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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Army	Date: March 2019
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Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)					PE 0604713A / Combat Feeding, Clothing, and Equipment							
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	-	8.561	4.502	2.393	-	2.393	2.817	1.817	1.531	1.611	0.000	23.232
548: Mil Subsistence Sys	-	0.678	1.092	2.393	-	2.393	2.817	1.817	1.531	1.611	0.000	11.939
EL2: Army Field Feeding Equipment	-	7.883	3.410	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	11.293

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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	3.702	4.507	6.141	-	6.141
Current President's Budget	8.561	4.502	2.393	-	2.393
Total Adjustments	4.859	-0.005	-3.748	-	-3.748
• Congressional General Reductions	-0.002	-0.005			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	5.000	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.139	-			
• Adjustments to Budget Years	-	-	-3.748	-	-3.748

Change Summary Explanation

Reduction of FY 2020 funding is in support of the Army's modernization priorities in support of the National Defense Strategy.

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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 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
548: Mil Subsistence Sys	-	0.678	1.092	2.393	-	2.393	2.817	1.817	1.531	1.611	0.000	11.939
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 2018	FY 2019	FY 2020	
Title: Fielded Individual Ration Improvement Project (FIRIP)									0.075	-	-	
Description: Continuous product improvement 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.												
Title: Assault/Special Purpose Ration Improvement Project (ASPIP)									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(MCW), First Strike Ration (FSR), and Modular Operational Ration Enhancement (MORE).												
Title: Fielded Group Ration Improvement Project (FGRIP)									0.078	-	-	
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: Block Upgrades and Operational Improvements for Expeditionary Field Feeding Equipment									0.154	-	-	
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												

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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 2018	FY 2019
appliance upgrades. To reduce the overall fuel consumption of Expeditionary Field Feeding Equipment through enhanced combustion technologies.			
Title: Support to Air Force Field Feeding Modernization Efforts 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 FSE items that use less power; and investigate/develop appliances that use less water, increase competition on standardized designs		0.147	-
Title: Modular Integrated Kitchen System (MIKS) 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.		0.185	-
Title: Joint Service Combat Ration System Development 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 0603747A Project 610 to develop individual and group 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. FY 2019 Plans: Integrate prototype components/technologies into individual and group 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, validate Performance Contract Requirements (PCR), and resolve vendor/supplier issues; and conduct confirmatory sensory, chemical, physical and shelf life testing. FY 2020 Plans:		-	0.632
			1.393

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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		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020
For existing ration platforms (Meal, Ready-to-Eat; First Strike Ration; Meal, Cold Weather, Modular Operational Ration Enhancement; Unitized Group Rations ? A/M/H&S), will integrate prototype components/technologies into menu systems and ration assembly processes to improve quality, optimize nutritional content, decrease weight/cube/cost and/or improve modularity and field utility; will conduct OT&E on ration systems to validate system level performance; present recommendations to the Joint Services Operational Ration Forum (JSORF) for Milestone C approval; will finalize procurement documents and initiate transition to DLA-Troop Support; will obtain Surgeon General approval of revised menus; will execute production testing with industry to ensure consistent ration quality, validate Performance-based Contract Requirements (PCRs), and resolve vendor/supplier issues; will conduct confirmatory sensory, chemical, physical and shelf life testing. For developmental Close Combat Assault Ration (CCAR), will conduct OT&E of capabilities/systems successfully demonstrated in 6.4 that provide Warfighters with lower weight, lower volume, more calorically dense, higher quality, commercially producible ration components; will validate system level performance of prototype CCARs in the context of providing Warfighters with viable nutrition options for a 7-day period without resupply; will present recommendations to the JSORF for Milestone C approval as new components providing advanced nutrition and logistical capabilities within existing ration platforms, as CCAR system concepts mature.				
FY 2019 to FY 2020 Increase/Decrease Statement: Funding increased to support acceleration of Close Combat Assault Ration (CCAR).				
Title: Joint Service Field Feeding Systems Development 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 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.		-	0.460	1.000
FY 2019 Plans: 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.				
FY 2020 Plans: Will conduct OT&E of Inflatable Refrigerated Space (IRefS) and Tray Ration Heater - Improved for USMC; will obtain aerial delivery certification for IRefS; will complete OT&E on Mobile Feeding Galley and transition technical data to USN; will continue				

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Army							Date: March 2019				
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					
B. Accomplishments/Planned Programs (\$ in Millions)							FY 2018	FY 2019	FY 2020		
OT&E of integrated mounting system for galley equipment to reduce operation and support costs in support of the USN; will develop reports, Engineering Change Proposals (ECPs) and logistical data to reduce overall fuel and water consumption in support of the USMC; will transition other validated prototype equipment and technical data to USN, USMC and USAF.											
FY 2019 to FY 2020 Increase/Decrease Statement: Funding increased to support OT&E for Joint Services.											
Accomplishments/Planned Programs Subtotals							0.678	1.092	2.393		
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
• 610: Food Adv Development	6.286	4.593	3.721	-	3.721	3.223	3.175	3.972	4.133	0.000	29.103
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 2020 Army												Date: March 2019			
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 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	C/FP	RDECOM : Natick, MA	3.002	0.139	Oct 2017	0.235	Oct 2018	0.514	Oct 2019	-		0.514	Continuing	Continuing	Continuing
Subtotal			3.002	0.139		0.235		0.514		-		0.514	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	5.536	0.422	Oct 2017	0.698	Oct 2018	0.204	Oct 2019	-		0.204	Continuing	Continuing	Continuing
Subtotal			5.536	0.422		0.698		0.204		-		0.204	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	0.174	0.117	Oct 2017	0.159	Oct 2018	1.675	Oct 2019	-		1.675	Continuing	Continuing	Continuing
Subtotal			0.174	0.117		0.159		1.675		-		1.675	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			8.712	0.678		1.092		2.393		-		2.393	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 / 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 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 operational testing of combat ration systems																												
Conduct OT&E of Close Combat Assault Ration (CCAR)																												
Obtain Joint Service approval of first generation CCAR																												
Develop CCAR Technical Data Package and contract for Low Rate Initial Production																												
Transition CCAR component/packaging documents to DLA-TS for procurement																												
Conduct OT&E of Expeditionary Group Ration (EGR)																												
Transition individual ration/ration components/packaging documents																												
Transition Unitized Group Ration components/packaging documents																												
Refine heat recovery prototype for integration and conduct OT&E																												
Transition TDP for the EMS, JSERCS, and heat recovery system to USAF																												
Conduct OT&E of BEAR Type II kitchen system and transition to USAF																												
Conduct OT&E of Energy Conversion technologies for BEAR kitchens to USAF																												
Transition advanced USN equipment and systems to USN for production																												

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

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 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 expeditionary kitchen systems for shore-based Navy units																												
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 EFK upgrades and transition to USMC																												
Conduct OT&E of intuitive kitchen equipment and transition to Services																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Army			Date: March 2019
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	2024
Conduct OT&E of Close Combat Assault Ration (CCAR)	1	2020	4	2021
Obtain Joint Service approval of first generation CCAR	1	2021	2	2021
Develop CCAR Technical Data Package and contract for Low Rate Initial Production	2	2021	4	2021
Transition CCAR component/packaging documents to DLA-TS for procurement	1	2022	2	2022
Conduct OT&E of Expeditionary Group Ration (EGR)	1	2022	4	2022
Transition individual ration/ration components/packaging documents to DLA-TS	1	2018	4	2024
Transition Unitized Group Ration components/packaging documents to DLA-TS	1	2018	4	2024
Refine heat recovery prototype for integration and conduct OT&E.	1	2018	3	2019
Transition TDP for the EMS, JSERCS, and heat recovery system to USAF	4	2019	4	2019
Conduct OT&E of BEAR Type II kitchen system and transition to USAF	3	2018	4	2019
Conduct OT&E of Energy Conversation technologies for BEAR kitchens to USAF	1	2022	4	2024
Transition advanced USN equipment and systems to USN for procurement.	1	2014	4	2022
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 expeditionary kitchen systems for shore-based Navy units	1	2022	4	2022
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 EFK upgrades and transition to USMC	1	2023	4	2023
Conduct OT&E of intuitive kitchen equipment and transition to Services	1	2022	4	2022

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Army										Date: March 2019		
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 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: Army Field Feeding Equipment	-	7.883	3.410	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	11.293
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 2018	FY 2019	FY 2020
Title: Battlefield Kitchen (BK)	7.883	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 2019 Plans: Complete Limited User Test and Logistics Demonstration. Complete logistics documentation and prepare Milestone C package to obtain Milestone C decision and transition program into Low Rate Initial Production (LRIP).			
FY 2019 to FY 2020 Increase/Decrease Statement: Army efforts complete in FY 2019.			
Title: Expeditionary Solid Waste Disposal System (ESWDS)	-	0.788	-

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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					
B. Accomplishments/Planned Programs (\$ in Millions)							FY 2018		FY 2019		FY 2020	
Description: Provides an integrated waste disposal capability providing substantial improvement over burn pits that pose health risks to Soldiers and/or the logistics burden of backhauling trash. Will safely process 1,000 pounds per day of mixed solid waste.												
FY 2019 Plans: Conduct user test and Logistics Demonstration. Complete program documentation for transition to production.												
FY 2019 to FY 2020 Increase/Decrease Statement: Army efforts complete in FY 2019.												
Title: Containerized Kitchen, Modular												
Description: Integrate the Anny'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 2019 to FY 2020 Increase/Decrease Statement: Army efforts complete in FY 2019.												
Title: SBIR/STTR												
FY 2019 Plans: SBIR/STTR												
FY 2019 to FY 2020 Increase/Decrease Statement: SBIR/STTR												
Accomplishments/Planned Programs Subtotals							7.883		3.410		-	
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	
• EL1: Army Field Feeding Programs	0.430	1.346	0.000	-	0.000	-	-	-	-	Continuing	Continuing	

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C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2020</u>	<u>FY 2020</u>	<u>FY 2020</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>Complete</u>	<u>Total Cost</u>
• R62830: <i>Battlefield Kitchen (BK)</i>	-	2.024	0.000	-	0.000	-	-	-	-	Continuing	Continuing
• M65801: <i>REFRIGERATED</i>	10.877	9.140	0.000	-	0.000	-	-	-	-	Continuing	Continuing
CONTAINER SYSTEMS											
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 2020 Army												Date: March 2019			
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>			
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	0.240	0.250		0.324		-		-		-	0.000	0.814	-
SBIR/STTR	TBD	PMFSS : Natick, MA	-	-		0.109		-		-		-	0.000	0.109	-
Subtotal			0.240	0.250		0.433		-		-		-	0.000	0.923	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	1.120	1.081		1.302		-		-		-	0.000	3.503	-
Containerized Food Sanitation Center (FSC)	Various	PMFSS : Natick, MA	-	-		0.460		-		-		-	0.000	0.460	-
Deployable Sustainable Efficient Refrigeration Technology	Various	Various : Various	-	-		1.054		-		-		-	0.000	1.054	-
Subtotal			1.120	1.081		2.816		-		-		-	0.000	5.017	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
Ice Making System	Various	ATC/Ft Lee : Virginia	0.205	-		-		-		-		-	0.000	0.205	-
Battlefield Kitchen	Various	ATC/FT Lee : Virginia	-	6.552		0.161		-		-		-	0.000	6.713	-
Subtotal			0.205	6.552		0.161		-		-		-	0.000	6.918	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			1.565	7.883		3.410		-		-		-	0.000	12.858	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Army							Date: March 2019			
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				
	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks										

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

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
Design and build Battlefield Kitchen prototypes																												
Conduct PPT on the Battlefield Kitchen																												
Conduct Limited User Testing on the Battlefield Kitchen																												
Complete Milestone C and transition Battlefield Kitchen into LRIP																												
Prepare procurement package for use CCKK development																												
Award development contract for CCKK development																												
Develop testable system prototypes for CCKK																												
Conduct ESWDS user test and Log Demo																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Army			Date: March 2019
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	2	2018
Conduct PPT on the Battlefield Kitchen	2	2018	4	2018
Conduct Limited User Testing on the Battlefield Kitchen	3	2019	3	2019
Complete Milestone C and transition Battlefield Kitchen into LRIP	4	2019	4	2019
Prepare procurement package for use CCCK development	1	2019	2	2019
Award development contract for CCCK development	2	2019	2	2019
Develop testable system prototypes for CCCK	3	2019	4	2019
Conduct ESWDS user test and Log Demo	3	2019	3	2019