Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army

R-1 Program Element (Number/Name)

Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 5: System

PE 0604713A I Combat Feeding, Clothing, and Equipment

Date: February 2015

Development & Demonstration (SDD)

,	•											
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	-	_			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
Congressional Adds	-	1.699			
Congressional Directed Transfers	-	_			
Reprogrammings	-	_			
SBIR/STTR Transfer	_	_			
Adjustments to Budget Years	-	-	-0.476	-	-0.476

UNCLASSIFIED Page 1 of 20

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army  Date: February 2015												
Appropriation/Budget Activity 2040 / 5						am Elemen 13A / Comb ment	•	•	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

B Accomplishments/Planned Programs (\$ in Millions)

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	-
<b>Description:</b> 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

EV 2044

EV 2045

EV 2046

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: F	ebruary 2015	5	
Appropriation/Budget Activity 2040 / 5		pject (Number/Name) 3 I Mil Subsistence Sys			
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016	
Based on field test results, presented recommendations to Joint components/packaging/technologies for MRE (2016 DOP). Fina Defense Logistic Agency (DLA) Troop Support. Obtained Surger testing with industry to ensure consistent ration quality, understa Obtained and assembled selected new items for field test. Cond MRE (2017 DOP) to improve quality, acceptability, nutrition and	lized MRE procurement documents and initiated transition to on General approval of revised MRE menus. Executed produ and PCR requirements, and resolved vendor/supplier issues. ucted field evaluation of new candidate ration components for	uction			
FY 2015 Plans: Based on field test results, present recommendations to Joint Secomponents/packaging/technologies for MRE (2017 DOP). Fina TS. Obtain Surgeon General approval of revised MRE menus. Equality, understand Project Change Request (PCR) requirement selected new items for field test. Conduct field evaluation of new quality, acceptability, nutrition and expand variety.	lize MRE procurement documents and initiate transition to D execute production testing with industry to ensure consistent s, and resolve vendor/supplier issues. Obtain and assemble	ration			
FY 2016 Plans: Based on Budget Activity 4 (BA4) Joint Service approvals, finaliz MRE (2018 DOP) and initiate transition to DLA-Troop Support. Oproduction testing with industry to ensure consistent ration qualit and conduct confirmatory sensory, chemical, physical and shelf	Obtain Surgeon General approval of revised MRE menus. Exty, understand PCR requirements, resolve vendor/supplier is	ecute			
Title: Assault/Special Purpose Ration Improvement Project (ASI	PIP)	0.101	0.175	0.08	
<b>Description:</b> Continuous product improvement of special purposprocessing and packaging.	se rations by the insertion of new technologies in nutrition,				
FY 2014 Accomplishments: Continued on-going shelf life studies of candidate Meal, Cold We Enhancement components and updated procurement document	· ·				
<b>FY 2015 Plans:</b> Continue on-going shelf life studies of candidate Meal, Cold Westenhancement components and updated procurement document TS).		DLA-			
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PE 0604713A: Combat Feeding, Clothing, and Equipment Army Page 3 of 20 R-1 Line #90

	UNCLASSIFIED					
Exhibit R-2A, RDT&E Project Justification: PB 2016 Army			Date: F	ebruary 2015		
Appropriation/Budget Activity 2040 / 5		roject (Number/Name) 48 / 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 recomponents of ration components/packaging/technologies for First Snutritional content of revised menus and components.						
Title: Fielded Group Ration Improvement Project (FGRIP)			0.165	0.356	0.17	
<b>Description:</b> Continuous product improvement project to continuous packaging by integrating state-of-the-art military/commercial packaging		d				
FY 2014 Accomplishments:  Based on Warfighter testing, presented results/recommendations to a (UGR-H&S/E) (2015 DOP). Presented UGR-A results/recommendation Updated/coordinated menus and obtained Surgeon General approva Article production testing of newly approved UGR-H&S/E items. Final Troop Support.	ons to the UGR Integrated Product Team for FY15 mer	nus. d First				
FY 2015 Plans: Complete field testing of UGR-H&S/E (2016/17 DOP) and UGR-A (FV variety. Finalize UGR procurement documents for transition to DLA-T		pand				
FY 2016 Plans: Based on BA4 Joint Service approvals, finalize UGR (A, H&S, E) procinitiate transition to DLA-Troop Support. Obtain Surgeon General application of First Article production testing of new H&S and E items with in requirements, resolve vendor/supplier issues, and conduct confirmators.	roval of revised UGR menus. Support DLA-Troop Support of revised UGR menus. Support DLA-Troop Support of revised I	ort				
Title: Group Ration Airdrop Survivability Project (GRASP)			-	0.072	-	
<b>Description:</b> Quantify baseline airdrop performance characteristics for configurations/designs; identify survival rates (based on caloric loss a conditions; provide knowledge base and supporting data to generate gaps that might warrant product/package/assembly configuration redefined.	and packaging damage/loss) under defined operational executable load configuration changes; identify capabil	ity				
FY 2015 Plans:						

	UNCLASSIFIED						
Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: F	ebruary 2015				
Appropriation/Budget Activity 2040 / 5							
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016			
Extensive airdrop testing to determine UGR components, package Perform cost/benefit analysis of current vs. proposed reconfiguration and Airdrop partners.							
Title: Navy Shipboard Galleys		0.183	0.310	0.29			
<b>Description:</b> Provide continuous Research and Development (ReGalley designs and equipment technologies; support Naval Supp standardization plan; integrate automated technology such as, pr	ly Systems Command (NAVSUP) foodservice equipment						
FY 2014 Accomplishments: Identified requirements and metrics for Galley refrigeration assets commercial refrigeration capability under simulated Navy afloat o		ns on					
FY 2015 Plans: Conduct in-house test and evaluation of equipment prioritized by support for ship board evaluations; transition reports to NAVSUP/grow fresh produce aboard ballistic submarines for increased quality.	NAVSEA. Procure, test and evaluate a hydroponic system t	o					
FY 2016 Plans: Preliminary Design Review/Critical Design Review (PDR/CDR) re Conduct T&E of modified COTS equipment in accordance with Natechnical data package for transition to Navy;		nce;					
Title: Integrated Thermal Control into Modern Burner Unit (MBU)		0.240	-	-			
<b>Description:</b> Imbed a thermostatic control within the MBU to allot temperature by cycling the MBU on and off automatically.	w the kitchen appliance temperature to be regulated at a se	t					
FY 2014 Accomplishments: Conducted Operational Testing (OT) on prototype. Based on a su CASCOM, a new National Stock Number (NSN) for the integrated Support.							
Title: Armed Forces Recipe Service		-	0.600	-			

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date:	February 201	5		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604713A I Combat Feeding, Clothing, and Equipment	Project (Number/Name) 548 I Mil Subsistence Sys				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016		
<b>Description:</b> Demonstrate and validate standardized recipes to b settings. Develop and deliver specifications to the Armed Forces Armed Forces Management Information System (AFMIS), a system.	Recipe Committee for approval. Specifications will populat	te the				
FY 2015 Plans: Complete transition to new recipe development/nutritional analysis output of this project facilitates implementation of nutritional initiation		•				
Title: Joint Services Refrigerated Container System		0.15	1 -			
<b>Description:</b> To develop and field a highly expandable, highly effiadvanced technologies (i.e. smart power metering, novel insulation sources) to enable the safe/proper storage of perishable group rate.	n, polychromatic coatings, composites, and alternate energ					
FY 2014 Accomplishments: Conducted Developmental Testing at Aberdeen Proving Grounds	(APG). Conducted User Evaluations with all Services.					
Title: Basic Expeditionary Airfield Resources (BEAR) Kitchen Sys	tem Enhancements (BEAR-KSE)	0.29	4 -			
<b>Description:</b> The BEAR-KSE will evaluate multifunction appliance packing plans to meet the Air Forces transportability requirements						
FY 2014 Accomplishments: Completed in-house evaluation of the food service equipment, wh deployable system. Developed 3-D models and conduct pack-out air and 70% by land, sea, and rail. Transitioned data to PM-BEAR	assessments to support transportability requirements of 30					
Title: Autonomous Shipboard Cleaning System		0.21	0 -			
<b>Description:</b> Provides an automated dishwashing system that all manning requirements for future Navy platforms.	eviates the manual labor involved in dishwashing and reduc	ces				
FY 2014 Accomplishments: Finalized development of prototype developed under Phase II und	ler the Phase III development effort. Documented results of t and Engineering Center (NSRDEC). Identified if need for	f				

UNCLASSIFIED Page 6 of 20

PE 0604713A: Combat Feeding, Clothing, and Equipment Army

R-1 Line #90

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		1	Date: F	ebruary 2015	
Appropriation/Budget Activity 2040 / 5		Project (Number/Name) 548 / Mil Subsistence Sys			
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2014	FY 2015	FY 2016
additional testing exists. Performed enhanced simulation testing ar Warfare Center's test facilities.	nd demonstrations of the upgraded prototypes at Naval Su	rface			
Title: Block Upgrades and Operational Improvements for Expedition	onary Field Feeding Equipment		-	0.320	
<b>Description:</b> Eliminate the sole sourcing of tray ration heater compuse of non-immersive cooking technologies and more efficient ward appliance upgrades. To reduce the overall fuel consumption of Exproduction of and making use of the waste heat produced through	e-washing equipment. Increase Kitchen flexibility through peditionary Field Feeding Equipment by minimizing the	he			
FY 2015 Plans: Conduct root cause failure analysis on Modernized Tray Ration He evaluation on field feeding equipment. Complete approved Enginee Field Kitchen.		ary			
Title: Support to Air Force Field Feeding Modernization Efforts			-	0.240	0.3
<b>Description:</b> Provide continuous R&D efforts for all Expeditionary foodservice equipment to reduce labor, maintenance, pack-out volude Develop comprehensive specifications and technical data package and evaluate newer commercial FSE items for expeditionary use a cycle cost of each system; test Energy Star certified FSE items that less water, increase competition on standardized designs	ume and cost. Increase reliability, efficiency and sustainables for recommended Food Service Equipment (FSE) items and smaller transportation footprint; develop total overall life	; test			
FY 2015 Plans: Provide continuous R&D efforts for all Expeditionary Air Force squa operational test and evaluation support to the BEAR community to in source selection evaluations, provide technical documents to support reviews.	develop or edit equipment purchase descriptions, participa	ate			
FY 2016 Plans: Complete preliminary design review (PDR); Initiate BEAR Kitchen I proposed equipment; Draft technical test reports and provide to Air					
Title: Joint Inter-service Field Feeding Burner			_	0.169	

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PE 0604713A: Combat Feeding, Clothing, and Equipment

Exhibit R-2A, RDT&E Project Jus												
	tification: PB	2016 Army				,			Date: Fe	ebruary 2015		
Appropriation/Budget Activity 2040 / 5				PE 06	ogram Eler 04713A / Co quipment		e <b>r/Name)</b> ng, Clothing,		Project (Number/Name) 548 / Mil Subsistence Sys			
B. Accomplishments/Planned Pro	ograms (\$ in N	<u>(lillions)</u>							FY 2014	FY 2015	FY 2016	
<b>Description:</b> Develop, demonstrate Government will control configuration parts list using widely supportable s	on, procureme	nt, and supp	ort decisions									
FY 2015 Plans: Build beta units; prepare Tech Data Logistic Support (ILS) validation. Tr				ealistic opera	ating enviror	nment and co	onduct Integr	ated				
Title: Navy Food Storage Analysis	Tool								-	0.050	0.28	
requirements for naval vessels bas Manual 096, Weights and Stability, 672, and Type Commander establis and storeroom locations for all store	Naval Vessel shed endurance	Requiremen e levels; Wil	ts Food Serv I develop au	vice Facility l tomated sub	Design Manu sistence inv	ual, Build Sp	ecifications 6	671,				
FY 2015 Plans: Expand NFSAT capabilities to inclu Ship (LCS) class.	ide Landing Pla		-			ass and the	Littoral Com	bat				
Expand NFSAT capabilities to inclu	·	atform Docki	ng (LPD) an	nphibious wa	arfare ship c							
Expand NFSAT capabilities to inclu Ship (LCS) class. FY 2016 Plans: Complete Alpha version of Navy su	·	atform Docki	ng (LPD) an	nphibious wa	arfare ship cl	nd evaluatio		ersion	1.874	3.034	1.43	
Expand NFSAT capabilities to inclu Ship (LCS) class. FY 2016 Plans: Complete Alpha version of Navy su	ibsistence inve	atform Docki ntory manaç	ing (LPD) an	nphibious wavare; and Co	arfare ship cl anduct test a	nd evaluatio	n of Alpha ve	ersion	1.874			
Expand NFSAT capabilities to incluShip (LCS) class.  FY 2016 Plans: Complete Alpha version of Navy sure of the software  C. Other Program Funding Summ	bsistence inve	atform Docki ntory manag ons)	ng (LPD) angement softw	nphibious wavare; and Con	arfare ship conduct test an entite of the entitle of the	nd evaluatio s/Planned P	n of Alpha ve	ersion btotals		Cost To		
Expand NFSAT capabilities to incluShip (LCS) class.  FY 2016 Plans: Complete Alpha version of Navy su of the software  C. Other Program Funding Summ  Line Item  RDT&E 643747.610:	ibsistence inve	atform Docki ntory manaç	ing (LPD) an	nphibious wavare; and Co	arfare ship cl anduct test a	nd evaluatio	n of Alpha ve	ersion	9 FY 2020		Total Cos	
Expand NFSAT capabilities to incluShip (LCS) class.  FY 2016 Plans: Complete Alpha version of Navy su of the software  C. Other Program Funding Summ	nbsistence inventage in the interest in the in	ntory managons)	ng (LPD) angement softweet sof	nphibious wavare; and Con	arfare ship conduct test an entire ship conduct test and entire ship condu	nd evaluatio s/Planned P FY 2017	n of Alpha ve rograms Su FY 2018	ersion btotals FY 201	9 FY 2020 3 4.713	Cost To Complete	Total Cos Continuin	

UNCLASSIFIED

Page 8 of 20

Army

PE 0604713A: Combat Feeding, Clothing, and Equipment

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 5	, ,	- , (	umber/Name) subsistence Sys

## C. Other Program Funding Summary (\$ in Millions)

			FY 2016	FY 2016	FY 2016					Cost To	
<u>Line Item</u>	FY 2014	FY 2015	<b>Base</b>	OCO	<b>Total</b>	FY 2017	FY 2018	FY 2019	FY 2020	Complete	<b>Total Cost</b>
<ul> <li>OPA M65806: Assault</li> </ul>	0.423	4.889	3.632	-	3.632	5.167	4.660	4.165	4.605	Continuing	Continuing
Kitchen, Field Feeding M65806										_	

## 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

					<u> </u>	ICLASC	) ILD								
Exhibit R-3, RDT&E I	Project C	ost Analysis: PB 2	2016 Army	/								Date:	February	2015	
Appropriation/Budge 2040 / 5		PE 060			umber/N eeding, C			t <b>(Numbe</b> lil Subsiste							
Management Service	es (\$ in M	lillions)		FY 2	2014	FY 2	2015		2016 se		2016 CO	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 Contrac
CFP Management	C/FP	RDECOM : Natick, MA	2.197	0.233	Apr 2014	0.164		0.233		-		0.233	-	2.827	Continuir
SBIR+STTR	TBD	Various : Various	0.064	-		-		-		-		-	-	0.064	-
		Subtotal	2.261	0.233		0.164		0.233		-		0.233	-	2.891	-
Product Developmen	nt (\$ in M	illions)		FY 2	2014	FY 2	2015	FY 2 Ba	2016 se		2016 CO	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	Continuin
DOD Field Feeding Equipment	C/FP	Various : Various	3.337	0.278	Apr 2014	0.920		0.648		-		0.648	-	5.183	Continuin
Army Field Feeding Equipment Development	C/FP	PM Force Sustainment Systems (FSS) : Natick, MA	2.266	0.211	Mar 2014	0.241		-		-		-	-	2.718	Continuin
		Subtotal	10.979	1.298		2.630		1.197		-		1.197	-	16.104	-
Test and Evaluation	(\$ in Milli	ons)		FY 2	2014	FY 2	2015	FY 2	2016 se		2016 CO	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	Total Cost	Target Value of Contract
Various	Various	TECOM/OEC/ATC : Warren, MI	3.709	0.343	May 2014	0.240		-		-		-	-	4.292	Continuin
		Subtotal	3.709	0.343		0.240		-		-		-	-	4.292	-
			Prior Years	FY :	2014	FY 2	2015	FY 2 Ba	2016 se		2016 CO	FY 2016 Total	Cost To	Total Cost	Target Value of Contract
	_	Project Cost Totals	16.949	1.874		3.034		1.430		-		1.430		23.287	-

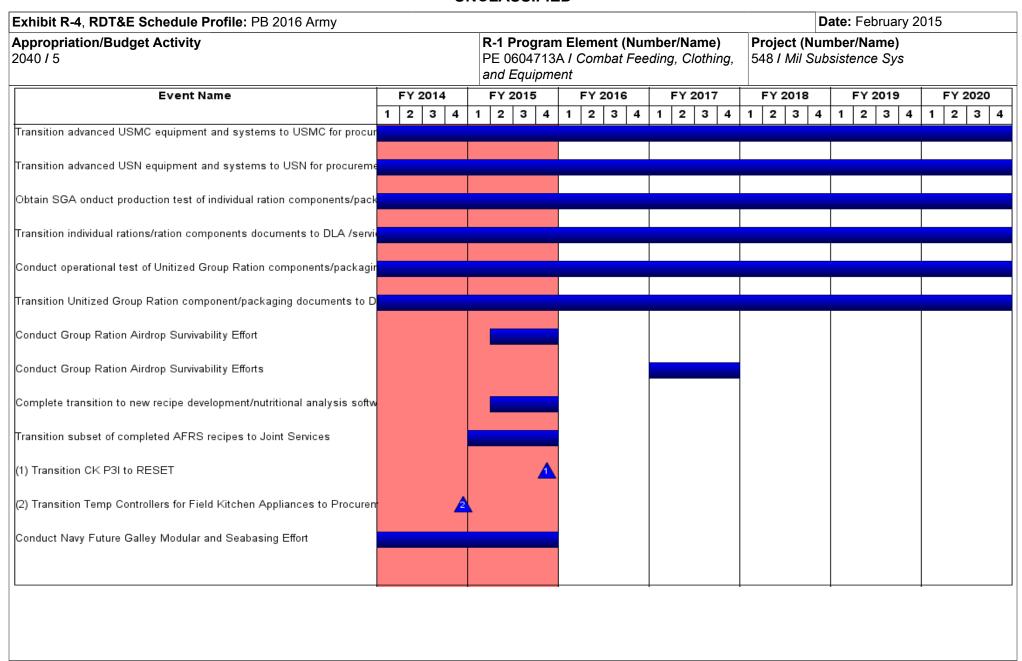
PE 0604713A: Combat Feeding, Clothing, and Equipment Army

UNCLASSIFIED
Page 10 of 20

R-1 Line #90

Exhibit R-3, RDT&E Project Cost Analys	is: PB 2016 Army					Date	: February	2015	
Appropriation/Budget Activity 2040 / 5			R-1 Program El PE 0604713A / and Equipment	lement (Number/N Combat Feeding, C	Project (Number 548 / Mil Subsis				
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2	2016 FY 2016 CO Total	Cost To Complete	Total Cost	Target Value o Contrac
<u>Remarks</u>									

PE 0604713A: Combat Feeding, Clothing, and Equipment Army



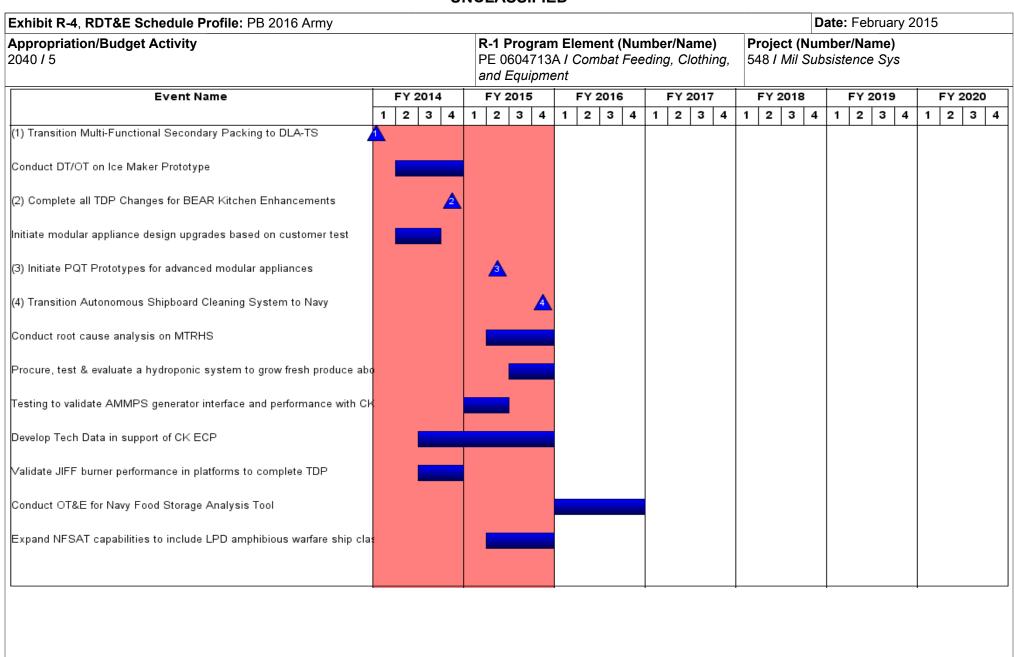


Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
2040 / 5	PE 0604713A I Combat Feeding, Clothing,	548 / Mil S	ubsistence Sys
	and Equipment		

# Schedule Details

	Sta	art	End					
Events	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				
nitiate modular appliance design upgrades based on customer test	2	2014	3	2014				
nitiate PQT Prototypes for advanced modular appliances	2	2015	2	2015				
Fransition 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				

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army			Date: February 2015
1	, ,	• •	umber/Name)
	PE 0604713A I Combat Feeding, Clothing, and Equipment	548 / MIII S	ubsistence Sys

	St	art	E	nd
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

Exhibit R-2A, RDT&E Project Ju	stification	: PB 2016 <i>P</i>	Army							Date: Feb	ruary 2015	
Appropriation/Budget Activity 2040 / 5		_	am Elemen 13A / Comb ment	•	umber/Name) / 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.

Accomplishments/Diamed Drawans (f. in Millians)

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.	B. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016
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.	Title: Ice Making System	-	-	0.333
	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.			
Accomplishments/Planned Programs Subtotals 0.333	Award contract for development of prototype Containerized Ice Making Systems and complete Developmental Testing.			
	Accomplishments/Planned Programs Subtotals	-	-	0.333

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		,					Date: February 2015
Appropriation/Budget Activity 2040 / 5		PE 06	•	ment (Number/ ombat Feeding,	•	, ,	lumber/Name) y Field Feeding Equipment
C. Other Program Funding Summary (\$ in Millions)	FY 2016	FY 2016	FY 2016				Cost To

#### Line Item FY 2014 FY 2015 oco FY 2017 FY 2018 FY 2019 FY 2020 Complete Total Cost Base Total 1.319 Continuing Continuing RDT&E 654713.548: 1.874 3.034 1.430 1.430 0.961 0.550 0.652 Military Subsistence System • RDT&E 643747.610: 5.013 3.480 0.021 0.021 5.598 6.803 5.043 4.713 Continuing Continuing Food Adv Dev • RDT&E 643747.EL1: *Army* 0.280 0.280 1.974 0.452 0.509 Continuing Continuing Field Feeding Programs • OPA M65806: Assault 0.423 4.889 3.632 3.632 5.167 4.660 4.165 4.605 Continuing Continuing Kitchen, Field Feeding

#### 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

R-1 Line #90

Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	016 Army	/								Date:	February	2015	
Appropriation/Budg 2040 / 5	et Activity	1		R-1 Program Element (Number/Name) PE 0604713A I Combat Feeding, Clothing, and Equipment  Project (Number/Name) EL2 I Army Field Feeding										nt	
Management Service	es (\$ in M	lillions)		FY	2014	FY	2015		2016 ise		2016 CO	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 Contrac
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 Developme	ent (\$ in M	illions)		FY	2014	FY	2015		2016 ise		2016 CO	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	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 Milli	ons)		FY:	2014	FY	2015		2016 ise		2016 CO	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	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	Ва	2016 ise		2016 CO	FY 2016 Total	Cost To	Total Cost	Target Value of Contrac
		Project Cost Totals	0.000	-		-		0.333		-		0.333	-	0.333	-

Remarks

																			Da	ite:	Feb	rua	ry 2	015			
Appropriation/Budget Activity 2040 / 5  Event Name FY 201						R-1 Program Element (Number/Name) PE 0604713A I Combat Feeding, Clothing, and Equipment											Project (Number/Name) EL2 I Army Field Feeding Equipment										
FY 2014											FY 2017				_								_				
1	2	3   4	4	1   2	2   3	5   4	1	2	3	4	1	2	3	4	1	2	-	3	4	1	2	3	4	1	2	3	4
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	1	1 2	1 2 3	1 2 3 4	FY 2014 FY 1 2 3 4 1 2	FY 2014 FY 2011 1 2 3 4 1 2 3	PE 0604713 and Equipmed  FY 2014 FY 2015 1 2 3 4 1 2 3 4	PE 0604713A I and Equipment  FY 2014 FY 2015  1 2 3 4 1 2 3 4 1	PE 0604713A / Con and Equipment  FY 2014 FY 2015 FY 1 2 3 4 1 2 3 4 1 2	PE 0604713A / Combat and Equipment  FY 2014 FY 2015 FY 2011  1 2 3 4 1 2 3 4 1 2 3	PE 0604713A / Combat Fee and Equipment  FY 2014 FY 2015 FY 2016  1 2 3 4 1 2 3 4 1 2 3 4  FY 2014 FY 2015 FY 2016  1 2 3 4 1 2 3 4 1 2 3 4	PE 0604713A / Combat Feeding and Equipment  FY 2014 FY 2015 FY 2016  1 2 3 4 1 2 3 4 1 2 3 4 1  6	PE 0604713A / Combat Feeding, Cand Equipment  FY 2014 FY 2015 FY 2016 FY 3  1 2 3 4 1 2 3 4 1 2 3 4 1 2  6	PE 0604713A / Combat Feeding, Cloth and Equipment  FY 2014 FY 2015 FY 2016 FY 201  1 2 3 4 1 2 3 4 1 2 3 4 1 2 3	PE 0604713A / Combat Feeding, Clothing, and Equipment    FY 2014	PE 0604713A / Combat Feeding, Clothing, and Equipment    FY 2014	PE 0604713A / Combat Feeding, Clothing, and Equipment  FY 2014  FY 2015  FY 2016  FY 2017  FY 2017  1 2 3 4 1 1 2 3 4 1 1 2	PE 0604713A / Combat Feeding, Clothing, and Equipment  FY 2014 FY 2015 FY 2016 FY 2017 FY 20  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 5 3 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	PE 0604713A I Combat Feeding, Clothing, and Equipment    FY 2014	R-1 Program Element (Number/Name)   PE 0604713A   Combat Feeding, Clothing, and Equipment   EL2   Army File	R-1 Program Element (Number/Name)   PE 0604713A   Combat Feeding, Clothing, and Equipment   FY 2014   FY 2015   FY 2016   FY 2017   FY 2018   FY 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1   1 2	R-1 Program Element (Number/Name)   PE 0604713A   Combat Feeding, Clothing, and Equipment   Pr 2015   FY 2016   FY 2017   FY 2018   FY 2 1   2   3   4   1   2   3   3   4   1   2   3   3	R-1 Program Element (Number/Name)   Project (Number/Name)   EL2 I Army Field Feeding and Equipment   FY 2014   FY 2015   FY 2016   FY 2017   FY 2018   FY 2018   TY 2019   TY	R-1 Program Element (Number/Name)   PE 0604713A   Combat Feeding, Clothing, and Equipment   EL2   Army Field Feeding Equipment   EV 2014   FY 2015   FY 2016   FY 2017   FY 2018   FY 2019   TY 2018   TY 2019   TY 20	PE 0604713A I Combat Feeding, Clothing, and Equipment    FY 2014	R-1 Program Element (Number/Name)   PE 0604713A   Combat Feeding, Clothing, and Equipment   EL2   Army Field Feeding Equ	R-1 Program Element (Number/Name)   PE 0604713A   Combat Feeding, Clothing, and Equipment   FY 2014   FY 2015   FY 2016   FY 2017   FY 2018   FY 2019   FY 202

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army			Date: February 2015
' ' '	,	- 3 (	umber/Name) / Field Feeding Equipment

# Schedule Details

	Start		End	
Events	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