Number/Name) 610 / Food Adv Development					
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Combat Feeding Program Management	Allot	RDECOM, NSRDEC, Natick, MA : Natick, MA	6.359	0.665	Oct 2017	0.468	Oct 2018	0.372	Oct 2019	-		0.372	Continuing	Continuing	Continuing
DLA Bill Pay	TBD	Various : Various	1.550	0.586	Oct 2017	-		-		-		-	0.000	2.136	-
Subtotal			7.909	1.251		0.468		0.372		-		0.372	Continuing	Continuing	N/A
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Joint Service Rations and Combat Feeding Equipment	Various	Various : Various	30.501	4.500	Oct 2017	3.555	Oct 2018	3.349	Oct 2019	-		3.349	Continuing	Continuing	Continuing
FY2019 SBIR/STTR Transfer	TBD	TBD : TBD	-	-		0.168	Oct 2018	-		-		-	0.000	0.168	-
Subtotal			30.501	4.500		3.723		3.349		-		3.349	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Joint Service Rations and Combat Feeding Equipment	Allot	RDECOM, NSRDEC, Natick, MA : Natick, MA	0.352	0.535	Oct 2017	0.402	Oct 2018	-		-		-	Continuing	Continuing	Continuing
Subtotal			0.352	0.535		0.402		-		-		-	Continuing	Continuing	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			38.762	6.286		4.593		3.721		-		3.721	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Army **Date:** March 2019

Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603747A / <i>Soldier Support and Survivability</i>	Project (Number/Name) 610 / <i>Food Adv Development</i>
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Event Name	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Evaluate individual and group ration enhancements and transition to 6.5 for OT&E																												
Conduct in-house T&E of CCAR components, packaging and assembly formats																												
Conduct in-house T&E of optimized MRE and FSR w/ candidate CCAR components																												
Transition validated CCAR components and packaging to 6.5 for OT&E																												
Conduct in-house T&E of EGR and transition to 6.5 for OT&E																												
Provide USN w/CPI, evaluations and menu development to support transition to 6.5 for OT&E																												
ID and evaluate advanced galley/scullery equipment for the USN																												
Conduct Dem/Val of Galley/Scullery equipment and transition to 6.5 for OT&E																												
Conduct in-house T&E of JSERCS prototype for BEAR Type I kit for USAF																												
Identify and procure JIMKE prototypes																												
Conduct in-house T&E of JIMKE intuitive equipment and transition to SDD for OT&E																												
Conduct T&E on rapidly deployable refrigeration prototype																												
Award contract for build of prototype mobile galley feeding system																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Army

Date: March 2019

Appropriation/Budget Activity

2040 / 4

R-1 Program Element (Number/Name)

PE 0603747A / Soldier Support and Survivability

Project (Number/Name)

610 / Food Adv Development

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Army			Date: March 2019
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603747A / <i>Soldier Support and Survivability</i>	Project (Number/Name) 610 / <i>Food Adv Development</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Evaluate individual and group ration enhancements and transition to SDD for OT&E	1	2017	4	2024
Conduct in-house T&E of CCAR components, packaging and assembly formats	1	2019	4	2020
Conduct in-house T&E of optimized MRE and FSR w/ candidate CCAR components	1	2020	4	2020
Transition validated CCAR components and packaging to 6.5 for OT&E	4	2020	4	2020
Conduct in-house T&E of EGR and transition to 6.5 for OT&E	1	2020	4	2021
Provide USN w/CPI, evaluations and menu development to support NSCM upgrades	1	2017	4	2024
ID and evaluate advanced galley/scullery equipment for the USN	1	2017	4	2021
Conduct Dem/Val of Galley/Scullery equipment and transition to SDD for OT&E	1	2017	4	2021
Conduct in-house T&E of JSERCS prototype for BEAR Type I kitchen for USAF	1	2017	1	2018
Identify and procure JIMKE prototypes	1	2018	2	2019
Conduct in-house T&E of JIMKE intuitive equipment and transition to SDD for OT&E	2	2019	4	2021
Conduct T&E on rapidly deployable refrigeration prototype	1	2020	4	2020
Award contract for build of prototype mobile galley feeding system for USN	1	2018	1	2019
Conduct in-house T&E of mobile feeding galley and transition to SDD for OT&E	1	2019	1	2020
Award contract to fabricate IRefS prototype and conduct in-house T&E	1	2019	4	2020
Conduct in-house T&E of energy conservation technologies for BEAR Kitchens	1	2020	4	2022
Conduct in-house T&E of EFK upgrades for USMC	1	2020	4	2023
Conduct in-house T&E of expeditionary kitchen systems for shore-based Navy units	1	2020	4	2022

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Army										Date: March 2019		
Appropriation/Budget Activity 2040 / 4					R-1 Program Element (Number/Name) PE 0603747A / Soldier Support and Survivability				Project (Number/Name) C08 / Rapid Equipping Force			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
C08: Rapid Equipping Force	-	9.043	5.796	2.793	3.000	5.793	5.819	5.845	5.840	6.119	0.000	44.255
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note Equipment mix and configuration may change based on changes in operational environment and circumstances.												
A. Mission Description and Budget Item Justification The REF FY 2020 RDT&E request is \$2.793 million (Base) and \$3.000 million (OCO) and is for system integration, testing, and evaluation to support project requirements The REF is the Army's Quick Reaction Capability (QRC) with the ability to acquire, integrate and sustain Commercial-Off-The Shelf (COTS), Government Off-The-Shelf (GOTS), Non-Developmental Item (NDI), and Non-Standard Equipment (NSE) solutions to meet urgent combat requirements for globally employed forces. It inserts selected future force technologies, capabilities, and surrogate materiel solutions into deployed, deploying, select-prepared to deploy, and transformational forces for operational evaluation, assessment, and evolutionary development. The REF assesses the provided capabilities to improve future solutions to inform materiel development for the future Army capability requirements and to potentially transition the capability to an Army acquisition program. The REF is an enduring organization (Base funded) per Memorandum, Under Secretary of the Army, 30 Jan 2014, subject: Implementation Plan for Stabilization of the Rapid Equipping Force (REF). The REF bridges the gap between the Army's traditional acquisition process and immediate equipping needs. The REF pursues tangible solutions that can be equipped rapidly with a goal of 180 days. The REF focuses on finding immediate and effective game-changing capabilities to increase Soldier Readiness, effectiveness, protection, and lethality in any operational environment. The REF 10-Liner process provides the ability to react quickly to an ever-changing enemy who changes in days and months, not years in a complex world. The REF coordinates with the Combatant Command (COCOMs) and Army Service Component Command (ASCCs) in theater to fully understand their urgent needs, for which the REF acquisition capability may identify, procure, deliver, and sustain solutions to the deployed units. Although the REF works directly with Operational Commanders at all levels, it focuses on Brigade level and below to equip solutions to identified capability gaps. The Army Acquisition Executive designated Program Executive Office (PEO) Soldier as the Milestone Decision Authority (MDA) to institutionalize the acquisition authorities in support of the REF and to provide proper acquisition oversight while enhancing visibility of these efforts. The MDA will ensure flexibility and speed focused on the Soldier's needs serviced by the dedicated REF Program Management Office (PMO). This establishes a formal acquisition reporting chain that leverages existing reporting venues to ensure appropriate Assistant Secretary of the Army (Acquisition, Logistics and Technology) (ASA(ALT)) visibility, oversight, and direction. The REF capabilities cross all Warfighter Functions: 1. Mission Command												

UNCLASSIFIED

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2. Movement and Maneuver 3. Intelligence 4. Fires 5. Sustainment 6. Protection							
The RDT&E funding also provides the REF the flexibility to invest in near-term, and innovative solutions. RDT&E funds are necessary in the majority of all REF projects. Most importantly, REF requires RDT&E funds to conduct safety certification (testing) for non-standard equipment before it is equipped to the Soldier. This critical requirement exists to ensure that REF-provided equipment is safe for Soldiers to use and that any risks are identified and documented. The REF also requires RDT&E funds to integrate several different COTS/GOTS and NDI technologies into one capability that solves the tougher and more complex problems. RDT&E funds maybe used to further develop high (>6) Technology Readiness Level (TRL) systems or advanced technologies in conjunction with industry and Other Governmental Agencies (OGAs). Frequently, these technologies only need small amounts of funding to help them achieve a maturity level that is suitable to solve deployed U.S. Army Forces problems.							
The REF requires RDT&E funds to modify, test, and evaluate existing technologies that were developed for one purpose, however may be suitable to solve another problem. REF will also fund deliberate projects in support of technology-solution-scouting to meet anticipated Army needs and to mitigate operational gaps. These efforts measure and identify current technologies, and provide information to better inform Army Training and Doctrine Command (TRADOC) and other communities of interest, with the intent of enlightening future Army requirements. Example efforts that may require RDTE include the following projects: Tactical Satellite Communications (SATCOM) and communications systems; tactical and small Combat Out Post/Forward Operating Base (COP/FOB) Intelligence, Surveillance, and Reconnaissance (ISR) and Force Protection systems; Counter Unmanned Aerial Systems (CUAS); Electronic Warfare (EW) systems; Non-Tactical Vehicles (NTV); Persistent Duration UAS, and Subterranean (SubT) Operations.							
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: Rapid Equipping Force			6.043	5.706	2.793	3.000	5.793
Description: Funding is provided for the following effort.							
FY 2019 Plans: The REF partners with ASCC forces and Army SOF community to support globally deployed Soldiers and regionally aligned BCTs in all areas of responsibility. The REF anticipates increased uncertainty regarding the future of OIR and other operations in the CENTCOM AOR requiring additional flexibility to develop technological solutions supporting the reduced numbers of Soldiers operating globally in order to fill force protection gaps in the face of a lethal terrorism threat. The REF expects to continue our engagement with the ASCCs to address capability gaps generated by geographical and environmental constraints. Conversely, the REF will increase its understanding of evolving threats and operating conditions within the respective ASCC areas of operations.							

UNCLASSIFIED

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Appropriation/Budget Activity 2040 / 4		R-1 Program Element (Number/Name) PE 0603747A / Soldier Support and Survivability		Project (Number/Name) C08 / Rapid Equipping Force		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
<p>The REF also expects to play a much more deliberate role in providing support to the GRF as they prepare for a wider range of response missions. In accordance with REF?s participation in the Office of Secretary of Defense (OSD) led quick reaction capability effort, the Army determined the REF would provide the Army?s warm base capability at ~600 requirements in FY19 and beyond.</p> <p>For FY19 the REF projects ~495 (Base/OCO) requirements in the following REF Warfighter function areas.</p> <ol style="list-style-type: none">1. Mission Command2. Movement and Maneuver3. Intelligence4. Fires5. Sustainment6. Protection <p>The FY19 funds for projects in the amount of \$1.160 million (10% of Budget); breakout is base on the FY18 requirements trend.</p> <p>The REF anticipates ATEC testing and evaluation cost of \$4.546 million. The REF requires RDT&E funds to test technologies in order to ensure suitability and safety before equipping the Soldier - any modified COTS/GOTS/ NDI item has to be tested.</p> <p>FY 2020 Base Plans:</p> <p>The REF partner with ASCC forces and Army SOF community to support globally deployed Soldiers and regionally aligned BCTs in all areas of responsibility. The REF anticipates increased uncertainty regarding the future of Operation Inherent Resolve (OIR) and other operations in the CENTCOM Area of Responsibility (AOR) requiring additional flexibility to develop technological solutions supporting the reduced numbers of Soldiers operating globally in order to fill force protection gaps in the face of a lethal terrorism threat. The REF expects to continue our engagement with the ASCCs to address capability gaps generated by geographical and environmental constraints. Conversely, the REF will increase its understanding of evolving threats and operating conditions within the respective ASCC areas of operations. The REF also expects to play a much more deliberate role in providing support to the GRF as they prepare for a wider range of response missions. In accordance with REF?s participation in the Office of Secretary of Defense (OSD) led quick reaction capability</p>						

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Army			Date: March 2019					
Appropriation/Budget Activity 2040 / 4		R-1 Program Element (Number/Name) PE 0603747A / Soldier Support and Survivability		Project (Number/Name) C08 / Rapid Equipping Force				
B. Accomplishments/Planned Programs (\$ in Millions)				FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
effort, the Army determined the REF would provide the Army?s warm base capability at ~ 600 requirements in FY20 and beyond.								
REF Warfighter function areas								
1. Mission Command 2. Movement and Maneuver 3. Intelligence 4. Fires 5. Sustainment 6. Protection								
For FY20 the REF projects ~600 (Base/OCO) requirements in the following REF Warfighter Functions.								
The FY20 funds for projects in the amount of \$279K (10% of Budget); breakout is base on the FY18 requirements trend.								
The REF anticipates ATEC testing and evaluation cost of \$2.514 million. The REF requires RDT&E funds to test technologies in order to ensure suitability and safety before equipping the Soldier - any modified COTS/GOTS/ NDI item has to be tested.								
FY 2020 OCO Plans: The REF partner with ASCC forces and Army SOF community to support globally deployed Soldiers and regionally aligned BCTs in all areas of responsibility. The REF anticipates increased uncertainty regarding the future of Operation Inherent Resolve (OIR) and other operations in the CENTCOM Area of Responsibility (AOR) requiring additional flexibility to develop technological solutions supporting the reduced numbers of Soldiers operating globally in order to fill force protection gaps in the face of a lethal terrorism threat. The REF expects to continue our engagement with the ASCCs to address capability gaps generated by geographical and environmental constraints. Conversely, the REF will increase its understanding of evolving threats and operating conditions within the respective ASCC areas of operations. The REF also expects to play a much more deliberate role in providing support to the GRF as they prepare for a wider range of response missions. In accordance with REF?s participation in the Office of Secretary of Defense (OSD) led quick reaction capability								

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Army				Date: March 2019		
Appropriation/Budget Activity 2040 / 4		R-1 Program Element (Number/Name) PE 0603747A / Soldier Support and Survivability		Project (Number/Name) C08 / Rapid Equipping Force		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
effort, the Army determined the REF would provide the Army's warm base capability at ~ 600 requirements in FY20 and beyond. REF Warfighter function areas 1. Mission Command 2. Movement and Maneuver 3. Intelligence 4. Fires 5. Sustainment 6. Protection For FY20 the REF projects ~600 (Base/OCO) requirements in the following REF Warfighter Functions. The FY20 funds for projects in the amount of \$300K (10% of Budget); breakout is base on the FY18 requirements trend. The REF anticipates ATEC testing and evaluation cost of \$2.700 million. The REF requires RDT&E funds to test technologies in order to ensure suitability and safety before equipping the Soldier - any modified COTS/GOTS/ NDI item has to be tested. FY 2019 to FY 2020 Increase/Decrease Statement: There is no significant decrease (\$.006M).						
Title: FY 2019 SBIR / STTR Transfer Description: FY 2019 SBIR / STTR Transfer FY 2019 Plans: FY 2019 SBIR / STTR Transfer FY 2019 to FY 2020 Increase/Decrease Statement: FY 2019 SBIR / STTR Transfer		-	0.090	-	-	-
Accomplishments/Planned Programs Subtotals		6.043	5.796	2.793	3.000	5.793

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Army								Date: March 2019			
Appropriation/Budget Activity 2040 / 4				R-1 Program Element (Number/Name) PE 0603747A / <i>Soldier Support and Survivability</i>				Project (Number/Name) C08 / <i>Rapid Equipping Force</i>			
								FY 2018	FY 2019		
Congressional Add: Soldier Enhancement Program								3.000	-		
FY 2018 Accomplishments: Soldier Enhancement Program											
Congressional Adds Subtotals								3.000	-		
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
• M80101: <i>Rapid Equipping Soldier Support Equipment</i>	13.500	29.879	9.877	24.122	33.999	33.999	9.878	9.879	9.899	0.000	141.033
Remarks											
D. Acquisition Strategy											
<p>The Rapid Equipping Force (REF) harnesses current and emerging technologies to provide rapid solutions to the urgently required capabilities of U.S. Army Forces employed globally. The REF focus is on rapidly placing capabilities into Soldiers' hands. This mission is accomplished in one of two ways: 1) rapidly adapting COTS/ GOTS/NDI equipment to meet operational needs, and 2) developing emerging deployable capability via interaction with research and development organizations and academia. All capabilities are safety tested prior to insertion into operational environments. Training and sustainment are provided for every capability until it is transitioned to an approved acquisition program or terminated through an approved Army process. Operational assessments are conducted to provide feedback in support of Army requirements generation and future capability development. REF capabilities routinely serve as a bridge to specific ONS, JUONS, and JEONS gaps to meet urgent operational requirements.</p>											
E. Performance Metrics											
N/A											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Army												Date: March 2019			
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603747A / Soldier Support and Survivability				Project (Number/Name) C08 / Rapid Equipping Force					
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Mission Command	C/FFP	Various : Various	0.100	0.091		0.116		0.019		0.021		0.040	0.000	0.347	-
Movement and Maneuver	C/FFP	Various : Various	0.198	0.150		0.192		0.049		0.053		0.102	0.000	0.642	-
Intelligence	C/FFP	Various : Various	0.080	0.208		0.267		0.077		0.083		0.160	0.000	0.715	-
Fires	C/FFP	Various : Various	0.007	0.003		0.004		0.002		0.002		0.004	0.000	0.018	-
Sustainment	C/FFP	Various : Various	0.093	0.144		0.184		0.034		0.037		0.071	0.000	0.492	-
Protection	C/FFP	Various : Various	0.186	0.308		0.487		0.098		0.104		0.202	0.000	1.183	-
Dismounted Improvised Explosive Device (IED) Defeat	C/FFP	Various : Various	2.889	-		-		-		-		-	Continuing	Continuing	Continuing
Dismounted Operations Support	C/FFP	Various : Various	4.796	-		-		-		-		-	Continuing	Continuing	Continuing
Intelligence, Surveillance, and Reconnaissance (ISR) Shortfalls in Environmentally Inhospitable OEs	C/FFP	Various : Various	5.951	-		-		-		-		-	Continuing	Continuing	Continuing
Small Combat Outpost (COP) / Patrol Base (PB) Force Protection and Sustainment	C/FFP	Various : Various	3.738	-		-		-		-		-	Continuing	Continuing	Continuing
Other-REF RIPL Priorities (5-10)	C/FFP	Various : Various	8.778	-		-		-		-		-	Continuing	Continuing	-
Other	C/FFP	Various : Various	2.208	-		-		-		-		-	0.000	2.208	-
Base: Various Projects-Protect the Force in Counter Insurgency	C/FFP	Various : Various	11.841	-		-		-		-		-	0.000	11.841	-
Small Combat Outpost (COP)/Patrol Base (PB) Sustainment	C/FFP	Various : Various	1.506	-		-		-		-		-	0.000	1.506	-
Base: Various Projects-Enhance Intelligence Surveillance Recon	C/FFP	Various : Various	9.009	-		-		-		-		-	0.000	9.009	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Army												Date: March 2019			
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603747A / Soldier Support and Survivability				Project (Number/Name) C08 / Rapid Equipping Force					
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Small Combat Outpost (COP)/Patrol Base (PB) Force Protection	C/FFP	Various : Various	2.093	-		-		-		-		-	0.000	2.093	-
Dismounted Blue Force Tracking and Mission Command	C/FFP	Various : Various	0.528	-		-		-		-		-	0.000	0.528	-
Base: Various Projects-Logistics/Medical in Counterinsurgency Ops	C/FFP	Various : Various	1.639	-		-		-		-		-	0.000	1.639	-
Base: Various Projects-Timeliness of Analysis and Information Dissemination	C/FFP	Various : Various	6.961	-		-		-		-		-	0.000	6.961	-
Congressional Add-Squad Mission Support System (SMSS)	C/FFP	Various : Various	1.600	-		-		-		-		-	0.000	1.600	-
SSTR/Economic Assumptions/FFRDC and SBIR	C/FFP	Various : Various	1.090	-		-		-		-		-	0.000	1.090	-
OCO: Rapid Equipping Force	C/FFP	Various : Various	19.190	-		-		-		-		-	0.000	19.190	-
Subtotal			84.481	0.904		1.250		0.279		0.300		0.579	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
ATEC (REF Integrated Priority List 1-10)	C/FFP	Various : Various	11.344	-		-		-		-		-	Continuing	Continuing	Continuing
ATEC (Warfighter Function Areas)	C/FFP	Various : Various	5.975	8.139		4.546		2.514		2.700		5.214	0.000	23.874	-
ATEC (REF Integrated Priority List 1-7)	C/FFP	Various : Various	2.000	-		-		-		-		-	0.000	2.000	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Army												Date: March 2019		
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603747A / <i>Soldier Support and Survivability</i>				Project (Number/Name) C08 / <i>Rapid Equipping Force</i>				

Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			19.319	8.139		4.546		2.514		2.700		5.214	Continuing	Continuing	N/A

	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	103.800	9.043	5.796	2.793	3.000	5.793	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Army																Date: March 2019			
Appropriation/Budget Activity 2040 / 4								R-1 Program Element (Number/Name) PE 0603747A / Soldier Support and Survivability								Project (Number/Name) C08 / Rapid Equipping Force			

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Army			Date: March 2019
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603747A / Soldier Support and Survivability	Project (Number/Name) C08 / Rapid Equipping Force	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Rapid Equipping Force	1	2020	1	2020

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Army										Date: March 2019		
Appropriation/Budget Activity 2040 / 4					R-1 Program Element (Number/Name) PE 0603747A / Soldier Support and Survivability				Project (Number/Name) EL1 / Army Field Feeding Programs			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
EL1: Army Field Feeding Programs	-	0.430	1.346	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	1.776
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Project EL1 efforts complete in FY 2019

A. Mission Description and Budget Item Justification

This Project provides for the advanced component development and prototyping of Army combat feeding equipment designed to reduce the logistics burden and Operation and Support (O&S) costs of subsistence support to service personnel. Project supports development of rapidly deployable field food service equipment in coordination with ration development efforts. Project conducts demonstration and validation of improved subsistence support items used to enhance soldier effectiveness and quality of life. This project develops critical enablers that support the Joint Future Force Capabilities and the Joint Expeditionary Mindset by maintaining readiness through fielding and integrating new equipment. This equipment enhances the field Soldier's well-being and provides the Soldier with usable equipment, in addition to reducing sustainment requirements, related Combat Support/Combat Service Support (CS/CSS) demands on lift, combat zone footprint, and costs for logistical support.

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

	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: Ethylene Control Device (ECD) for Multi Temperature Refrigerated Container System (MTRCS)	0.183	0.705	-	-	-
Description: Develop a compact, low power, automated system that decomposes ethylene inside the Multi Temperature Refrigerated Container Systems (MTRCS) to extend the shelf life of fresh fruits and vegetables. The 300 watt Ethylene Control Device (ECD) provides an average of two week shelf life extension of fresh produce. It can be operated independently or in unison with the MTRCS refrigeration system and can be temporarily or permanently mounted with no negative impact to the MTRCS storage capacity (MTRCS Operational Requirements Document (ORD) approved Apr 2002).					
FY 2019 Plans: Funds reallocated to Containerized Food Sanitation Center (CFSC) for prototype fabrication and testing.					
FY 2019 to FY 2020 Increase/Decrease Statement: Army efforts will complete in FY19. Following FY 19, funding will shift to other accounts to support the Army's modernization priorities in support of the National Defense Strategy.					
Title: Deployable Sustainable Efficient Refrigeration Technology (DESERT)	0.247	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Army				Date: March 2019		
Appropriation/Budget Activity 2040 / 4		R-1 Program Element (Number/Name) PE 0603747A / Soldier Support and Survivability		Project (Number/Name) EL1 / Army Field Feeding Programs		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Description: Develop enhanced refrigeration unit that uses a lower Global Warming Potential (GWP) refrigerant than the current MTRCS. The Deployable Sustainable Efficient Refrigeration Technology (DESERT) makes use of R-134A as the working fluid. R-134A has a GWP of ~1300 as compared to the current MTRCS refrigerant R404A which has a GWP of ~3900. The redesigned refrigeration unit offers greater fuel efficiency, operation at real sun/desert temperatures of 135F, increased reliability and the ability to make use of alternate power sources to augment efficiency. The DESERT refrigeration unit shall be backwards compatible to the MTRCS for continuing procurement and as a replacement (MTRCS ORD approved Apr 2002).						
Title: Containerized Food Sanitation Center (CFSC) Description: Develop and Test a Containerized Food Sanitation Center (CFSC) that meets the requirements of the Force Provider Expeditionary (FPE) and uses fuel fired water heating to improve energy efficiency.. FY 2019 Plans: Complete prototype integration and conduct developmental testing and user evaluation. Complete program documentation for transition to production. FY 2019 to FY 2020 Increase/Decrease Statement: Army efforts complete in FY19 and funding will shift to other accounts to support the Army's modernization priorities in support of the National Defense Strategy.		-	0.598	-	-	-
Title: FY 2019 SBIR / STTR Transfer Description: FY 2019 SBIR / STTR Transfer FY 2019 Plans: FY 2019 SBIR / STTR Transfer FY 2019 to FY 2020 Increase/Decrease Statement: FY 2019 SBIR / STTR Transfer		-	0.043	-	-	-
Accomplishments/Planned Programs Subtotals		0.430	1.346	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Army										Date: March 2019	
Appropriation/Budget Activity 2040 / 4				R-1 Program Element (Number/Name) PE 0603747A / <i>Soldier Support and Survivability</i>				Project (Number/Name) EL1 / <i>Army Field Feeding Programs</i>			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
• EL2: <i>Army Field Feeding Equipment</i>	7.883	3.410	0.000	-	0.000	-	-	-	-	0.000	11.293
• M65806: <i>Assault Kitchen (AK)</i>	4.608	4.587	1.673	-	1.673	-	-	-	-	0.000	10.868
• M65801: <i>REFRIGERATED CONTAINER SYSTEMS</i>	10.877	9.140	0.000	-	0.000	-	-	-	-	0.000	20.017
• R62830: <i>Battlefield Kitchen (BK)</i>	-	2.024	0.000	-	0.000	-	-	-	-	0.000	2.024
Remarks											
D. Acquisition Strategy											
Project development will transition to Engineering and Manufacturing Development (EMD) and into production after thorough testing.											
E. Performance Metrics											
N/A											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Army												Date: March 2019			
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603747A / <i>Soldier Support and Survivability</i>						Project (Number/Name) EL1 / <i>Army Field Feeding Programs</i>			
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Management Support	Various	PMFSS : Natick, MA	0.349	0.128		0.190		-		-		-	0.000	0.667	-
Subtotal			0.349	0.128		0.190		-		-		-	0.000	0.667	N/A
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Battlefield Kitchen	Various	PMFSS : Natick, MA	2.632	-		-		-		-		-	0.000	2.632	-
ECD for MTRCS	Various	Various : Various	-	0.125		0.612		-		-		-	0.000	0.737	-
DESERT	Various	PMFSS : Natick, MA	-	0.177		-		-		-		-	0.000	0.177	-
FSC III	Various	Various : Various	-	-		0.501		-		-		-	0.000	0.501	-
FY 2019 SBIR / STTR Transfer	TBD	TBD : TBD	-	-		0.043		-		-		-	0.000	0.043	-
Subtotal			2.632	0.302		1.156		-		-		-	0.000	4.090	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			2.981	0.430		1.346		-		-		-	0.000	4.757	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Army			Date: March 2019		
Appropriation/Budget Activity 2040 / 4		R-1 Program Element (Number/Name) PE 0603747A / <i>Soldier Support and Survivability</i>			Project (Number/Name) EL1 / <i>Army Field Feeding Programs</i>

Event Name	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Conduct evaluation of ECD performance and application																												
Conduct in house CFSC design																												
Award contract for CFSC design																												
Fabricate CFSC test prototype and conduct testing																												
Transition CFSC to production																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Army			Date: March 2019
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603747A / <i>Soldier Support and Survivability</i>	Project (Number/Name) EL1 / <i>Army Field Feeding Programs</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Conduct evaluation of ECD performance and application	1	2018	4	2018
Conduct in house CFSC design	2	2018	3	2018
Award contract for CFSC design	4	2018	4	2018
Fabricate CFSC test prototype and conduct testing	1	2019	4	2019
Transition CFSC to production	4	2019	4	2019