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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army	Date: February 2015
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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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	-	1.874	3.034	1.763	-	1.763	2.466	2.608	2.430	2.457	Continuing	Continuing
548: Mil Subsistence Sys	-	1.874	3.034	1.430	-	1.430	0.961	0.550	0.652	1.319	Continuing	Continuing
EL2: Army Field Feeding Equipment	-	-	-	0.333	-	0.333	1.505	2.058	1.778	1.138	-	6.812

Note

FY16: Funds realigned to higher priority Army Programs. The FY 2016 funding request was reduced by \$.463 million to account for the availability of prior year execution balances.

A. Mission Description and Budget Item Justification

This project supports the development and demonstration and Non-Developmental Item (NDI) Commercial Off The Shelf (COTS) evaluation of combat feeding equipment to enhance soldier efficiency and survivability, and to reduce food service logistics requirements for all four services. The project supports multi-fuel, rapidly deployable field food service equipment initiatives and engineering and manufacturing development to improve equipment, enhance safety in food service, and decrease fuel and water requirements. This project develops critical enablers that support the Joint Future Capabilities and Joint Expeditionary mindset, by maintaining readiness through fielding and integrating new equipment; by enhancing the field soldier's well-being; and providing soldier usable equipment. They 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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	1.938	1.335	2.239	-	2.239
Current President's Budget	1.874	3.034	1.763	-	1.763
Total Adjustments	-0.064	1.699	-0.476	-	-0.476
• Congressional General Reductions	-0.064	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	1.699			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	-0.476	-	-0.476

UNCLASSIFIED

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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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
548: Mil Subsistence Sys	-	1.874	3.034	1.430	-	1.430	0.961	0.550	0.652	1.319	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
This project supports the development and demonstration and Non-Developmental Item (NDI) Commercial Off The Shelf (COTS) evaluation of combat feeding equipment to enhance Soldier efficiency and survivability, and to reduce food service logistics requirements for all four services. The project supports multi-fuel, rapidly deployable field food service equipment initiatives and engineering and manufacturing development to improve equipment, enhance safety in food service, and decrease fuel and water requirements. This project develops critical enablers that support the Joint Future Capabilities and Joint Expeditionary mindset, by maintaining readiness through fielding and integrating new equipment; by enhancing the field Soldier's well-being; and providing Soldier usable equipment. They 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. Accomplishments/Planned Programs (\$ in Millions)									FY 2014	FY 2015	FY 2016	
Title: Containerized Kitchen Modernization (CK)									0.380	0.312	-	
Description: New Containerized Kitchen layout with modular, closed combustion, thermostatically controlled appliances that reduce heat stress inside the kitchen												
FY 2014 Accomplishments: Mitigated the effects of CK generator obsolescence through the expedited integration of the Advanced Medium Mobile Power Source (AMMPS). Awarded contract for the design and integration of the AMMMPS into legacy CKs. Drafted modification work order to capture design baseline and find costs, level of effort to modify CK fleet with AMMPS												
FY 2015 Plans: Upgrade the Containerized Kitchen with improved layout, appliances, ventilation and power generation for improved energy efficiency and operator environment. Use completed initial design to integrate the Advanced Medium Mobile Power Source (AMMPS) into the CK. Perform testing to validate generator interface, interoperability and performance with the CK. Develop technical data to support required Engineering Change Proposal to current system.												
Title: Fielded Individual Ration Improvement Project (FIRIP)									0.150	0.430	0.299	
Description: Continuous product improvement project for the Meal Ready to Eat (MRE)												
FY 2014 Accomplishments:												

UNCLASSIFIED

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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 2014	FY 2015
Based on field test results, presented recommendations to Joint Services (2Q14) for continued product improvement of ration components/packaging/technologies for MRE (2016 DOP). Finalized MRE procurement documents and initiated transition to Defense Logistic Agency (DLA) Troop Support. Obtained Surgeon General approval of revised MRE menus. Executed production testing with industry to ensure consistent ration quality, understand PCR requirements, and resolved vendor/supplier issues. Obtained and assembled selected new items for field test. Conducted field evaluation of new candidate ration components for MRE (2017 DOP) to improve quality, acceptability, nutrition and expand variety.			
FY 2015 Plans: Based on field test results, present recommendations to Joint Services (2Q15) for continued product improvement of ration components/packaging/technologies for MRE (2017 DOP). Finalize MRE procurement documents and initiate transition to DLA-TS. Obtain Surgeon General approval of revised MRE menus. Execute production testing with industry to ensure consistent ration quality, understand Project Change Request (PCR) requirements, and resolve vendor/supplier issues. Obtain and assemble selected new items for field test. Conduct field evaluation of new candidate ration components for MRE (2018 DOP) to improve quality, acceptability, nutrition and expand variety.			
FY 2016 Plans: Based on Budget Activity 4 (BA4) Joint Service approvals, finalize MRE procurement documents and standards for verification for MRE (2018 DOP) and initiate transition to DLA-Troop Support. Obtain Surgeon General approval of revised MRE menus. Execute production testing with industry to ensure consistent ration quality, understand PCR requirements, resolve vendor/supplier issues, and conduct confirmatory sensory, chemical, physical and shelf life testing.			
Title: Assault/Special Purpose Ration Improvement Project (ASPIP) Description: Continuous product improvement of special purpose rations by the insertion of new technologies in nutrition, processing and packaging.		0.101	0.175
FY 2014 Accomplishments: Continued on-going shelf life studies of candidate Meal, Cold Weather/Long-Range Patrol and Modular Operational Ration Enhancement components and updated procurement documents for transition to Defense Logistics Agency Troop Support.			
FY 2015 Plans: Continue on-going shelf life studies of candidate Meal, Cold Weather/Long-Range Patrol and Modular Operational Ration Enhancement components and updated procurement documents for transition to Defense Logistics Agency Troop Support (DLA-TS).			
FY 2016 Plans:			
			0.080

UNCLASSIFIED

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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 2014	FY 2015	FY 2016
Plan field evaluation of new ration components for FSR. Present recommendations to Joint Services (2Q16) for continued product improvement of ration components/packaging/technologies for First Strike Ration (FSR). Obtain Surgeon General approval for the nutritional content of revised menus and components.				
Title: Fielded Group Ration Improvement Project (FGRIP) Description: Continuous product improvement project to continuously update/improve group ration components, menus, and packaging by integrating state-of-the-art military/commercial packaging and technology base transitions. FY 2014 Accomplishments: Based on Warfighter testing, presented results/recommendations to Joint Services for Unitized Group Ration Heat and Serve (UGR-H&S/E) (2015 DOP). Presented UGR-A results/recommendations to the UGR Integrated Product Team for FY15 menus. Updated/coordinated menus and obtained Surgeon General approval. Provided assistance to DLA Troop Support for Limited First Article production testing of newly approved UGR-H&S/E items. Finalized UGR procurements documents for transition to DLA - Troop Support. FY 2015 Plans: Complete field testing of UGR-H&S/E (2016/17 DOP) and UGR-A (FY17 menus) to improve quality, nutritional intake and expand variety. Finalize UGR procurement documents for transition to DLA-TS. FY 2016 Plans: Based on BA4 Joint Service approvals, finalize UGR (A, H&S, E) procurement documents and standards for verification and initiate transition to DLA-Troop Support. 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.		0.165	0.356	0.170
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. FY 2015 Plans:		-	0.072	-

UNCLASSIFIED

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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 2014	FY 2015
Extensive airdrop testing to determine UGR components, packaging and assembly configurations with the highest survival rates. Perform cost/benefit analysis of current vs. proposed reconfigurations. Transition updated technical data to DLA-Troop Support and Airdrop partners.			
Title: Navy Shipboard Galleys Description: Provide continuous Research and Development (R&D) for Navy Shipboard Galleys for state-of-the-art Galley designs and equipment technologies; support Naval Supply Systems Command (NAVSUP) foodservice equipment standardization plan; integrate automated technology such as, prognostics, diagnostics, and reliability tracking FY 2014 Accomplishments: Identified requirements and metrics for Galley refrigeration assets and procured commercial equipment. Conducted evaluations on commercial refrigeration capability under simulated Navy afloat operations against established requirements metrics. FY 2015 Plans: Conduct in-house test and evaluation of equipment prioritized by Navy; Instrument equipment for reliability evaluations and support for ship board evaluations; transition reports to NAVSUP/NAVSEA. Procure, test and evaluate a hydroponic system to grow fresh produce aboard ballistic submarines for increased quality of life and nutrition for submarine Sailors. FY 2016 Plans: Preliminary Design Review/Critical Design Review (PDR/CDR) reviews; Instrument equipment for Condition-Based Maintenance; Conduct T&E of modified COTS equipment in accordance with NAVSEA test criteria; Complete at-sea user evaluations and technical data package for transition to Navy;		0.183	0.310
Title: Integrated Thermal Control into Modern Burner Unit (MBU) Description: Imbed a thermostatic control within the MBU to allow the kitchen appliance temperature to be regulated at a set temperature by cycling the MBU on and off automatically. FY 2014 Accomplishments: Conducted Operational Testing (OT) on prototype. Based on a successful evaluation and concurrence from the customer, CASCOM, a new National Stock Number (NSN) for the integrated MBU was assigned for procurement through DLA Troop Support.		0.240	-
Title: Armed Forces Recipe Service		-	0.600

UNCLASSIFIED

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015
Description: Demonstrate and validate standardized recipes to be utilized by the Services in food service and operational settings. Develop and deliver specifications to the Armed Forces Recipe Committee for approval. Specifications will populate the Armed Forces Management Information System (AFMIS), a system utilized by all DoD Components. FY 2015 Plans: Complete transition to new recipe development/nutritional analysis software. Conduct nutritional analysis of deliverables. The output of this project facilitates implementation of nutritional initiatives such as Go for Green and Healthy Base Initiative.			
Title: Joint Services Refrigerated Container System Description: To develop and field a highly expandable, highly efficient TriCon refrigerated container system that utilizes adaptable advanced technologies (i.e. smart power metering, novel insulation, polychromatic coatings, composites, and alternate energy sources) to enable the safe/proper storage of perishable group rations in forward deployed areas. FY 2014 Accomplishments: Conducted Developmental Testing at Aberdeen Proving Grounds (APG). Conducted User Evaluations with all Services.		0.151	-
Title: Basic Expeditionary Airfield Resources (BEAR) Kitchen System Enhancements (BEAR-KSE) Description: The BEAR-KSE will evaluate multifunction appliances, reduce pallet positions, and develop TriCon and BiCon packing plans to meet the Air Forces transportability requirements of 30% by air and 70% by land, sea, and rail. FY 2014 Accomplishments: Completed in-house evaluation of the food service equipment, which met Air Force requirements for a lighter, leaner, more rapidly deployable system. Developed 3-D models and conduct pack-out assessments to support transportability requirements of 30% by air and 70% by land, sea, and rail. Transitioned data to PM-BEAR		0.294	-
Title: Autonomous Shipboard Cleaning System Description: Provides an automated dishwashing system that alleviates the manual labor involved in dishwashing and reduces manning requirements for future Navy platforms. FY 2014 Accomplishments: Finalized development of prototype developed under Phase II under the Phase III development effort. Documented results of FY14 land-based testing at Natick Soldier Research Development and Engineering Center (NSRDEC). Identified if need for		0.210	-

UNCLASSIFIED

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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 2014	FY 2015
additional testing exists. Performed enhanced simulation testing and demonstrations of the upgraded prototypes at Naval Surface Warfare Center's test facilities.			
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 appliance upgrades. To reduce the overall fuel consumption of Expeditionary Field Feeding Equipment by minimizing the production of and making use of the waste heat produced through JP-8 combustion. FY 2015 Plans: Conduct root cause failure analysis on Modernized Tray Ration Heater (MTRHS) prototype. Conduct operational test and evaluation on field feeding equipment. Complete approved Engineering Changes to upgrade the capability of the Expeditionary Field Kitchen.		-	0.320
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 Energy Star certified FSE items that use less power; and investigate/develop appliances that use less water, increase competition on standardized designs FY 2015 Plans: Provide continuous R&D efforts for all Expeditionary Air Force squadrons. Increase reliability, efficiency and sustainability. Provide operational test and evaluation support to the BEAR community to develop or edit equipment purchase descriptions, participate in source selection evaluations, provide technical documents to support the contract award process and participate in the design reviews. FY 2016 Plans: Complete preliminary design review (PDR); Initiate BEAR Kitchen Final Design Review; Conduct user Test & Evaluation of proposed equipment; Draft technical test reports and provide to Air Force for review.		-	0.240
Title: Joint Inter-service Field Feeding Burner		-	0.169

UNCLASSIFIED

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B. Accomplishments/Planned Programs (\$ in Millions)									FY 2014	FY 2015	FY 2016
Description: Develop, demonstrate and validate a Joint-Service, government owned JP-8 burner for field kitchen appliances. Government will control configuration, procurement, and support decisions. Establishment of a Commercial Off The Shelf (COTS) parts list using widely supportable supply chain in field operations.											
FY 2015 Plans: Build beta units; prepare Tech Data Package; test units in a high fidelity, realistic operating environment and conduct Integrated Logistic Support (ILS) validation. Transitional information appropriately.											
Title: Navy Food Storage Analysis Tool									-	0.050	0.285
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; Will develop automated subsistence inventory management, tracking and storeroom locations for all storage areas with mobile scanning technology capability;											
FY 2015 Plans: Expand NFSAT capabilities to include Landing Platform Docking (LPD) amphibious warfare ship class and the Littoral Combat Ship (LCS) class.											
FY 2016 Plans: Complete Alpha version of Navy subsistence inventory management software; and Conduct test and evaluation of Alpha version of the software											
Accomplishments/Planned Programs Subtotals									1.874	3.034	1.430
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• RDT&E 643747.610: Food Adv Dev 643747.610	5.013	3.480	0.021	-	0.021	5.598	6.803	5.043	4.713	Continuing	Continuing
• RDT&E 643747.EL1: Army Field Feeding Programs	-	-	0.280	-	0.280	1.974	0.452	-	0.509	Continuing	Continuing
• RDT&E 654713.EL2: Army Field Feeding Equipment	-	-	0.333	-	0.333	1.505	2.058	1.778	1.138	Continuing	Continuing

UNCLASSIFIED

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C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2016</u>	<u>FY 2016</u>	<u>FY 2016</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Complete</u>	<u>Total Cost</u>
• OPA M65806: Assault Kitchen, Field Feeding M65806	0.423	4.889	3.632	-	3.632	5.167	4.660	4.165	4.605	Continuing	Continuing
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 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 2016 Army												Date: February 2015			
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 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
CFP Management	C/FP	RDECOM : Natick, MA	2.197	0.233	Apr 2014	0.164		0.233		-		0.233	-	2.827	Continuing
SBIR+STTR	TBD	Various : Various	0.064	-		-		-		-		-	-	0.064	-
Subtotal			2.261	0.233		0.164		0.233		-		0.233	-	2.891	-
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
Various combat feeding equipment, multi fuel and water equipment	C/FP	RDECOM : Natick, MA	5.376	0.809	Mar 2014	1.469		0.549		-		0.549	-	8.203	Continuing
DOD Field Feeding Equipment	C/FP	Various : Various	3.337	0.278	Apr 2014	0.920		0.648		-		0.648	-	5.183	Continuing
Army Field Feeding Equipment Development	C/FP	PM Force Sustainment Systems (FSS) : Natick, MA	2.266	0.211	Mar 2014	0.241		-		-		-	-	2.718	Continuing
Subtotal			10.979	1.298		2.630		1.197		-		1.197	-	16.104	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
Various	Various	TECOM/OEC/ATC : Warren, MI	3.709	0.343	May 2014	0.240		-		-		-	-	4.292	Continuing
Subtotal			3.709	0.343		0.240		-		-		-	-	4.292	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			16.949	1.874		3.034		1.430		-		1.430	-	23.287	-

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army							Date: February 2015			
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>				
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks										

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army **Date:** February 2015

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 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
Transition advanced USMC equipment and systems to USMC for procure																												
Transition advanced USN equipment and systems to USN for procureme																												
Obtain SGA onduct production test of individual ration components/pack																												
Transition individual rations/ration components documents to DLA /servi																												
Conduct operational test of Unitized Group Ration components/packagin																												
Transition Unitized Group Ration component/packaging documents to D																												
Conduct Group Ration Airdrop Survivability Effort																												
Conduct Group Ration Airdrop Survivability Efforts																												
Complete transition to new recipe development/nutritional analysis softw																												
Transition subset of completed AFRS recipes to Joint Services																												
(1) Transition CK P3I to RESET																												
(2) Transition Temp Controllers for Field Kitchen Appliances to Procurem																												
Conduct Navy Future Galley Modular and Seabasing Effort																												

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army **Date:** February 2015

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 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
(1) Transition Multi-Functional Secondary Packing to DLA-TS	▲																											
Conduct DT/OT on Ice Maker Prototype																												
(2) Complete all TDP Changes for BEAR Kitchen Enhancements				▲																								
Initiate modular appliance design upgrades based on customer test																												
(3) Initiate PQT Prototypes for advanced modular appliances								▲																				
(4) Transition Autonomous Shipboard Cleaning System to Navy												▲																
Conduct root cause analysis on MTRHS																												
Procure, test & evaluate a hydroponic system to grow fresh produce aboard ship																												
Testing to validate AMMPS generator interface and performance with CK																												
Develop Tech Data in support of CK ECP																												
Validate JIFF burner performance in platforms to complete TDP																												
Conduct OT&E for Navy Food Storage Analysis Tool																												
Expand NFSAT capabilities to include LPD amphibious warfare ship class																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army			Date: February 2015
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
Transition advanced USMC equipment and systems to USMC for procurement.	1	2013	4	2021
Transition advanced USN equipment and systems to USN for procurement.	1	2014	4	2021
Obtain SGA onduct production test of individual ration components/packaging	1	2009	4	2021
Transition individual rations/ration components documents to DLA /services	1	2009	4	2021
Conduct operational test of Unitized Group Ration components/packaging	1	2009	4	2021
Transition Unitized Group Ration component/packaging documents to DLA-TS	1	2009	4	2021
Conduct Group Ration Airdrop Survivability Effort	2	2015	4	2015
Conduct Group Ration Airdrop Survivability Efforts	1	2017	4	2017
Complete transition to new recipe development/nutritional analysis software	2	2015	4	2015
Transition subset of completed AFRS recipes to Joint Services	1	2015	4	2015
Transition CK P3I to RESET	4	2015	4	2015
Transition Temp Controllers for Field Kitchen Appliances to Procurement	4	2014	4	2014
Conduct Navy Future Galley Modular and Seabasing Effort	1	2014	4	2015
Transition Multi-Functional Secondary Packing to DLA-TS	1	2014	1	2014
Conduct DT/OT on Ice Maker Prototype	2	2014	4	2014
Complete all TDP Changes for BEAR Kitchen Enhancements	4	2014	4	2014
Initiate modular appliance design upgrades based on customer test	2	2014	3	2014
Initiate PQT Prototypes for advanced modular appliances	2	2015	2	2015
Transition Autonomous Shipboard Cleaning System to Navy	4	2015	4	2015
Conduct root cause analysis on MTRHS	2	2015	4	2015
Procure, test & evaluate a hydroponic system to grow fresh produce aboard ballis	3	2015	4	2015
Testing to validate AMMPS generator interface and performance with CK ECP	1	2015	2	2015

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army			Date: February 2015		
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	
		Start		End	
Events		Quarter	Year	Quarter	Year
Develop Tech Data in support of CK ECP		3	2014	4	2015
Validate JIFF burner performance in platforms to complete TDP		3	2014	4	2014
Conduct OT&E for Navy Food Storage Analysis Tool		1	2016	4	2016
Expand NFSAT capabilities to include LPD amphibious warfare ship class and LCS		2	2015	4	2015

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army										Date: February 2015		
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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
EL2: Army Field Feeding Equipment	-	-	-	0.333	-	0.333	1.505	2.058	1.778	1.138	-	6.812
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project supports the development and demonstration and Non-Developmental Item (NDI) Commercial Off The Shelf (COTS) evaluation of combat feeding equipment to enhance soldier efficiency and survivability, and to reduce food service logistics requirements for the Army. The project supports multi-fuel, rapidly deployable field food service equipment initiatives and engineering and manufacturing development to improve equipment, enhance safety in food service, and decrease fuel and water requirements. This project develops critical enablers that support the Army's Strategic Planning Guidance by developing and integrating critical expeditionary capabilities that maintain readiness; provide effective solutions that reduce the resource and operational energy footprint; provide modernized equipment; and enhance the field Soldier's well being. This project also 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 2014	FY 2015	FY 2016
Title: Ice Making System	-	-	0.333
Description: Develops an add-on ice making capability that automatically dispenses and seals 10 lbs bags at a rate of a minimum of 3,600 pounds of ice per day. This capability is based upon Army current operational requirements for ice which is four pounds per Soldier per day. This capability enables support for up to 900 personnel. Current operations require external support to provide personnel with ice for cooling drinking water in extremely arid environments. This capability will reduce the sustainment risk and cost associated with transporting this commodity from external sources. The objective requirement enables stockage of ice to assist with surge operations.			
FY 2016 Plans: Award contract for development of prototype Containerized Ice Making Systems and complete Developmental Testing.			
Accomplishments/Planned Programs Subtotals	-	-	0.333

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army										Date: February 2015	
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>			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• RDT&E 654713.548: <i>Military Subsistence System</i>	1.874	3.034	1.430	-	1.430	0.961	0.550	0.652	1.319	Continuing	Continuing
• RDT&E 643747.610: <i>Food Adv Dev</i>	5.013	3.480	0.021	-	0.021	5.598	6.803	5.043	4.713	Continuing	Continuing
• RDT&E 643747.EL1: <i>Army Field Feeding Programs</i>	-	-	0.280	-	0.280	1.974	0.452	-	0.509	Continuing	Continuing
• OPA M65806: <i>Assault Kitchen, Field Feeding</i>	0.423	4.889	3.632	-	3.632	5.167	4.660	4.165	4.605	Continuing	Continuing
Remarks											
D. Acquisition Strategy											
Complete System Development and Demonstration 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 2016 Army													Date: February 2015		
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 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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	PM Force Sustainment Systems : Natick, MA	0.000	-		-		0.015		-		0.015	-	0.015	-
Subtotal			0.000	-		-		0.015		-		0.015	-	0.015	-
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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	RDECOM : Natick, MA	0.000	-		-		0.113	Oct 2015	-		0.113	-	0.113	-
Subtotal			0.000	-		-		0.113		-		0.113	-	0.113	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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	0.000	-		-		0.205	Oct 2015	-		0.205	-	0.205	-
Subtotal			0.000	-		-		0.205		-		0.205	-	0.205	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	-		-		0.333		-		0.333	-	0.333	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army																Date: February 2015												
Appropriation/Budget Activity								R-1 Program Element (Number/Name)								Project (Number/Name)												
2040 / 5								PE 0604713A / Combat Feeding, Clothing, and Equipment								EL2 / Army Field Feeding Equipment												
Event Name	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
Complete prototype Containerized Ice Making Systems (CIMS)																												
Conduct Developmental Testing (DT) on the Containerized Ice Making Systems																												
Conduct Operational Testing on the Containerized Ice Making Systems																												
(1) Complete Milestone C and transition CIMS into production																												
Design and build Battlefield Kitchen prototypes																												
Conduct DT on the Battlefield Kitchen																												
Conduct Limited User Testing on the Battlefield Kitchen																												
(2) Complete Milestone C and transition Battlefield Kitchen into production																												
Design and build prototype DESERT Systems																												
Conduct Developmental Testing (DT) on the DESERT Systems																												
Conduct Limited User Testing on the DESERT Systems																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army			Date: February 2015
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
Complete prototype Containerized Ice Making Systems (CIMS)	1	2016	2	2016
Conduct Developmental Testing (DT) on the Containerized Ice Making Systems	3	2016	4	2016
Conduct Operational Testing on the Containerized Ice Making Systems	1	2017	2	2017
Complete Milestone C and transition CIMS into production	4	2017	4	2017
Design and build Battlefield Kitchen prototypes	1	2017	1	2018
Conduct DT on the Battlefield Kitchen	2	2018	4	2018
Conduct Limited User Testing on the Battlefield Kitchen	4	2018	1	2020
Complete Milestone C and transition Battlefield Kitchen into production	2	2019	2	2019
Design and build prototype DESERT Systems	1	2019	4	2019
Conduct Developmental Testing (DT) on the DESERT Systems	1	2020	2	2020
Conduct Limited User Testing on the DESERT Systems	3	2020	4	2020