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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Army **Date:** February 2018

Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0604713A / Combat Feeding, Clothing, and Equipment							
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	-	1.975	3.702	4.507	-	4.507	6.141	4.863	4.740	4.510	0.000	30.438
548: Mil Subsistence Sys	-	0.730	0.700	1.093	-	1.093	1.893	1.942	1.817	1.531	0.000	9.706
EL2: Army Field Feeding Equipment	-	1.245	3.002	3.414	-	3.414	4.248	2.921	2.923	2.979	0.000	20.732

A. Mission Description and Budget Item Justification

Projects under this Program Element support the development, demonstration and Non-Developmental Item (NDI) Commercial Off The Shelf (COTS) evaluation of combat feeding equipment to enhance soldier efficiency, improve soldier survivability, and reduce food service logistics requirements for all four services. These Projects support multi-fuel, rapidly deployable field food service equipment initiatives. Efforts also support the Engineering and Manufacturing Development (EMD) phase of programs to improve equipment, enhance safety in food service, and decrease fuel and water requirements. The Projects develop critical enablers that support the Joint Future Capabilities and Joint Expeditionary mindset, by maintaining readiness through integrating new equipment, enhancing the field soldier's well-being, and providing soldiers usable equipment. The Projects also reduce sustainment requirements, related Combat Support/Combat Service Support (CS/CSS) demands on lift, the combat zone footprint, and costs for logistical support.

This PE/Project supports Field Feeding programs for all the services.

B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	2.054	3.702	4.141	-	4.141
Current President's Budget	1.975	3.702	4.507	-	4.507
Total Adjustments	-0.079	0.000	0.366	-	0.366
• Congressional General Reductions	-0.001	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.078	-			
• Adjustments to Budget Years	-	-	0.366	-	0.366

Change Summary Explanation

FY 2017 variation due to FFRDC (-1K) and STTR/SBIR reduction (\$78K).

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The FY 2019 funding request was increased by \$0.366 million. Project EL2 increased by \$0.123 million and Project 548 increased by \$0.243 million.		

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Army										Date: February 2018		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604713A / Combat Feeding, Clothing, and Equipment				Project (Number/Name) 548 / Mil Subsistence Sys			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
548: Mil Subsistence Sys	-	0.730	0.700	1.093	-	1.093	1.893	1.942	1.817	1.531	0.000	9.706
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
This Project enables system development and demonstration of Joint Service combat rations and field feeding equipment/systems 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 (DLA). 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 (CFREB) 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.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2017	FY 2018	FY 2019	
Title: Fielded Individual Ration Improvement Project (FIRIP)									0.115	0.075	-	
Description: Continuous product improvement project for the Meal Ready to Eat (MRE). Integrate prototype components/ technologies into the MRE menu systems to improve operational effectiveness. Demonstrate system integration and producibility, develop component specifications and transition to Defense Logistics Agency ? Troop Support (DLA-Troop Support) for procurement.												
FY 2018 Plans: Based on field test results, present recommendations to Joint Services (2Q18) for continued product improvement of ration components/packaging/technologies for MRE (2020 date of pack). Finalize MRE procurement documents and initiate transition to DLA-Troop Support. Obtained Surgeon General approval of revised MRE menus. Execute production testing with industry to ensure consistent ration quality, understand Performance Contract Requirements (PCR), and resolved vendor/supplier issues. Obtain selected new items for field test. Conduct field evaluation of new candidate ration components for MRE (2021 date of pack) to improve quality, acceptability, nutrition and expand variety.												
FY 2018 to FY 2019 Increase/Decrease Statement: Effort as titled ended in FY 2018.												
Title: Assault/Special Purpose Ration Improvement Project (ASPIP)									0.056	0.039	-	
Description: Continuous product improvement of special purpose rations by the integration of new technologies in nutrition, processing and packaging. Special purpose rations include the Meal, Cold Weather/Long Range Patrol (MCW/LRP), First Strike Ration (FSR), and Modular Operational Ration Enhancement (MORE).												

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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604713A / <i>Combat Feeding, Clothing, and Equipment</i>	Project (Number/Name) 548 / <i>Mil Subsistence Sys</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018
FY 2018 Plans: Integrate prototype components/technologies into FSR, MCW/LRP and/or MORE menu systems to improve quality, acceptability, nutrition and expand variety. Execute production testing with industry to ensure consistent ration quality, understand Performance Contract Requirements (PCR), and resolve vendor/supplier issues. Continue to populate Combat Rations Database with nutritional/menu data.			
FY 2018 to FY 2019 Increase/Decrease Statement: Effort as titled ended in FY 2018.			
Title: Fielded Group Ration Improvement Project (FGRIP) Description: Continuous product improvement project 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). FY 2018 Plans: Finalize UGR (A, H&S, E) procurement documents and standards for verification and initiated transition to DLA-Troop Support based on BA4 Joint Service approvals. Obtain Surgeon General approval of revised UGR menus. Support DLA-Troop Support Limited First Article production testing of new H&S and E items with industry to ensure consistent ration quality, understand PCR requirements, resolve vendor/supplier issues, and conduct confirmatory sensory, chemical, physical and shelf life testing. FY 2018 to FY 2019 Increase/Decrease Statement: Effort as titled ended in FY 2018.		0.108	0.078
			-
Title: Group Ration Airdrop Survivability Project (GRASP) Description: Quantify baseline airdrop performance characteristics for current group combat ration (UGR-H&S/M/E) configurations/designs; identify survival rates (based on caloric loss and packaging damage/loss) under defined operational conditions; provide knowledge base and supporting data to generate executable load configuration changes; identify capability gaps that might warrant product/package/assembly configuration redesign and reengineering.		0.039	-
			-
Title: Block Upgrades and Operational Improvements for Expeditionary Field Feeding Equipment Description: Eliminate the sole sourcing of tray ration heater component parts. Reduce overall water consumption through the use of non-immersive cooking technologies and more efficient ware-washing equipment. Increase Kitchen flexibility through		0.079	0.154
			-

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018
<p>appliance upgrades. To reduce the overall fuel consumption of Expeditionary Field Feeding Equipment through enhanced combustion technologies.</p> <p>FY 2018 Plans: Develop reports, Engineering Change Proposals (ECP)s and logistical data to facilitate integration of cooking appliances into USMC EFK, ETRHS, and/or TRH. Transition prototype equipment and technical data to USMC.</p> <p>FY 2018 to FY 2019 Increase/Decrease Statement: Effort as titled ended in FY 2018.</p>			
<p>Title: Support to Air Force Field Feeding Modernization Efforts</p> <p>Description: Provide continuous R&D efforts for all Expeditionary Air Force squadrons. Modernize and standardize field foodservice equipment to reduce labor, maintenance, pack-out volume and cost. Increase reliability, efficiency and sustainability. Develop comprehensive specifications and technical data packages for recommended Food Service Equipment (FSE) items; test and evaluate newer commercial FSE items for expeditionary use and smaller transportation footprint; develop total overall life cycle cost of each system; test Energy Star certified FSE items that use less power; and investigate/develop appliances that use less water, increase competition on standardized designs</p> <p>FY 2018 Plans: Complete T&E of Energy Management System prototype. Transition performance results to the Basic Expeditionary Airfield Resources (BEAR) Program Management Office. Integrate heat recovery system technical data into the BEAR Kitchen System Technical Data Package.</p> <p>FY 2018 to FY 2019 Increase/Decrease Statement: Effort as titled ended in FY 2018.</p>		0.158	0.147
<p>Title: Navy Food Storage Analysis Tool (NFSAT)</p> <p>Description: Software analysis tool for Navy Foodservice that will automatically calculate all storage space factors and requirements for naval vessels based off the specific Navy Standard Core Menu (NSCM), crew size, Naval Ship's Technical Manual 096, Weights and Stability, Naval Vessel Requirements Food Service Facility Design Manual, Build Specifications 671, 672, and Type Commander established endurance levels. Develop automated subsistence inventory management, tracking and storeroom locations for all storage areas with mobile scanning technology capability.</p>		0.175	-
Title: Modular Integrated Kitchen System (MIKS)		-	0.207

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B. Accomplishments/Planned Programs (\$ in Millions)			FY 2017	FY 2018	FY 2019
<p>Description: Design a standardized mounting system for all Galley equipment to significantly reduce technical labor skills required to complete deck modifications. MIKS will standardize electrical and water requirements, enhance procurement options, decrease operating and support (O&S) costs, and increase the speed of installing new technologies into the Galley/Scullery areas.</p> <p>FY 2018 Plans: Conduct land-based user evaluation of new integrated mounting system, prepare technical data package (TDP), and provided documentation to Navy (USN) for procurement.</p> <p>FY 2018 to FY 2019 Increase/Decrease Statement: Effort as titled ended in FY 2018.</p>					
<p>Title: Joint Service Combat Ration System Development</p> <p>Description: This effort integrates and demonstrates mature Joint Service combat ration systems that enable warfighter maneuver, readiness and effectiveness during highly mobile, dispersed operations. Prototypes are transitioned from PE 0603747/Project 610 to develop combat rations with improved capabilities including improved warfighter physical and cognitive performance through optimized nutrition and reduced logistics burden through weight and cube reduction. This effort completes operational test and evaluation (OT&E) to confirm system level performance, and develops ration specifications for transition to Defense Logistics Agency - Troop Support (DLA - Troop Support) for procurement.</p> <p>FY 2019 Plans: Will integrate prototype components/technologies into menu systems to improve quality, optimize nutritional content, decrease weight/cube and/or improve modularity; conduct OT&E on ration systems to validate system level performance; present recommendations to the Joint Services Operational Ration Forum for Milestone C approval; finalize procurement documents and initiate transition to DLA-Troop Support; obtain Surgeon General approval of revised menus; execute production testing with industry to ensure consistent ration quality, understand Performance Contract Requirements (PCR), and resolve vendor/supplier issues; and conduct confirmatory sensory, chemical, physical and shelf life testing.</p> <p>FY 2018 to FY 2019 Increase/Decrease Statement: Lines of effort previously reported separately (i.e., FIRIP; ASPIP and FGRIP) have been merged into a single line starting in FY 2019 titled "Joint Service Combat Ration System Development".</p>			-	-	0.633
<p>Title: Joint Service Field Feeding Systems Development</p> <p>Description: This effort integrates and demonstrates field feeding equipment systems in support of the Navy (USN), Air Force (USAF), and Marine Corps (USMC) that reduce the logistics burden, improve efficiency, and decrease operation and support costs as directed by the DoD CFREB and Joint Service partners. Validated systems, specifications, and technical data</p>			-	-	0.460

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B. Accomplishments/Planned Programs (\$ in Millions)							FY 2017	FY 2018	FY 2019		
<p>packages are transitioned to the appropriate Service partner for procurement and fielding. Service partners include Product Manager Combat Support Equipment (PdM-CSE), Naval Sea Systems Command (NAVSEA), Naval Supply Systems Command (NAVSUP), and USAF Basic Expeditionary Airfield Resources (BEAR) Program Office.</p> <p><i>FY 2019 Plans:</i> Will conduct OT&E of new integrated mounting system for galley equipment to reduce operation and support costs in support of the USN; support integration and demonstration of efficient refrigeration assets and an Energy Management System (EMS) in support of the USAF BEAR Type I & II kitchen systems; develop reports, Engineering Change Proposals (ECPs) and logistical data to reduce overall fuel and water consumption in support of the USMC; transition validated prototype equipment and technical data to USN, USMC and USAF.</p> <p><i>FY 2018 to FY 2019 Increase/Decrease Statement:</i> Lines of effort previously reported separately (i.e., Block Upgrades and Operational Improvements for Expeditionary Field Feeding Equipment; Support to Air Force Field Feeding Modernization Efforts; NFSAT; MIKS) have been merged into a single line starting FY 2019 titled ?Joint Service Field Feeding Equipment and Menu Development?.</p>											
Accomplishments/Planned Programs Subtotals							0.730	0.700	1.093		
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• 610: <i>Food Adv Development</i>	5.095	6.548	4.599	-	4.599	4.110	4.223	4.175	4.972	0.000	33.722
Remarks											
D. Acquisition Strategy											
Complete Engineering and Manufacturing Development (EMD) and Demonstration of food items and equipment for transition into competitive procurement contract. Complete advanced research efforts to support Engineering Change Proposals for previously developed equipment.											
E. Performance Metrics											
N/A											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Army												Date: February 2018			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604713A / <i>Combat Feeding, Clothing, and Equipment</i>						Project (Number/Name) 548 / <i>Mil Subsistence Sys</i>			
Management Services (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	C/FP	RDECOM : Natick, MA	2.827	0.175	Oct 2016	0.139	Oct 2017	0.235	Oct 2018	-		0.235	0.000	3.376	Continuing
Subtotal			2.827	0.175		0.139		0.235		-		0.235	0.000	3.376	N/A
Product Development (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	5.155	0.381	Oct 2016	0.444	Oct 2017	0.698	Oct 2018	-		0.698	Continuing	Continuing	Continuing
Subtotal			5.155	0.381		0.444		0.698		-		0.698	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	-	0.174	Oct 2016	0.117	Oct 2017	0.160	Oct 2018	-		0.160	Continuing	Continuing	Continuing
Subtotal			-	0.174		0.117		0.160		-		0.160	Continuing	Continuing	N/A
			Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			7.982	0.730		0.700		1.093		-		1.093	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Army **Date:** February 2018

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604713A / <i>Combat Feeding, Clothing, and Equipment</i>	Project (Number/Name) 548 / <i>Mil Subsistence Sys</i>
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Event Name	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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 operational testing of combat ration systems																												
Transition combat ration procurement documents to DLA																												
Transition prototype equipment, ECPs and technical data to USMC																												
Conduct in-house T&E of Beta version and transition NFSAT to USN																												
Prepare TDP and obtain high fidelity MIKS prototype system																												
Conduct OT&E of BEAR Type II kitchen system and transition to USAF																												
Conduct land-based user evaluation of MIKS and transition data to USN																												
Transition Mobile Feeding Galley to USN																												
Transition labor & energy saving galley/scullery upgrades to USN																												
Conduct OT&E of Improved Tray Ration Heater and transition to USMC																												
Obtain Aerial Delivery Certification of Inflatable Refrigerated Space (IReFS)																												
Conduct OT&E of intuitive kitchen equipment and transition to Services																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Army			Date: February 2018
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604713A / <i>Combat Feeding, Clothing, and Equipment</i>	Project (Number/Name) 548 / <i>Mil Subsistence Sys</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Conduct operational testing of combat ration systems	1	2018	4	2023
Transition combat ration procurement documents to DLA	1	2018	4	2023
Transition prototype equipment, ECPs and technical data to USMC	1	2017	4	2018
Conduct in-house T&E of Beta version and transition NFSAT to USN	2	2017	4	2017
Prepare TDP and obtain high fidelity MIKS prototype system	1	2018	4	2018
Conduct OT&E of BEAR Type II kitchen system and transition to USAF	3	2018	4	2019
Conduct land-based user evaluation of MIKS and transition data to USN	2	2019	4	2019
Transition Mobile Feeding Galley to USN	1	2020	3	2020
Transition labor & energy saving galley/scullery upgrades to USN	1	2020	4	2021
Conduct OT&E of Improved Tray Ration Heater and transition to USMC	1	2020	4	2021
Obtain Aerial Delivery Certification of Inflatable Refrigerated Space (IRefS)	1	2020	4	2021
Conduct OT&E of intuitive kitchen equipment and transition to Services	1	2021	4	2021

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Army										Date: February 2018		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604713A / Combat Feeding, Clothing, and Equipment				Project (Number/Name) EL2 / Army Field Feeding Equipment			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
EL2: Army Field Feeding Equipment	-	1.245	3.002	3.414	-	3.414	4.248	2.921	2.923	2.979	0.000	20.732
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
This Project supports the development, demonstration and Non-Developmental Item (NDI) Commercial Off The Shelf (COTS) evaluation of combat feeding equipment to enhance Soldier efficiency, improve Soldier survivability, and reduce food service logistics requirements for the Army. The Project supports multi-fuel, rapidly deployable field food service equipment initiatives. Efforts also support the Engineering and Manufacturing Development (EMD) phase of programs to improve equipment, enhance safety in food service, and decrease fuel and water requirements. The Projects develop critical enablers that support the Army's Strategic Planning Guidance by developing and integrating critical expeditionary capabilities that maintain readiness, providing effective solutions that reduce the resource and operational energy footprint, providing modernized equipment, and enhancing the field Soldier's well being. This project reduces sustainment requirements, related Combat Support/ Combat Service Support (CS/CSS) demands on lift, the combat zone footprint, and costs for logistical support.												
This PE/Project supports Field Feeding programs for the Army.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2017	FY 2018	FY 2019	
Title: Battlefield Kitchen (BK)									1.245	3.002	1.484	
Description: Provide replacement of the obsolete Mobile Kitchen Trailer (MKT) system. The BK shall replace the MKT with a kitchen that provides fuel efficient, thermally controlled, closed combustion appliances within an environmentally controlled workspace. The BK shall provide rations for up to 300 Soldiers within 4 hours of setup. The BK provides refrigeration, running water and a heated serving line using the same off-road prime mover as the MKT as well as transportability by rail, sea, fixed and rotary wing aircraft.												
FY 2018 Plans: Complete integration of BK subsystems and fabricate final BK system prototypes. Conduct Production Prove-out Testing and initiate Limited User Test in accordance with approved Test& Evaluation Master Plan.												
FY 2019 Plans: Complete Limited User Test. Complete logistics documentation and prepare Milestone C package to obtain Milestone C decision and transition program into Low Rate Initial Production (LRIP).												
FY 2018 to FY 2019 Increase/Decrease Statement:												

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018	FY 2019
Significant hardware development, fabrication, and testing efforts in FY18 to meet accelerated program schedule. Decreased funding in FY19 supports completion of testing and transition into production.				
Title: Containerized Food Sanitation Center Description: Develop, test and field a containerized food sanitation center using the modular burner and the modular appliance concept that meets the requirements of Tri Service Food Code and the Force Provider Expeditionary (FPE) Capabilities Production Document (CPD). FY 2019 Plans: Prototype target sanitation sinks using commercially available sinks and the Army's modular burner technology. Develop performance specification for complete development of the required sinks and burners integrated into TRICON sized containers. Award development contract or delivery order for comprehensive prototyping. FY 2018 to FY 2019 Increase/Decrease Statement: New RDT&E start for modification to field equipment incorporating new technology.		-	-	0.788
Title: Containerized Kitchen, Modular Description: Integrate the Army's new Modular Appliance Burner and modular appliances developed for the Battlefield Kitchen into the Containerized Kitchen Platform. Replacing the open combustion appliances on the CK eliminates a key safety issue and the modular appliances are 20-40% more fuel efficient. Sharing the modular concept across all Army Field Feeding Platforms cuts the life cycle support costs significantly. FY 2019 Plans: Use the government owned technical data package developed by the Army and updated by the BK kitchen development effort to award an integration contract to govern integration of modular burners and appliances onto the Containerized Kitchen Platform. Oversee the Systems Engineering required to develop a comprehensive design for a Containerized Kitchen, Modular. FY 2018 to FY 2019 Increase/Decrease Statement: Increase in funding required to support transition of effort from 6.4 RDT&E due to technology maturity and initiation of EMD.		-	-	1.142
Accomplishments/Planned Programs Subtotals		1.245	3.002	3.414

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C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• EL1: <i>Army Field Feeding Programs</i>	1.873	0.447	1.362	-	1.362	0.504	1.646	2.100	1.500	Continuing	Continuing
• R62830: <i>Battlefield Kitchen, Field Feeding</i>	-	-	2.049	-	2.049	6.749	10.838	14.954	16.581	Continuing	Continuing
• M65801: <i>Refrigerated Container Systems</i>	10.124	10.877	8.177	-	8.177	6.527	7.300	3.726	3.723	Continuing	Continuing
Remarks											
D. Acquisition Strategy											
Complete Engineering Manufacturing Decisions (EMD) of food items and equipment for transition into competitive procurement contract. Complete advanced research efforts to support Engineer Change Proposals for previously developed equipment.											
E. Performance Metrics											
N/A											

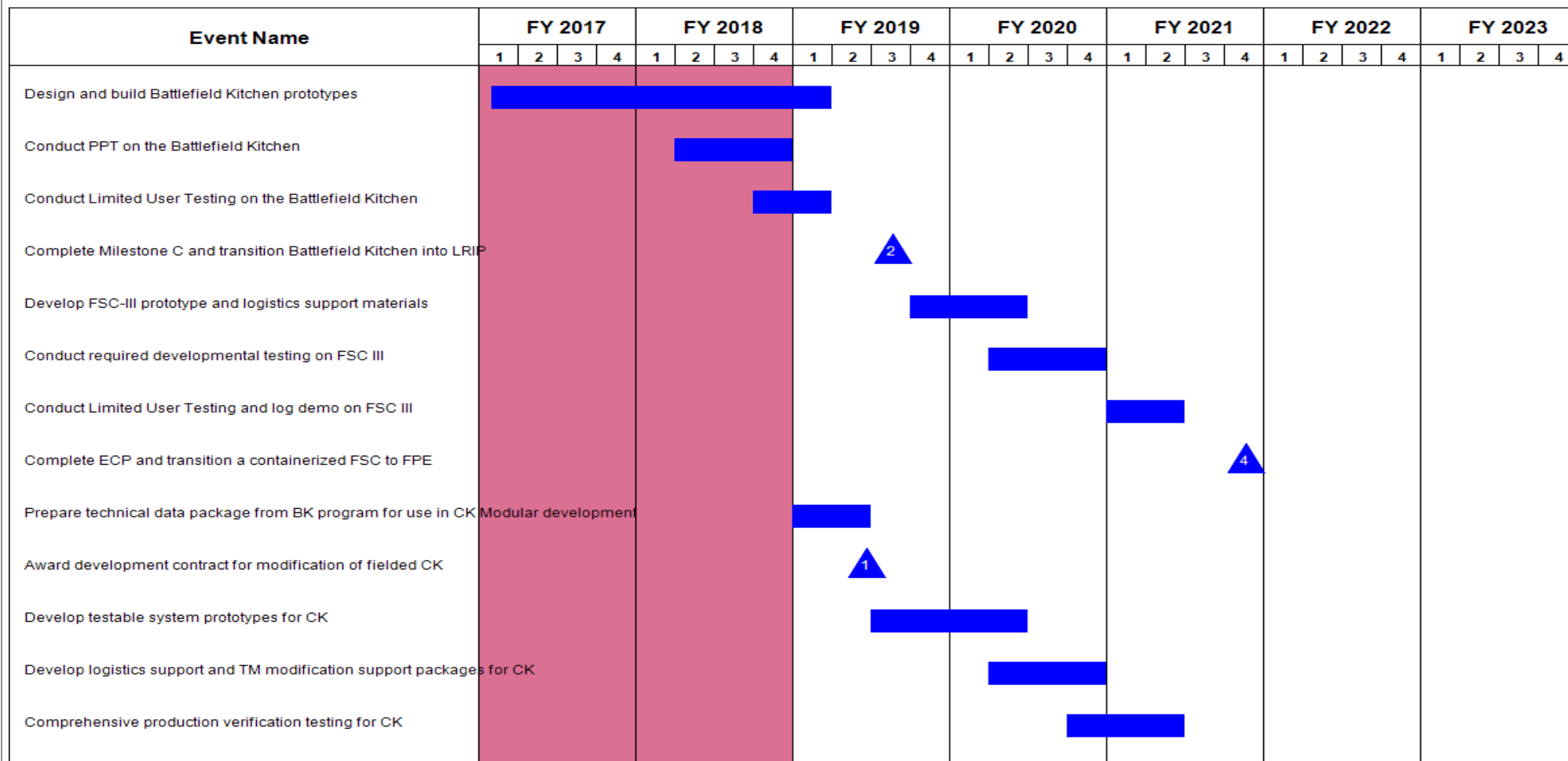
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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Army												Date: February 2018			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604713A / Combat Feeding, Clothing, and Equipment				Project (Number/Name) EL2 / Army Field Feeding Equipment					
Management Services (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	0.115	0.125		0.250		0.437		-		0.437	0.000	0.927	-
Subtotal			0.115	0.125		0.250		0.437		-		0.437	0.000	0.927	N/A
Product Development (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	-	1.120		1.081		1.302		-		1.302	0.000	3.503	-
Containerized Food Sanitation Center (FSC)	Various	PMFSS : Natick, MA	-	-		-		0.460		-		0.460	0.000	0.460	-
Deployable Sustainable Efficient Refrigeration Technology	Various	Various : Various	-	-		-		1.054		-		1.054	0.000	1.054	-
Subtotal			-	1.120		1.081		2.816		-		2.816	0.000	5.017	N/A
Test and Evaluation (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Ice Making System	Various	ATC/Ft Lee : Virginia	0.205	-		-		-		-		-	0.000	0.205	-
Battlefield Kitchen	Various	ATC/FT Lee : Virginia	-	-		1.671		0.161		-		0.161	0.000	1.832	-
Subtotal			0.205	-		1.671		0.161		-		0.161	0.000	2.037	N/A
			Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.320	1.245		3.002		3.414		-		3.414	0.000	7.981	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Army **Date:** February 2018

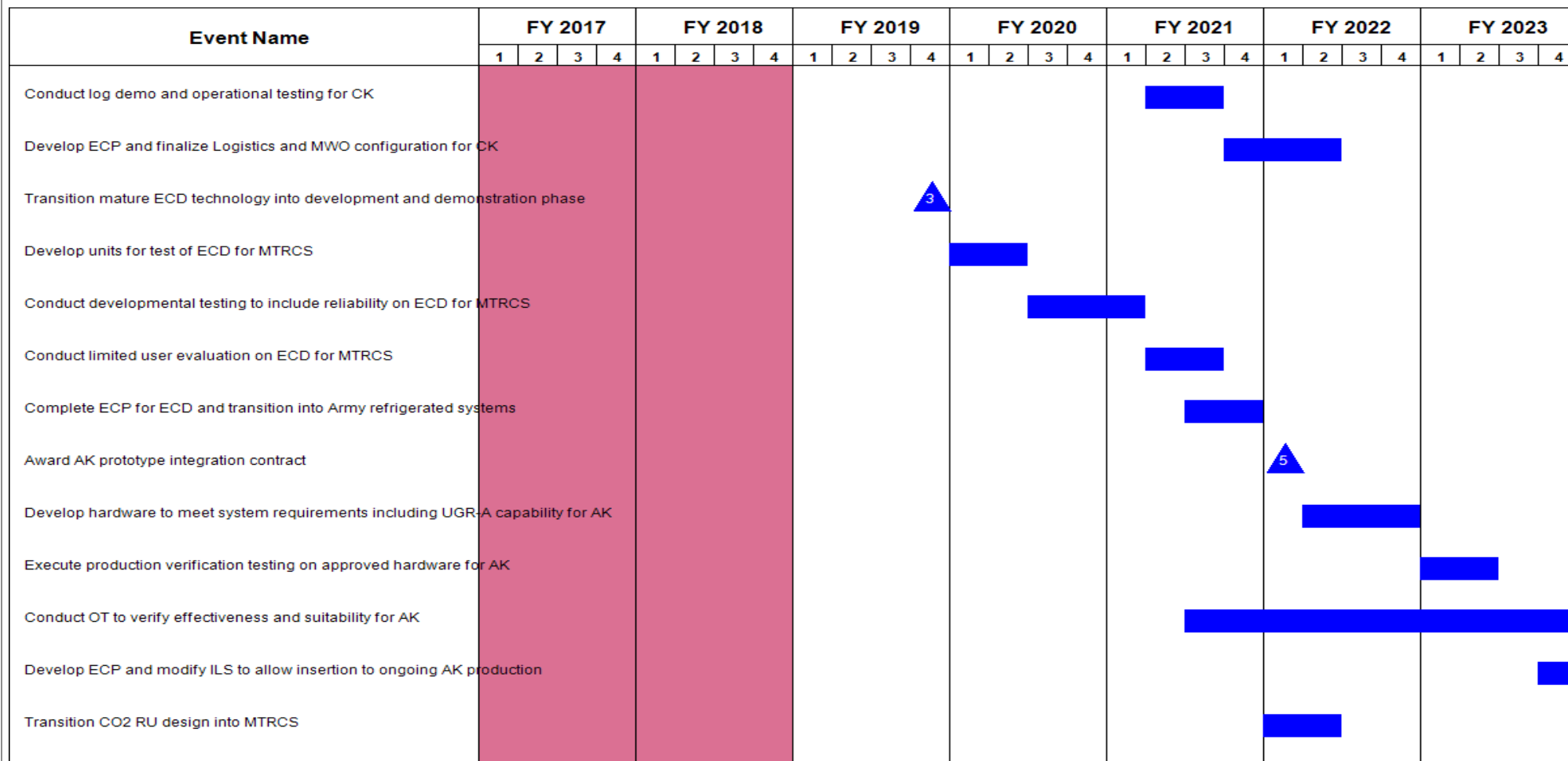
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604713A / <i>Combat Feeding, Clothing, and Equipment</i>	Project (Number/Name) EL2 / <i>Army Field Feeding Equipment</i>
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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Army	Date: February 2018
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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604713A / <i>Combat Feeding, Clothing, and Equipment</i>	Project (Number/Name) EL2 / <i>Army Field Feeding Equipment</i>
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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Army														Date: February 2018																							
Appropriation/Budget Activity 2040 / 5										R-1 Program Element (Number/Name) PE 0604713A / Combat Feeding, Clothing, and Equipment										Project (Number/Name) EL2 / Army Field Feeding Equipment																	
Event Name										FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
										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 production verification level testing on CO2 MTRCS																														<div></div>							
Conduct suitable OT to verify suitability and effectiveness of CO2 MTRCS																																		<div></div>			
Develop contract change documentation for CO2 MTRCS																																					
Transition component development for ECD infused TRCS over road cooling capabili																																					
Conduct system testing																																					

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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Army			Date: February 2018
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604713A / <i>Combat Feeding, Clothing, and Equipment</i>	Project (Number/Name) EL2 / <i>Army Field Feeding Equipment</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Design and build Battlefield Kitchen prototypes	1	2017	1	2019
Conduct PPT on the Battlefield Kitchen	2	2018	4	2018
Conduct Limited User Testing on the Battlefield Kitchen	4	2018	1	2019
Complete Milestone C and transition Battlefield Kitchen into LRIP	3	2019	3	2019
Develop FSC-III prototype and logistics support materials	4	2019	2	2020
Conduct required developmental testing on FSC III	2	2020	4	2020
Conduct Limited User Testing and log demo on FSC III	1	2021	2	2021
Complete ECP and transition a containerized FSC to FPE	4	2021	4	2021
Prepare technical data package from BK program for use in CK Modular development	1	2019	2	2019
Award development contract for modification of fielded CK	2	2019	2	2019
Develop testable system prototypes for CK	3	2019	2	2020
Develop logistics support and TM modification support packages for CK	2	2020	4	2020
Comprehensive production verification testing for CK	4	2020	2	2021
Conduct log demo and operational testing for CK	2	2021	3	2021
Develop ECP and finalize Logistics and MWO configuration for CK	4	2021	2	2022
Transition mature ECD technology into development and demonstration phase	4	2019	4	2019
Develop units for test of ECD for MTRCS	1	2020	2	2020
Conduct developmental testing to include reliability on ECD for MTRCS	3	2020	1	2021
Conduct limited user evaluation on ECD for MTRCS	2	2021	3	2021
Complete ECP for ECD and transition into Army refrigerated systems	3	2021	4	2021
Award AK prototype integration contract	1	2022	1	2022
Develop hardware to meet system requirements including UGR-A capability for AK	2	2022	4	2022

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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Army			Date: February 2018		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0604713A / Combat Feeding, Clothing, and Equipment		Project (Number/Name) EL2 / Army Field Feeding Equipment	
		Start		End	
Events		Quarter	Year	Quarter	Year
Execute production verification testing on approved hardware for AK		1	2023	2	2023
Conduct OT to verify effectiveness and suitability for AK		3	2021	4	2023
Develop ECP and modify ILS to allow insertion to ongoing AK production		4	2023	4	2023
Transition CO2 RU design into MTRCS		1	2022	2	2022
Conduct production verification level testing on CO2 MTRCS		3	2022	1	2023
Conduct suitable OT to verify suitability and effectiveness of CO2 MTRCS		2	2023	2	2023
Develop contract change documentation for CO2 MTRCS		3	2023	4	2023
Transition component development for ECD infused TRCS over road cooling capabili		1	2023	3	2023
Conduct system testing		4	2023	4	2023