

# ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

**February 2007**

<b>BUDGET ACTIVITY</b> <b>5 - System Development and Demonstration</b>	<b>PE NUMBER AND TITLE</b> <b>0604713A - Combat Feeding, Clothing, and Equipment</b>							<b>PROJECT</b> <b>548</b>		
COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
548 MIL SUBSISTENCE SYS	3224	2984	2501	2515	2154	2199	2174	2220		19971

**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.

<b>Accomplishments/Planned Program:</b>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY06: Completed a market survey to define how bottled water is purchased, received, stored, distributed, and consumed in the field. Multiple commercial 12/24 volt DC portable refrigerator/freezer prototypes were purchased and evaluated for suitability to provide chilled drinking water storage capability in military tactical vehicles. Documented test results in the market survey report.	68			
FY06: Identified grey water treatment options for the field food sanitation system. Designed, evaluated and refined the concept for mitigation of combustion by products. FY07: Conduct testing and evaluation of developmental prototypes of sink-exhaust fan assemblies to verify performance. Evaluate methods for reusing untreated rinse and sanitizing water as wash and rinse water, respectively. Analyze closed-loop treatment systems with regard to cost, ease of use, maintenance, and reliability. FY08: Prepare a solicitation and award a contract to build developmental prototypes of packaged, closed-loop water treatment systems. .FY09: Conduct testing and evaluation of closed loop-water treatment systems against the water quality standard and other requirements such as durability and reliability. Prepare Engineering Change Proposal (ECP) for transition to production.	243	393	250	200
FY09: Validate usage volume with CACCOM for pressure water design. Design and fabricate a prototype pressurized water system include all piping, pumps, freeze protection, and controls to provide pressurized water to meet all the demands of the field feeding site.				64
FY06: Completed the Multi-Temperature Refrigerated Container Systems Developmental and Operational testing. Prepared Milestone C package for transition to procurement.	301			
FY06: Conducted cost analysis and designed a system to effectively reduce the by products of combustion and improve thermal efficiency of the cooking equipment in the containerized Kitchen (CK). FY07: Fabricate improved CK prototype and conduct in house testing. FY08: Conduct Production Qualification testing (PQT). FY09: Conduct Production Verification Testing (PVT).	484	523	526	228
FY09: Leverage Market survey results obtained from the Water Cooling program conducted in 2006. Prepare a Performance Specification. Prepare a Request for Proposal/Statement of Work (SOW) to award a contract to design and fabricate prototype(s).				161
FY07: Receive technology transition from Science and Technology and SBIR based studies. Complete performance specification and award developmental contract for Future Combat Vehicle Crew Support. FY08: Complete testing and evaluation and prepare milestone package.		197	211	

# ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

**February 2007**

BUDGET ACTIVITY	PE NUMBER AND TITLE		PROJECT	
<b>5 - System Development and Demonstration</b>	<b>0604713A - Combat Feeding, Clothing, and Equipment</b>		<b>548</b>	
FY06: Prepared Milestone C documentation and performance specification for AK and transitioned to procurement	90			
FY06: Awarded a contract to develop a co-generator that produces heat for cooking and sanitation and produces electricity for electrical appliances on the Mobile Kitchen Trailer, containerized Kitchen and other systems.	252			
FY09: Design and fabricate a prototype and conduct in house performance testing for CK Oven Upgrade.				150
FY09: Design and fabricate a prototype and conduct in house performance testing for CK scrubbing ventilation.				105
FY06: Completed procurement documents for highly acceptable Boil in Bag (BIB) egg (UGR H&S/A) and shelf stable Institutional Sized Pouch (ISP) (UGR H&S) bacon and transitioned to DSCP for procurement. Presented recommended changes for the MRE, UGR and MCW/LRPs based on field testing with warfighters to the Joint Service Operational Rations Forum (JSORF) 2Q06; 19 new items were approved for MRE (2008 date of pack (DOP)); 17 new items for UGR H&S (2007 DOP); 38 for UGRA (2007 DOP); and 16 for the MCW/LRP. Obtained OTSG approval for new MRE, UGR H&S/A, and MCW/LRP. Finalized all MRE/UGR procurement documents and initiated delivery to DSCP. Performed combat ration components cuttings for industry/OGA to ensure consistent ration component quality.FY07: Finalize all FSR and UGR-E procurement documents and transition to DSCP (1Q07). Complete delivery of MRE (2008 DOP), UGR H&S/A (2007 DOP) performance based contract requirements to DSCP for procurement (1Q07). Conduct field test of new ration components for MRE (2009 DOP) and UGR H&S/A (2008 DOP). Present recommendations to JSORF (2Q07) for continuous improvement of ration components of MRE (2009 DOP), and UGR H&S/A (2008 DOP). Finalize all procurement documents to include MCW/LRP and initiate delivery to DSCP. Obtain OTSG approval. Perform cuttings for industry/OGA to ensure consistent quality. Complete field testing for new ration components for MRE (2010 DOP) and UGR H&S/A (2009 DOP) to enhance quality and expand variety.	705	524		
FY08: Present recommendations to JSORF (2Q08) for MRE (2010 DOP) and UGR H&S/A (2009 DOP) for continued product improvement. Finalize MRE/UGR H&S procurement documents and initiate transition to DSCP. Obtain OTSG approval. Perform cuttings for industry/OGA to ensure consistent ration quality. Complete field testing of new ration components; MRE (2011 DOP), UGR H&S/A (2010 DOP), MCW/LRP, FSR (2), and UGR-E (2) to improve quality and expand variety.FY09: Based on field test results, present recommendations to JSORF (2Q09) for continuous transition to DSCP. Obtain OTSG approval. Perform cuttings for industry/OGA to ensure consistent ration quality. Complete field testing of new ration components; MRE (2011 DOP), UGR H&S/A (2010 DOP), MCW/LRP, FSR (2), and UGR-E (2) to improve quality and expand variety.FY09: Based on field test results, present recommendations to JSORF (2Q09) for continuous improvement of ration components/packaging/technologies for MRE (2011 DOP), UGR H&S/A (2010 DOP), MCW/LRP, FSR (2), and UGR-E (2). Obtain OTSG approval for new menus. Perform cuttings for industry/OGA to ensure consistent quality. Finalize procurement documents and transition to DSCP. Complete field testing of new ration components for MRE (2012 DOP), FSR (3), UGR H&S/A (2011 DOP) and UGR-E (3) to enhance quality and expand variety.			402	334
FY06: Tested and evaluated portable, pressurized, self-contained, automatic fresh water delivery system for field feeding sites at remote locations. System includes pump, automatic controls, and 100 gallon water tank for remote locations capable of autonomous and continuous operation for integration into Air Force field feeding sites for modernization and subsequent operational testing and evaluation during FY07. Designed, developed, fabricated and tested prototype QuadCold Marine Corps expeditionary field refrigeration system. QuadCold is a QuadCon sized refrigerator/freezer that has the capabilities to keep refrigerated rations at 33-40°F and frozen rations at -5°F to 32°F in ambient temperatures up to 122°F. QuadCold prototype passed all structural and thermal certification criteria including as a single unit, coupled, 10-foot ISO configuration and coupled, 20-foot ISO configuration. Integrated newly developed thermal control coating to reduce degrading effects of solar radiation. Prototypes provided to the Marines to support User Evaluations at Camp Lejeune to validate remote site feeding of the Marine Expeditionary Forces (MEF's). Developed draft Performance Specification and provided for	140	147	117	134

# ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

**February 2007**

BUDGET ACTIVITY	PE NUMBER AND TITLE			PROJECT	
<b>5 - System Development and Demonstration</b>	<b>0604713A - Combat Feeding, Clothing, and Equipment</b>			<b>548</b>	
comment to Marines and industry.FY07: Transition performance based specification for fresh water delivery system to Air Force for procurement. Evaluate water heater to support Air Force field kitchen requirements. Conduct market survey and identify alternate exhaust fan for use with Air Force ventilation systems. FY08-09: Build prototype beverage water heater for use by the Sea Bees with the proposed water trailer. Continue to provide engineering support and services for product improvements for fielded food service equipment for joint services.					
FY06: Completed market survey to identify COTS items for an optimized Insulated Food Container (IFC) for group feeding applications that is mass and space efficient, less costly, holds both UGR-A and UGR-H&S rations. System design was optimized using inexpensive stereo-lithography rapid prototyping process for multiple design changes resulting in 20% reduced cube volume, 14-20% mass reduction, and tapered body for nesting providing 25% reduced storage space. Optimized IFCs successfully met requirements for hot and cold thermal performance, US Highway Truck Vibration Exposure (Mil-Std-810F, section 514.5C-1) and Vibration Impact Testing. IFCs user evaluated by 10th Mountain Division at Fort Drum and 3rd Brigade deployed overseas. Commercial Item Description A-A-52193E was be revised to incorporate the changes and then transitioned to the Services/DLA for procurement.	143				
FY06: Evaluated automated food production equipment to provide cost/labor saving through the use and application of new automated food service equipment on Navy ships. Conducted in-house evaluation of Campbells automatic soup/stew dispensing machine, Turbo Chef fast cooking oven, Rational Combination Oven, and Edys ice cream machine. Conducted in-house evaluation on four major pieces of food service equipment. Based on in-house testing, it is estimated that the equipment will reduce maintenance by 16 man-hours and operation by 10 man-hours combined per day. Received approval from the National Sanitation Foundation (NFS) to use clear non-stick dry film material that is PTFE (Teflon) free on food service pans. Provided NAVSUP with written report/cost benefits of utilizing precooked entrees. Benefits included a 50% reduction in preparation time, improved food safety, reduced waste and a reduction in case cube freezer storage requirements. FY07: Serve as certifying agent for all Navy Food Service Equipment to be used onboard Navy Vessels. Monitor commercial development in food service to accommodate reductions in shipboard labor, extend service life of equipment. Test and generate evaluation reports; down select items; list approved Galley equipment in Navy Food Service Equipment Catalog.	500	788			
FY06: Implemented technology insertion/ modernization of equipment and conducted user field tests to optimize and upgrade the Air Force Container Deployment Kitchen (CDK) to improve operational efficiency, extend the system service life, reduce maintenance, decrease operating labor and enhance reliability. Completed upgrade of CDK from Tyndal Air Force Base. Corrected identified deficiencies with older CDK design including electrical panel overheating, serving line problems, malfunctioning water heaters, plumbing system issues and power requirements. Replaced outdated food service equipment and integrated CDK system with latest technologies. Developed detailed equipment replacement list and an enhancement package which was successfully transitioned to Air Force to support procurement. The Air Force will use the information developed under this program to determine feasibility of entire CDK fleet upgrade.	298				
FY08: Identify, evaluate, and consolidate service requirements in conjunction with user community for TriCon Kitchen. Develop performance based SOW based on service comments.FY09: Award a contract to design and develop a prototype modular all electric kitchen within a TriCon container that could support all Services. Conduct Developmental Testing of the prototype TriCon kitchen. Begin User Testing with the Air Force.				166	165
FY-08: Participate in future naval vessel IPT meetings and gather updates on crew size, food service space and foot print allocations, weight restrictions/reductions and program costs. Evaluate information and design future galleys to meet the proposed naval requirements. Utilize modeling, simulation, animation, and prototyping to validate designs to support Navy requirements for reductions in total lifecycle costs in construction, design, and equipment arrangementFY09: A prototype of a future galley will be constructed utilizing automated				250	322

# ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

**February 2007**

BUDGET ACTIVITY	PE NUMBER AND TITLE			PROJECT
<b>5 - System Development and Demonstration</b>	<b>0604713A - Combat Feeding, Clothing, and Equipment</b>			<b>548</b>
food service equipment, process controls, and ergonomic designs. The galley will be prototyped for initial operational testing and evaluation for potential inclusion into future galley designs onboard naval platforms. Develop galley designs with the capacity to integrate future technologies that will significantly reduce shipboard manning requirements through automated processes, equipment technological advancements, and equipment diagnostics/prognostics for total system integration. Program efforts will facilitate efficient utilization of the Navy requirements for reduced crew size and standardize equipment onboard all Navy platforms. Advanced technology will contribute significantly to the quality of life shipboard personnel, morale of food service personnel, alleviate labor-intensive functions, and support life cycle O&S cost reductions in the fleet.				
FY08: Test and evaluate; and complete operational shipboard testing of uniform baking oven. Novel oven will ensure substantial reduction in prep time, consistent quality and dramatic reduction in energy consumption. Modify oven prototype as required; conduct onboard testing to verify ovens capabilities for shipboard integration. Complete equipment design and prepare a commercial item description. Transition technical data package to Navy for procurement.			277	
FY07-08: Provided technical support for the development, modernization and implementation of the Air Force Basic Expeditionary Airfield Resources (BEAR) field kitchen concept, which consolidates existing Air Force Harvest Falcon, Harvest Eagle, 9-1 and 9-2 tent field kitchens. Kitchens reorganized and consolidated into the BEAR-(i) (Initial), which provides all food service requirements to support 550 airmen, and BEAR-(f) (Follow-on) platforms, which incrementally support food service requirements for 550 to 1100 personnel. Integrate and test food service equipment to support development, modernization and implementation of Air Force Basic Expeditionary Airfield Resources (BEAR) single kitchen system design. Effort supports replacement and consolidation of four separate aging field feeding systems with a single state-of-the-art solution. Conduct developmental testing and operational testing to support follow-on modernization packages and sustain feeding requirements as the force size increases with in-service application. Using an innovative modular approach the BEAR program provides an integrated system that will reduce labor, provide modern, efficient equipment, increase the food production yield, and reduce life cycle cost.FY09: Construct complete final BEAR-(i) and BEAR-(f) systems that include new Modular Shelter System, new Advanced Flooring System, and new equipment. Conduct Air Force User Evaluations at Tyndall and Dobbins AFBs. . Complete modifications and prepare performance specification and transition to AF for procurement.		328	302	196
FY-09: Evaluate beverage and self-service islands/lines for product quality, variety, ease of cleaning and maintenance. Identify specific automated self-serve equipment for crew mess deck applications to accommodate reduction in Food Service Attendants and Culinary Specialists. Recommend improvements to NAVSEA and NAVSUP and secure afloat test platform.				344
FY09: Upgrade/correct deficiencies with the kitchen identified based on results of the testing. Develop detailed equipment replacement list and an enhancement package and transition to the Navy to support potential future procurement. The Navy will use the information developed under this program to determine feasibility of entire COMMZ fleet upgrade.				112
SBIR/STTR		84		
<b>Total</b>	<b>3224</b>	<b>2984</b>	<b>2501</b>	<b>2515</b>

# ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2007

BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>	PE NUMBER AND TITLE <b>0604713A - Combat Feeding, Clothing, and Equipment</b>				PROJECT <b>548</b>	
<b><u>B. Program Change Summary</u></b>	FY 2006	FY 2007	FY 2008	FY 2009		
Previous President's Budget (FY 2007)	3334	3017	2520	2519		
Current BES/President's Budget (FY 2008/2009)	3224	2984	2501	2515		
Total Adjustments	-110	-33	-19	-4		
Congressional Program Reductions		-11				
Congressional Recissions						
Congressional Increases						
Reprogrammings						
SBIR/STTR Transfer						
Adjustments to Budget Years	-110	-22	-19	-4		

<b><u>C. Other Program Funding Summary</u></b>	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
RDTE, 0603747.610, Food Adv Dev	3233	2760	3795	3914	4315	4405	4359	4462	Continuing	Continuing
OPA 3, M65803, Kitchen, Containerized, Field	5273	9009	11478	17482	18027	17416	8052	7776	Continuing	Continuing
OPA 3, M65802, Sanitation Center, Field Feeding	11394	17614	4501						Continuing	Continuing

Comment:

**D. Acquisition Strategy** Complete System Development and Demonstration of food items and equipment for transition into competitive procurement contract.

# ARMY RDT&E COST ANALYSIS (R3)

February 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
5 - System Development and Demonstration			0604713A - Combat Feeding, Clothing, and Equipment									548		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Various combat feeding equipment, multi-fuel and water equipment	In-House	RDECOM, NSC		1400	1-4Q	1260	1-4Q	1233	1-4Q	1243	1-4Q		5136	
DOD Field Feeding Equipment	Contracts	Various		575		514	1-4Q	335	1-4Q	328	1-4Q		1752	
Army Field Feeding Equipment Development	In-House	PM Force Sustainment Systems (FSS)		340		291	1-4Q	285	1-4Q	279	1-4Q		1195	
Subtotal:				2315		2065		1853		1850			8083	
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:														
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Various	MIPR	TECOM/OEC/ATC		580		496		348		354			1778	
Subtotal:				580		496		348		354			1778	
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
CFP Management	In-House	RDECOM		329	1-4Q	339	1-4Q	300	1-4Q	311	1-4Q		1279	
SBIR/STTR						84							84	
Subtotal:				329		423		300		311			1363	

# ARMY RDT&E COST ANALYSIS (R3)

February 2007

BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>	PE NUMBER AND TITLE <b>0604713A - Combat Feeding, Clothing, and Equipment</b>						PROJECT <b>548</b>			
<b>Project Total Cost:</b>		3224		2984		2501		2515		11224

# Schedule Profile (R4 Exhibit)

February 2007

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604713A - Combat Feeding, Clothing, and Equipment**

**PROJECT**  
**548**

Event Name	FY 06				FY 07				FY 08				FY 09				FY 10				FY 11				FY 12				FY 13			
	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	2	3	4
(1) Conduct Milestone C on Assault Kitchen (AK).					▲																											
Transition Advanced AF equipment and systems to AF for procurement.																																
Integrate equipment, Navy program to AF BEAR Kitchen and Marine Tray Ration Heat																																
Transition Adv Marine Corps (MC) equipment and systems to MC for procurement.																																
Transition Advanced Navy Equipment and Systems to Navy for procurement.																																
Conduct DT on MKT/CK co-generation system.																																
Conduct Operational Test of individual ration components																																
Conduct OT on MKT/CK cogeneration system																																
Transition individual rations/ration components documentation to DLA /services																																
Conduct operational test of Unitized Group Ration (UGR)-B																																
Transition updated UGR-B assembly and component document to DSCP for procurement																																
Conduct operational test of UGR components/packaging																																

# Schedule Profile (R4 Exhibit)

February 2007

BUDGET ACTIVITY  
**5 - System Development and Demonstration**

PE NUMBER AND TITLE  
**0604713A - Combat Feeding, Clothing, and Equipment**

PROJECT  
**548**

Event Name	FY 06				FY 07				FY 08				FY 09				FY 10				FY 11				FY 12				FY 13			
	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	2	3	4
(2) Conduct OT of UGR-E Type II							▲																									
Transition UGR component/packaging documents to DSCP for procurement		▲																														
Conduct DT and OT on BEAR System and transition to Air Force												■																				
Conduct DT/OT on Waste to Energy Conversion System and transition to procurement																■																
(3) Conduct Field evaluation of the CDK				▲																												
(4) Optimize and transisiton CDK to AF for procurement				▲																												
Fabricate and test CK prototype, Conduct PQT on CK								■				■																				
Fabricate test cogeneration for MKT PVT item												■																				
(5) Conduct DT and OT for MKT skillet and oven																																
Conduct DT and OT on ADR P3I prototype refrigeration units.																				■												
(6) Update the ADR P3I TDP and transition to the Air Force to support production con																												▲				
Conduct DT and User Evaluations on prototype NavRP, Identify, evaluate, and consolidate service requirements in conjunction with use												■												■								

# Schedule Profile (R4 Exhibit)

February 2007

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604713A - Combat Feeding, Clothing, and Equipment**

**PROJECT**  
**548**

Event Name	FY 06				FY 07				FY 08				FY 09				FY 10				FY 11				FY 12				FY 13			
	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	2	3	4
(7) Award a contract to design and develop a prototype modular TriCon kitchen to sup													▲7																			
(8) Complete DT/User Testing on prototype TriCon kitchen with the Services.																				▲8												
(9) Test prototype Sink Exhaust Fan Assemblies, (10) Test prototype Closed Loop Water Treatment System, (11) Transition Sink Exhaust Fan Assembly to Procurement, (12) Transition Battlefield Ice System to Procurement							▲9		▲11				▲10							▲12												
Test prototype Mobile Refrigeration Trailer System																	■	■	■	■												
(13) Transition Mobile Refrigeration Trailer to Procurement																								▲13								
(14) Transition Solar Powered Refrigeration to Procurement, (15) Test prototype Future Combat Vehicle Crew Support									▲15															▲14								
Test prototype Containerized Food Sanitization Center																	■	■	■	■												
(16) Transition Mobile Kitchen Trailer Future to Procurement, (17) Transition CKP3I to Procurement, (18) Transition Improved Tray Ration Heater to Procurement																▲17												▲16				▲18

# Schedule Profile (R4 Exhibit)

February 2007

BUDGET ACTIVITY  
**5 - System Development and Demonstration**

PE NUMBER AND TITLE  
**0604713A - Combat Feeding, Clothing, and Equipment**

PROJECT  
**548**

Event Name	FY 06				FY 07				FY 08				FY 09				FY 10				FY 11				FY 12				FY 13							
	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	2	3	4				
Test prototype Temperature Controllers for Field Kitchen Appliances																																				
(19) Transition Temp Controllers for Field Kitchen Appliances to Procurement																																				
Test prototype Water Cooler for Mounted Vehicles																																				

## Schedule Detail (R4a Exhibit)

February 2007

BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>		PE NUMBER AND TITLE <b>0604713A - Combat Feeding, Clothing, and Equipment</b>						PROJECT <b>548</b>	
<u>Schedule Detail</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	
Conduct Milestone C on Assault Kitchen (AK).		1Q							
Transition Advanced AF equipment and systems to AF for procurement.				4Q	1Q - 4Q	1Q			
Integrate equipment, Navy program to AF BEAR Kitchen and Marine Tray Ration Heat	4Q	1Q - 4Q	1Q						
Transition Adv Marine Corps (MC) equipment and systems to MC for procurement.			4Q	1Q - 4Q	1Q - 4Q	1Q			
Transition Advanced Navy Equipment and Systems to Navy for procurement.	4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q				
Conduct DT on MKT/CK co-generation system.			3Q						
Conduct Operational Test of individual ration components	4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
Conduct OT on MKT/CK cogeneration system				4Q					
Transition individual rations/ration components documentation to DLA /services		1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q	
Conduct operational test of Unitized Group Ration (UGR)-B	2Q								
Transition updated UGR-B assembly and component document to DSCP for procurement		3Q							
Conduct operational test of UGR components/packaging	4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
Conduct OT of UGR-E Type II		3Q							
Transition UGR component/packaging documents to DSCP for procurement	3Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 3Q	
Conduct DT and OT on BEAR System and transition to Air Force		4Q							
Conduct DT/OT on Waste to Energy Conversion System and transition to procurement					1Q - 4Q				

Conduct Field evaluation of the CDK	4Q							
Optimize and transisiton CDK to AF for procurement	4Q							
Fabricate and test CK prototype		1Q - 4Q						
Conduct PQT on CK			1Q - 3Q					
Fabricate test cogeneration for MKT PVT item			2Q - 4Q					
Conduct DT and OT for MKT skillet and oven			4Q					
Conduct DT and OT on ADR P3I prototype refrigeration units.						1Q - 4Q		
Update the ADR P3I TDP and transition to the Air Force to support production con							3Q	
Conduct DT and User Evaluations on prototype NavRP						3Q - 4Q		
Identify, evaluate, and consolidate service requirements in conjunction with use			2Q - 3Q					
Award a contract to design and develop a prototype modular TriCon kitchen to sup				2Q				
Complete DT/User Testing on prototype TriCon kitchen with the Services.					4Q			
Test prototype Sink Exhaust Fan Assemblies		3Q						
Test prototype Closed Loop Water Treatment System				3Q				
Transition Sink Exhaust Fan Assembly to Procurement			2Q					
Transition Battlefield Ice System to Procurement					4Q			
Test prototype Mobile Refrigeration Trailer System					3Q - 4Q			
Transition Mobile Refrigeration Trailer to Procurement						4Q		
Transition Solar Powered Refrigeration to Procurement						4Q		
Test prototype Future Combat Vehicle Crew Support			2Q					
Test prototype Containerized Food Sanitization					3Q - 4Q			

Center								
Transition Mobile Kitchen Trailer Future to Procurement							4Q	
Transition CKP3I to Procurement				4Q				
Transition Improved Tray Ration Heater to Procurement								4Q
Test prototype Temperature Controllers for Field Kitchen Appliances						3Q - 4Q		
Transition Temp Controllers for Field Kitchen Appliances to Procurement							4Q	
Test prototype Water Cooler for Mounted Vehicles					2Q - 3Q			