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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Army	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				PE 0603747A: <i>Soldier Support and Survivability</i>							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	74.847	13.903	10.073	19.860	29.933	11.051	10.965	10.280	10.453	Continuing	Continuing
610: <i>FOOD ADV DEVELOPMENT</i>	4.085	3.903	4.014	-	4.014	4.624	4.657	4.343	4.416	Continuing	Continuing
C08: <i>RAPID EQUIPPING FORCE</i>	22.762	10.000	6.059	19.860	25.919	6.427	6.308	5.937	6.037	Continuing	Continuing
C09: <i>SOLDIER SUPPORT EQUIPMENT - AD</i>	48.000	-	-	-	-	-	-	-	-	Continuing	Continuing

Note
Change Summary Explanation: FY13 OCO in the amount of \$19860 supports PEO Soldier.

A. Mission Description and Budget Item Justification

This program element supports component development and prototyping for organizational equipment, improved individual clothing and equipment that enhance Soldier battlefield effectiveness, survivability, and sustainment. This program element also supports the component development and prototyping of joint service food and combat feeding equipment designed to reduce logistics burden.

B. Program Change Summary (\$ in Millions)	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013 Base</u>	<u>FY 2013 OCO</u>	<u>FY 2013 Total</u>
Previous President's Budget	76.456	9.747	9.965	-	9.965
Current President's Budget	74.847	13.903	10.073	19.860	29.933
Total Adjustments	-1.609	4.156	0.108	19.860	19.968
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• FY11 OCO Request	-1.609	4.156	0.108	19.860	19.968

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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603747A: Soldier Support and Survivability				PROJECT 610: FOOD ADV DEVELOPMENT			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
610: FOOD ADV DEVELOPMENT	4.085	3.903	4.014	-	4.014	4.624	4.657	4.343	4.416	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project provides for the advanced component development and prototyping of joint service food and combat feeding equipment designed to reduce the logistics burden and Operation and Support (O&S) costs of subsistence support to service personnel. Project supports development of rations and rapidly deployable field food service equipment. Project conducts demonstration and validation of improved subsistence and subsistence support items used to enhance soldier effectiveness and quality of life in all four Services, as part of an integrated Department of Defense (DoD) Food Research, Development, Test, Evaluation and Engineering Program. The Program is reviewed and validated twice annually by the DoD Combat Feeding Research and Engineering Board (CFREB) as part of the Joint Service Food Program. This project develops critical enablers that support the Joint Future Force Capabilities and the Joint expeditionary mindset by maintaining readiness through fielding and integrating new equipment. This equipment enhances the field soldier's well-being and provides the soldier with usable equipment, in addition to reducing sustainment requirements, related Combat Support/Combat Service Support (CS/CSS) demands on lift, 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, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Solar Power Refrigeration Articles: Description: Provides a mechanical sub cooler that will increase the operational temperature limit, reduce fuel consumption and decrease electrical draw. The reduction in the refrigeration unit's electrical draw makes it a better candidate for incorporation of operational energy initiatives and alternative energy power sources to include solar power. FY 2011 Accomplishments: Transition Solar Refrigeration Technology from Science and Technology (S&T) to system development phase. Prepare solicitation for prototype. Fabricate prototype for evaluation and transition to System Development and Demonstration.	0.189 0	-	-	-	-
Title: Solid Waste Remediation Articles: Description: Provides environmentally friendly incineration system for solid waste.	0.290 0	0.100 0	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
FY 2011 Accomplishments: Review and validate requirements outlined in the Capability Production Document (CPD) with Combined Arms Support Command (CASCOM) and Joint Service Community. Establish design and evaluation criteria to meet desired capability. Procure prototypes for evaluation.						
FY 2012 Plans: Evaluate solid waste remediation hardware/systems and transition into System Development and Demonstration.						
Title: Modular Appliances for Field Feeding Articles:		0.423 0	-	-	-	-
Description: Provide a suite of common, man portable, highly efficient, closed combustion, thermostatically controlled appliances for use across the spectrum of field feeding and base camp operations.						
FY 2011 Accomplishments: Prepare solicitation for prototype and award contract. Initiate fabrication of prototype and initiate Developmental Testing (DT). Transition to Containerized Kitchen modernization System Development and Demonstration effort.						
Title: Fielded Individual Ration Improvement Project (FIRIP) Articles:		0.600 0	0.845 0	0.900	-	0.900
Description: Continuous product improvement project for the Meal, Ready to Eat (MRE)						
FY 2011 Accomplishments: Continue to identify suitable Commercial Off-The Shelf/Non-Development Item (COTS/NDI) candidate items and conduct in-house product development of food components for fielded individual operational rations (MRE 2013/2014 Date of Pack (DOP)) to enhance acceptability, increase consumption and improve nutritional intake. Conduct pilot scale in-house production to support engineering design, technology insertion, and producibility. Work with vendors and assemblers as needed to ensure feasibility and technology transition. Develop, integrate, and validate state-of-the-art science and technology, food processing and primary/secondary packaging innovations into individual ration platforms to increase operational effectiveness, functionality and improve logistics. processing and packaging to introduce targeted component items into individual ration platforms for enhanced acceptability, nutrition and performance.						
FY 2012 Plans:						

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)					
	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Continue to identify suitable COTS/NDI candidate items and conduct in-house product development of food components for fielded individual operational rations (MRE 2015 DOP) to enhance acceptability, increase consumption and improve nutritional intake. Conduct pilot scale in-house production to support engineering design, technology insertion, and producibility. Work with vendors and assemblers as needed to ensure feasibility and technology transition. Develop, integrate, and validate state-of-the-art science and technology, food processing and primary/secondary packaging innovations into individual ration platforms to increase operational effectiveness, functionality and improve logistics. processing and packaging to introduce targeted component items into individual ration platforms for enhanced acceptability, nutrition and performance.					
FY 2013 Base Plans: Continue to conduct in-house product development of food components and identify suitable COTS/NDI candidate items for fielded individual operational rations (e.g., Meal, Ready-to-Eat 2016 date of pack (DOP)) to enhance warfighter acceptability, increase consumption and improve nutritional intake; Conduct pilot scale in-house production to support engineering design, technology insertion, and commercial producibility; Develop, integrate and validate state-of-the-art science and technology, food processing and primary/secondary packaging innovations into individual ration platforms to increase operational effectiveness; Optimize food component processing and packaging to introduce targeted items/capabilities into individual ration platforms for enhanced acceptability, nutrition and performance; Transition to 6.5 for testing.					
Title: Assault/Special Purpose Ration Improvement Project (ASPIP)					
Articles:					
Description: Continuous product improvement of special purpose rations by the insertion of new technologies in nutrition, processing and packaging.					
FY 2011 Accomplishments: Continue identification and selection of new candidate items. Conduct in-house product development as needed; assemble test menus, select test site, and transition to 6.5 for field test. Complete procurement documents for new items and new assembly documentation for FSR and MCW/LRP. Conduct production testing of new components.					
FY 2012 Plans: Continue identification and selection of new candidate items. Conduct in-house product development as needed; assemble test menus, select test site, and transition to 6.5 for field test. Complete procurement documents					

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
for new items and new assembly documentation for FSR and MCW/LRP. Conduct production testing of new components. FY 2013 Base Plans: Continue to identify COTS/NDI components for the Meal, Cold Weather/Long Range Patrol and First Strike Ration to enhance acceptability, variety, consumption and nutritional value of combat rations. Identify new components based upon user feedback, focus groups, emerging products and technologies and user requirements. Conduct accelerated and long term storage studies on candidate components. Work with industry partners to facilitate producibility and technology transition. Transition to 6.5 for Warfighter testing.						
Title: Performance Metrics of Optimized Packaging Articles: Description: Integrate / demonstrate thin film and coating technologies and their respective properties into durable, high barrier, non-foil ration packaging materials and to build functionality into packaging materials to enhance package shelf life and product survivability while down-gauging materials. FY 2011 Accomplishments: This effort will evaluate innovative packaging materials including high barrier, non-foil packaging structure for acidic condiments in order to increase condiment variety and warfighter acceptability for maximum consumption and nutritional intake. Packaging materials will be down-selected then integrated with new formulations of high demand acidic condiments. The effort involves reformulating and optimizing pH of acidic condiments for acceptability, then integrating those new formulations with the down-selected packaging material for evaluation of package integrity, product quality, and shelf life. Producibility testing will then be initiated for commercial scale-up of the reformulated high acid condiments in the new packaging materials. Technical data and prototypes will transition to individual & group ration improvement projects for field testing.		0.121 0	-	-	-	-
Title: Next Generation Combat Breakfast Technologies Articles: Description: Develop and demonstrate technologies to enhance and expand development of the next generation of breakfast components. FY 2011 Accomplishments:		0.135 0	-	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Transition from technology base advanced development effort highly acceptable, multi-component breakfast and bakery items to fielded combat rations. Supports frequently requested items that will increase consumption, caloric intake, and morale. Military nutritional and shelf life requirements necessitate application of novel processing, packaging, and stabilization and preservation technologies to bridge the gap between user needs and product availability. Identified specific analytical requirements, ingredient, and packaging specifications such as water activity, pH, moisture, and additives to increase sensory acceptability and extend shelf life (humectants, emulsifiers, water binding agents, and anti-staling agents) are needed. Items include self-heating egg, breakfast burritos, breakfast pizzas, turnovers, sausage, instant breakfast cereals, pita breads, English muffins, etc. Will demonstrate and validate product parameters in commercial scale production, identify critical process controls, determine analytical testing or new test procedures, initiate long term storage studies and sensory evaluation, conduct nutrient analysis and incorporate in menu planning to meet Office of the Surgeon General (OTSG) guidelines, and develop technical data to support transition to production.						
Title: Fielded Group Ration Improvement Project (FGRIP) Articles: 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 2011 Accomplishments: Improve family of Unitized Group ration (UGRs) (H&S (2013/2014), A (2012/2013), B and E (2013/2014)) to increase overall Warfighter acceptability, and consumption. Based on Warfighter recommendations, incorporate COTS, NDI, and developmental components into prototype menus. Select field test site and transition to 6.5 for field testing. Complete draft procurement documents. Integrate state of the art packaging and combat ration processing technologies for improved operational and functional performance. FY 2012 Plans: Improve family of UGRs (H&S (2014/2015), A (2013/2014), B and E (2014/2015)) to increase overall Warfighter acceptability, and consumption. Based on Warfighter recommendations, incorporate COTS, NDI, and developmental components into prototype menus. Select field test site and transition to 6.5 for field testing. Complete draft procurement documents. Integrate state of the art packaging and combat ration processing technologies for improved operational and functional performance. FY 2013 Base Plans:		0.686 0	0.985 0	1.007	-	1.007

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Continue efforts to update/improve components, menus and packaging to increase consumption and overall nutritional intake of the family of Unitized Group Rations (UGRs) for UGR-A (FY15 menus), B, E and H&S (2015/16 DOP). Identify COTS/NDIs and/or develop new food components in-house, conduct in-house testing, down-select items and develop test menus for Warfighter evaluation. Develop, integrate and validate state-of-the-art science and technology, food processing and primary/secondary packaging innovations into group ration platforms to increase operational effectiveness, functionality and improve logistics. Transition to 6.5 for Warfighter testing.						
Title: Military Ration Studies Description: Evaluate the effects of extened consumption. FY 2011 Accomplishments: Conduct study of effects of extened consumption of military rations on warfighters.		0.070 0	-	-	-	-
Title: Automated Shipboard Dishwashing System (ASDS) Description: Develop technologies to demonstrate an ASDS that will reduce labor and manning for Carrier Scullery Operations. FY 2011 Accomplishments: Transition Automated Shipboard Scullery project from the Navy Small Business Innovative Research (SBIR) Program to a Phase III effort. Combat Feeding Directorate (CFD) will partner with PEO Carriers on a cost sharing initiative to support a Phase III SBIR effort. During the Phase III effort, the Automated Shipboard Dishwashing System (ASDS) configuration will be demonstrated aboard a U.S. Navy ship. Prior to the demonstrating the system onboard a ship, a Ship Configuration Change Document (SCD) will be initiated and approved. This will allow the ASDS to be installed onboard a Navy vessel for evaluation.		0.470 0	-	-	-	-
Title: US Navy Standard Core Menu Continuous Product Improvement Project (NSCM) Description: Provide recommendations for upgrading/improving Navy Standard Core Menu components by introducing new preparation techniques to enhance menu acceptance and effectiveness while reducing labor requirements.		0.136 0	0.175 0	0.180	-	0.180

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
FY 2011 Accomplishments: Provide Naval Supply Systems Command (NAVSUP) with continuous product identification, evaluations and menu development to support NSCM upgrades and revision changes.						
FY 2012 Plans: Provide NAVSUP with continuous product identification, evaluations and menu development to support NSCM upgrades and revision changes.						
FY 2013 Base Plans: Continue to identify and validate COTS and NDI candidate enhancements to the NSCM. Provide recommendations for improving menu components by introducing new commercial items and state-of-the-art food preparation and feeding techniques to enhance menu acceptance and reduce labor requirements. Transition product summaries and results/recommendations to Naval Supply Systems Command (NAVSUP) for adoption and procurement.						
Title: Smart Tag Indicators for Ration Packaging Articles: Description: Explore use of ultra thin battery technology to illuminate with measurable fill lines, and direction when visibility is low.		0.084 0	-	-	-	-
FY 2011 Accomplishments: Initiate program to provide ration components in fully integrated, multi-functional, active packaging materials beyond traditional polymer laminate films and oxygen scavenger sachets to improve storage stability & acceptability, reduce product waste, and increase consumption/nutrition. Performance oriented						
Title: Quality Kinetics/Rapid Fielding of Ration Components Description: Confirm or optimize current accelerated storage protocols. Validate a predictive model for food degradation.		-	-	0.082	-	0.082
FY 2013 Base Plans: Continue development of baseline predictive model. Complete storage studies, data collection and analysis. Validate model and implement updated storage protocols for operational ration components, where feasible. Transfer updated protocols to food technologists to support future in-house product development efforts.						

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Generate tech report summarizing results and facilitating tech transfer of model to food technologists and developers of COTS/NDI components.						
Title: Improved Food Risk Assessment / Management Articles: Description: Provide Department of Defense Veterinary Services Agency (DoDVSA) and Services a predictive modeling database / applicable training materials to provide science-based information to perform food safety risk assessment/management duties. FY 2011 Accomplishments: Improved Food Risk Assessment/Management, provide DoD Veterinary Services Agency and services a predictive modeling database and applicable training materials to provide science-based information to perform food safety risk assessment/management duties		0.030 0	-	-	-	-
Title: Joint Service Refrigeration Container System (JSRCS) Articles: Description: Develop a joint service refrigerated container system that will support all military field feeding platforms. FY 2011 Accomplishments: Develop a Joint Service Refrigerated Container System (JSRCS) to support group ration distribution and storage for multiple services. FY 2012 Plans: Develop a Joint Service Refrigerated Container System (JSRCS) to support group ration distribution and storage for multiple services.		0.130 0	0.610 0	-	-	-
Title: Advanced Refrigeration Insulation Articles: Description: Identify, test, and evaluate optimal insulation for military refrigerators. FY 2011 Accomplishments:		0.150 0	-	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Evaluate and demonstrate state of the art insulation technology, like Aerogel Insulation to significantly improve refrigeration efficiency in the field and shipboard.						
Title: Assault Kitchen (AK) Enhancement to Include UGR-A Capability Articles: Description: Streamlined system for preparing A ration with Assault Kitchen. FY 2011 Accomplishments: Develop a fully integrated refrigeration system for the Assault kitchen to allow the AK to support UGR-A ration feeding, and menu supplements		0.160 0	-	-	-	-
Title: Basic Expeditionary Airfield Resources (BEAR) Kitchen Support Enhancements Articles: Description: Provide Air Force new electric food service equipment; and implementation plan to support the initial (i) / follow-on (f) systems to support AF BEAR field feeding. FY 2011 Accomplishments: Air Force Basic Expeditionary Airfield Resources (BEAR) - Kitchen System Enhancements, provide AF with enhanced, state of the art all electric food service equipment; and continue to refine modular field feeding system. FY 2012 Plans: Air Force Basic Expeditionary Airfield Resources (BEAR) - Kitchen System Enhancements, provide AF with enhanced, state of the art all electric food service equipment; and continue to refine modular field feeding system.		0.182 0	0.330 0	-	-	-
Title: UGR-A for Expeditionary Basecamps Articles: Description: Provides an optimized number of servings for use by Tactical Small Units (TSUs) in contingency basing operations for both the UGR-A (Army) and UGR-B (Marine Corps) with austere field feeding equipment. FY 2012 Plans:		-	0.133 0	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Conduct warfighter evaluation to validate proposed configuration, coordinate recommendations with Joint Culinary Center of Excellence and obtain Joint Service Operational Ration Forum (JSORF) approval, and update and transition revised procurement documents to Defense Logisitcs Agency Troop Support (DLA-TS).						
Title: Barrier Coating for Optimized Package Performance Description: Provides low-cost, non-foil, high performance packaging materials for incorporation into existing and future combat ration packaging systems, such as the Unitized Group Ration (UGR) and Meal, Ready-to-Eat (MRE). FY 2013 Base Plans: Complete in-house studies of pilot scale pouches and demonstrating filling, sealing, and processing capabilities. Conduct verification testing (accelerated storage, rough handling, and field utility). Draft Technical Data Package (TDP) for incorporation into ration component performance specifications. Conduct validation trials with industrial partners to ensure materials indentified in TDP can be run on production scale equipment and converted into conforming preformed pouches. Verify industry capability of producing retort and non-retort pouches in both preformed and horizontal-form-fill-seal configurations. Transition new/revised procurement documents to DLA - Troop Support.		-	-	0.240	-	0.240
Title: Autonomous Shipboard Cleaning System (ASDS) Description: There is a need to develop an automated and innovative foodservice cleaning system for Navy legacy and future ships due to the planned reductions of Food Service Attendants (FSA), and Culinary Specialists (CS), required under the Navy Transformation Goal of optimized crewing. FY 2013 Base Plans: Accept delivery of the contractor developed ASDS Phase II Small Business Innovation Research (SBIR) prototype, initiate a Phase III development effort. Conduct land-based testing at Natick Soldier Research Development and Engineering Center (NSRDEC) and coordinate enhanced simulation testing and demonstrations of the upgraded prototypes at Naval Surface Warfare Center's test facilities.		-	-	0.283	-	0.283
Title: Integration of Selected Ration Components Using Novel Food Processing Technology to Individual Ration Platforms Description: Develop operational concept for integration of specific novel processed ration components into individual (as well as group and assault/special purpose) ration platforms. Establish baselines for nutrition retention, producibility and package utility. Evaluate baselines for novel processed components against		-	-	0.103	-	0.103

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
key performance parameters of known thermally processed ration components. Generate draft technical requirements and/or revised documents for novel processed ration components.						
FY 2013 Base Plans: Develop operational concept for integration of specific novel processed ration components into individual (as well as group and assault/special purpose) ration platforms. Establish baselines for nutrition retention, producibility and package utility. Evaluate baselines for novel processed components against key performance parameters of known thermally processed ration components. Generate draft technical requirements and/or revised documents for novel processed ration components.						
Title: Containerized Ice Making System Articles: Description: Develop a containerized ice making system to support a 600 person base camp for cooling drinking water in extreme arid conditions and support other ice requirements for those on the base camp and for soldiers going out on missions/patrols. FY 2012 Plans: Conduct major subcomponent testing. Perform design analysis review. Award Phase III prototype effort. Fabricate System prototype.		-	0.200 0	-	-	-
Title: Multi-Functional Secondary Packaging Articles: Description: Integrate alternative secondary packaging technologies into current ration packaging systems so as to reduce cost and waste generation, while maintaining required field performance. Production and insertion of new packaging technologies into individual, assault/special purpose and group ration systems. Provide lighter weight, lower cost, recyclable MRE and Unitized Group Ration shipping containers. FY 2012 Plans: Prototype fiberboard container demonstrated during the FY11 MRE Field evaluation will be further evaluated in comparison to the existing military fiberboard container. Scale-up of prototype MRE and UGR secondary shipping containers will be performed and containers evaluated at full production levels using existing assembler?s equipment.		-	0.150 0	-	-	-
Title: Co-Extruded Alternate Nutrient System (CANS)		-	-	0.100	-	0.100

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Description: Provide the Warfighter with functional multi-component bars and single matrices? pastes that serve as vehicles for optimizing nutrient delivery. Develop matrices that are best suited to deliver nutrients/ performance optimizers that are stable, functional and organoleptically appealing. Increase quality and variety of performance bars utilizing co-extrusion technologies.						
FY 2013 Base Plans: Validate producibility; finalize development of mature products (based on sensory analysis, accelerated shelf life test and testing in a relevant environment); and finalize packaging requirements.						
Title: Alternative Polymer Processing Technology (APPT) Description: Improve ration packaging by enhancing package performance through the use of advanced polymer processing technologies, such as orientation, co-extrusion, and layer multiplying co-extrusion. Reduce packaging weight and waste. Improve packaging performance through enhanced mechanical and barrier properties.		-	-	0.280	-	0.280
FY 2013 Base Plans: Prototype packages will be fabricated and storage stability and rough handling studies will be conducted to demonstrate performance in a simulated environment. Contracts will be initiated for insect infestation studies. The technical risk associated with this project is minimized, given that several congressionally funded programs have laid the ground work for this research through current and past projects. Producibility studies and field testing will be performed on Prototype packaging structures.						
Title: Transition of Advanced Appliances for Field Kitchens Description: Provide the Warfighter with JP-8-fueled appliances that save fuel, are simple to use, provide a safe kitchen environment, and can easily be moved into buildings when necessary. Warfighters benefit from a safer, healthier, more comfortable kitchen environment, and equipment that facilitates preparation of quality A-ration meals. Existing appliances are only about 15-40% efficient; new burner technologies have demonstrated 75% efficiency, typical of stationary gas-fired equipment.		-	-	0.457	-	0.457
FY 2013 Base Plans: Validate producibility and finalize development of mature JP-8 appliances which have been successfully demonstrated in a relevant environment in a 6.3 technical demonstration; finalize performance requirements.						

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<u>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</u>	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Perform cost evaluation of relevant appliances and JP-8 burner technologies. Finalize integration of appliances into modular cabinet interface for kitchen platforms.					
Accomplishments/Planned Programs Subtotals	4.085	3.903	4.014	-	4.014

<u>C. Other Program Funding Summary (\$ in Millions)</u>											
<u>Line Item</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013 Base</u>	<u>FY 2013 OCO</u>	<u>FY 2013 Total</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• RDT&E 654713.548: <i>Military Subsistence System</i>	2.043	2.073	2.132		2.132		2.127	2.202	2.239	Continuing	Continuing
• OPA M65801: <i>Refrigerated Containers</i>	23.824	22.133	22.441		22.441		22.486	22.470		Continuing	Continuing

<u>D. Acquisition Strategy</u> Project development will transition to System Development & Demonstration and production.
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<u>E. Performance Metrics</u> Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.
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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Army										DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603747A: Soldier Support and Survivability				PROJECT 610: FOOD ADV DEVELOPMENT					
Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Combat Feeding Program Management	Various	RDECOM, Natick, MA:Natick, MA	4.026	0.458		0.454		-		0.454	Continuing	Continuing	Continuing
Subtotal			4.026	0.458		0.454		-		0.454			
Product Development (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Joint Service Food/Combat Feeding Equipment	Various	RDECOM, Natick, MA:Natick, MA	33.198	1.410		1.457		-		1.457	Continuing	Continuing	Continuing
Joint Service Food/Combat Feeding Equipment	Various	Various:Various	21.282	1.499		1.549		-		1.549	Continuing	Continuing	Continuing
Subtotal			54.480	2.909		3.006		-		3.006			
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Joint Service Food/Combat Feeding Equipment	Various	DTC/AEC:National Capitol Region	8.592	0.536		0.554		-		0.554	Continuing	Continuing	Continuing
Subtotal			8.592	0.536		0.554		-		0.554			
			Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			67.098	3.903		4.014		-		4.014			
Remarks													

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Army			DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603747A: <i>Soldier Support and Survivability</i>		PROJECT 610: <i>FOOD ADV DEVELOPMENT</i>	

	FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017			
	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
Award R&D contract to design and fabricate prototypes for the JSRCS																												
Evaluate the SBIR automated scullery prototype onboard a Navy aircraft carrier																												
Quantify manning reductions for the scullery process based on testing results																												
Integrate control systems for diagnostics/prognostics of the automated scullery																												
Award a contract to design and develop a prototype modular TriCon kitchen (BEAR)																												
Review Marine Corp Field Feeding Doctrine identify capability of current systems																												
Test Vapor Compression Improvement prototype																												
Test prototype Modular Appliances																												
Conduct DT on JP8 Fired Commerical Appliances																												
USMC Field Kitchen Modernization Effort																												
Joint Service Refrigeration Systems Enhancement Effort																												
Next Gen Hurdle Technologies Challenge Studies and Field Test																												
Aircrew Build to Order Meal Module User Eval and Final Configuration																												
UGR-A and B for Contingency Basing documentation and transition to DLA																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Army																		DATE: February 2012										
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)										R-1 ITEM NOMENCLATURE PE 0603747A: Soldier Support and Survivability										PROJECT 610: FOOD ADV DEVELOPMENT								
	FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017			
	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
Barrier Coating prototype Evaluation and Field Test																												
Develop/implement updated Quality Kinetics storage protocols.																												
Establish baseline, evaluate and transition novel processed ration components t																												
Field Testing of Multi-Functional Secondary Packaging																												
Fabricate PQT Prototype for Containerized Ice Making System																												
Transition of Advanced Appliances for Field Kitchens- OT of Prototypes																												
Finalize Packaging Requirements Based on Producibility Tests																												
Field Tests of Alternative Polymer Processing Technology (APPT)																												
Modify Production Change Request (PCR) of APPT and Transition to DLA-TS																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Army			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603747A: <i>Soldier Support and Survivability</i>	PROJECT 610: <i>FOOD ADV DEVELOPMENT</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Award R&D contract to design and fabricate prototypes for the JSRCS	2	2011	2	2011
Evaluate the SBIR automated scullery prototype onboard a Navy aircraft carrier	2	2011	4	2011
Quantify manning reductions for the scullery process based on testing results	4	2011	4	2011
Integrate control systems for diagnostics/prognostics of the automated scullery	2	2012	4	2012
Award a contract to design and develop a prototype modular TriCon kitchen (BEAR)	1	2012	4	2012
Review Marine Corp Field Feeding Doctrine identify capability of current systems	2	2012	4	2012
Test Vapor Compression Improvement prototype	3	2011	4	2011
Test prototype Modular Appliances	3	2011	4	2011
Conduct DT on JP8 Fired Commerical Appliances	2	2014	4	2014
USMC Field Kitchen Modernization Effort	1	2014	4	2015
Joint Service Refrigeration Systems Enhancement Effort	1	2012	4	2012
Next Gen Hurdle Technologies Challenge Studies and Field Test	1	2012	4	2012
Aircrew Build to Order Meal Module User Eval and Final Configuration	1	2012	4	2013
UGR-A and B for Contingency Basing documentation and transition to DLA	1	2012	4	2012
Barrier Coating prototype Evaluation and Field Test	1	2012	4	2013
Develop/implement updated Quality Kinetics storage protocols.	1	2012	4	2013
Establish baseline, evaluate and transition novel processed ration components t	1	2013	4	2014
Field Testing of Multi-Functional Secondary Packaging	4	2012	4	2013
Fabricate PQT Prototype for Containerized Ice Making System	4	2011	3	2012
Transition of Advanced Appliances for Field Kitchens- OT of Prototypes	3	2013	2	2014
Finalize Packaging Requirements Based on Producibility Tests	1	2013	4	2013
Field Tests of Alternative Polymer Processing Technology (APPT)	1	2013	4	2013

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Army			DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603747A: <i>Soldier Support and Survivability</i>		PROJECT 610: <i>FOOD ADV DEVELOPMENT</i>

Events	Start		End	
	Quarter	Year	Quarter	Year
Modify Production Change Request (PCR) of APPT and Transition to DLA-TS	4	2013	4	2013

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Army								DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603747A: <i>Soldier Support and Survivability</i>				PROJECT C08: <i>RAPID EQUIPPING FORCE</i>			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
C08: <i>RAPID EQUIPPING FORCE</i>	22.762	10.000	6.059	19.860	25.919	6.427	6.308	5.937	6.037	Continuing	Continuing
Quantity of RDT&E Articles											
Note Note that: (a) Equipment mix and configuration may change based on changes in operational environment and circumstances. (b) REF- Resource Management Capabilities Needs equipment and funding execution details will be provided in the Secretary of Army report to the Congressional Defense Committees in March and October of each year (per House Appropriations Committee (HAC)Report #108-553, DoD Appropriations Bill 2005, June 18, 2004, page 134.) A. Mission Description and Budget Item Justification The REF was established in 2003 as a unique, singular organization designed to address an Army-wide, systemic deficiency in providing immediate technology solutions. The REF adds value for the Army by rapidly providing urgent capabilities to U.S. Army Forces employed globally by harnessing technologies in order to improve operational effectiveness. The REF canvasses the military, industry, academia and science communities for readily available commercial and government solutions that do not currently exist in the Army inventory, and then transitions successes to Army Materiel Command (AMC) for sustainment and in appropriate cases back to the Army Acquisition community as a Program of Record, for future life-cycle management. Additionally, the REF facilitates the early deployment of Army-managed solutions to meet emerging requirements. The REF bridges the gap between the lengthy acquisition process and immediate equipping needs. We pursue tangible solutions that can be equipped within a goal of 90 days. REF focuses on finding effective game-changing capabilities to increase Soldier effectiveness, protection and lethality in any operational environment. The REF process provides the mechanism to respond rapidly to an adaptive enemy who changes in days and months, not years. The REF Teams deployed in theater work with Combatant Commanders (COCOMs) to understand their urgent needs, for which the REF acquisition capability may identify, procure and deliver solutions to the deployed units. A key element of this process is fiscal flexibility, permitting the REF to allocate funds against emerging threats and requirements in the year of fiscal execution. The REF works directly with Operational Commanders at Brigade and below to find solutions to identified equipping requirements. These solutions may result in procurement of new or existing military/commercial materiel equipment, or accelerated development of a Future Force materiel solution for insertion into the current force now. The REF key tasks are: - Be responsive to tactical unit commanders engage Brigade Combat Team/Brigade Commanders (BCT/BDE CDRs)early and often - Bridge specific Operational Needs Statement/Joint Urgent Operational Needs Statement (ONS/JUONS)Gaps meet urgent needs - In coordination with Asymmetric Warfare Group (AWG)develop materiel solutions to counter Asymmetric Threats - Ensure adequate training and sustainment are provided with every capability - Cultivate and rapidly insert emerging technologies into Soldiers hands - Conduct operational assessments to provide useful operator feedback to the Army - Transition effective projects through Capability Development for Rapid Transition (CDRT) to support long-term sustainment											

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Army		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603747A: <i>Soldier Support and Survivability</i>	PROJECT C08: <i>RAPID EQUIPPING FORCE</i>
- Be aggressive and push the acquisition envelope, but operate within the law - Integrate with existing Army organizations and systems to enable them to recognize and solve problems for tactical units The REF Integrated Priority List (RIPL) (Top 11 Priorities driven by input from Deployed Units) drives all REF efforts. The priorities with metrics are shown below: 1.Dismounted Improvised Explosive Device (IED) Defeat Measures (Requirements 34; Projects 57) 2.Dismounted Support Operations (Requirements 36; Projects 44) 3.Intelligence Surveillance and Reconnaissance (ISR) Shortfalls in Environmentally Inhospitable Operational Environments(OEs) (high wind/high altitude, sewers, tunnels, etc.) (Requirements 93; Projects 97) 4.Small Combat Outpost (COP)/Patrol Base Force Protection and Village Support Operations (Requirements 82; Projects 97) 5.Dismounted Blue Force Tracking and Mission Command (Requirements 18; Projects 20) 6.Counter Ambush (precision (Small Arms Fire (SAF) and Rocket Propelled Grenade (RPG) (Requirements 33; Projects 36) 7.Non-Lethal Messaging (Requirements 9; Projects 9) 8.Advanced Escalation of Force Equipment (Requirements 22; Projects 19) 9.Entry control point operations and Vehicle Search Operations (Requirements 13; Projects 19) 10.Route Clearance Support for non Combined Joint Task Force (CJTF) Paladin/Engineer Units (Requirements 1; Projects 1) 11.Other (Requirements 129; Projects 79) Additional areas of focus in this priority include reducing energy dependence in small tactical units and understanding the causes of Traumatic Brain Injury (TBI) The REF FY13 RDT&E Request of \$5.994 million (base) \$19.860 million (OCO) integrates, coordinates, deploys and provides urgent material capabilities to deployed and pre-deploying units in support of Joint and Army Forces Commanders to enhance the combat effectiveness of the operating force and enable the defeat of asymmetric threats. The emphasis for RDT&E funding is on Testing and Evaluation that supports projects in the areas of Force Protection, IED Detection and Defeat, enhanced ISR capabilities, Tactical Command, Control and Communication tools. RDT&E funding also provides the REF the flexibility to invest in near-term, innovative solutions. RDT&E funds are necessary in the vast majority of all REF projects. REF uses RDT&E funds to work with industry and Other Governmental Agencies (OGAs) in order to further develop high (>6) Technology Readiness Level (TRL) or advanced technologies that often only need small amounts of funding in order to help them achieve a maturity level that is suitable to solve a Warfighter problem with low investments for high payoffs. REF requires RDT&E funds to integrate several different Commercial Off The Shelf/Government Off The Shelf (COTS/GOTS) technologies into one capability that solves the tougher and more complex problems. REF uses RDT&E funds to conduct demonstrations and tests to validate technology solutions. REF requires RDT&E funds in order to modify existing technologies that were developed for one purpose but now may be suitable to solve another problem. REF Expeditionary Labs use RDT&E funds to develop and adapt technologies that meet immediate requirements forward in the theaters of operation with the active assistance of the Warfighter in the solution development process. REF requires RDT&E funds to test technologies in order to ensure suitability and safety before equipping the Warfighter - Any modified COTS/GOTS item has to be tested. The Asymmetric Warfare Group (AWG) integrates, coordinates, deploys and provides trained and ready forces in support of Joint and Army Forces Commanders' to enhance the combat effectiveness of the operating force and enable the defeat of asymmetric threats. The AWG observes, collects, develops, validates, and disseminates emerging tactics, techniques, and procedures (TTPs) to supported units. AWG provides Train-the-Trainer for countering asymmetric threats, to include		

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Army			DATE: February 2012				
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)		R-1 ITEM NOMENCLATURE PE 0603747A: Soldier Support and Survivability	PROJECT C08: RAPID EQUIPPING FORCE				
Improvised Explosive Devices, suicide bombers and bioweapons. AWG identifies and coordinates the fielding of rapid prototyping and/or Commercial Off-The-Shelf (COTS) solutions to counter asymmetrical threats. By providing the tools, expertise, and experience necessary to improve and quicken a units' reaction to rapidly changing TTPs, the AWG supports the rapid targeting and target execution of asymmetric warfare threats. The AWG also provides service procedures for identifying and disseminating lessons learned in order to support the need for rapid adaptation. Additionally, the AWG provides service acquisition and develops fielding procedures in support of Commanders' requirements for new technologies and materiel solutions for Asymmetric threa							
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Rapid Equipping Force			22.762	10.000	6.059	19.860	25.919
Articles:			0	0			
Description: Funding is provided for the following effort							
FY 2011 Accomplishments: The REF bridges the gap between the Army acquisition process and warfighter immediate needs. The REFs intent is to provide urgent capabilities to US Army Forces across all Combatant Commands (COCOMS), harnessing current and emerging technologies that improve operational effectiveness focusing on commercially available solutions not in the Army inventory. The requirements and budgetary efforts are focused on the REF Integrated Priority List (RIPL) and includes defeating Improvised Explosive Devices that are designed to kill or injure dismounted Soldiers, providing dismounted Soldiers the tools they need to operate independently of their vehicles and bases for extended periods, providing improved force protection for small, temporary outposts, reducing energy dependence in small, tactical units, and understanding the causes of Traumatic Brain Injury (TBI). As of Sep 30, 2011, the REF is managing 470 requirements and 478 projects in support of immediate warfighter needs. Funding includes \$11Million Rapid Acquisition Authority from the Department of Defense.							
FY 2012 Plans: Rapid Equipping Force (REF) personnel reviewed Army Senior Leadership guidance and estimate that the current level of effort in FY2011 will continue despite the draw down of forces in Operation New Dawn (OND). The FY2011 level of effort will continue until at least FY2014 due to emerging and increasing requirements associated with supporting immediate warfighter needs in support of Operation Enduring Freedom. The level of effort may increase as the REF continues to build partnerships that will provide urgent capabilities to US Army Forces across all COCOMS.							
FY 2013 Base Plans: Rapid Equipping Force (REF) personnel reviewed Army Senior Leadership guidance and estimate that the current level of effort in FY2011 will continue despite the drawdown of forces in Operation New Dawn (OND). The FY2011 level of effort will continue until at least FY2014 due to emerging and increasing requirements							

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Army							DATE: February 2012				
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)			R-1 ITEM NOMENCLATURE PE 0603747A: Soldier Support and Survivability			PROJECT C08: RAPID EQUIPPING FORCE					
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
associated with supporting immediate warfighter needs in support of Operation Enduring Freedom. The level of effort may increase as the REF continues to build partnerships that will provide urgent capabilities to US Army Forces across all COCOMS.											
FY 2013 OCO Plans: Rapid Equipping Force (REF) personnel reviewed Army Senior Leadership guidance and estimate that the current level of effort in FY2011 will continue despite the draw down of forces in Operation New Dawn (OND). The FY2011 level of effort will continue until at least 2014 due to emerging and increasing requirements associated with supporting immediate warfighter needs in support of Operation Enduring Freedom. The level of effort may increase as the REF continues to build partnerships that will provide urgent capabilities to US Army Forces across all COCOMS.											
Accomplishments/Planned Programs Subtotals							22.762	10.000	6.059	19.860	25.919
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• M08101: Other Procurement Army	71.400	26.923	5.078	98.167	103.245		4.800	4.300	4.400	Continuing	Continuing
• OMA: Operations and Maintenance, Army	161.722	137.400	7.112	120.800	127.912		7.442	7.722	7.778	Continuing	Continuing
D. Acquisition Strategy											
The REF rapidly provides urgent capabilities to US Army Forces employed globally by harnessing current and emerging technologies in order to improve operational effectiveness. The REF focus is on rapidly placing game-changing capabilities into Soldiers' hands. This mission is accomplished in one of two ways: rapidly adapting COTS and GOTS equipment to meet operational needs, and; developing emerging deployable capability via interaction with research and development organizations and academia. All capabilities are safety tested prior to insertion into operational environments. Training and sustainment is provided for every capability until it is transitioned to an approved program of record or terminated through the CDRT process. Operational assessments are conducted to provide feedback in support of Army fielding decisions. REF capabilities routinely serve to bridge specific ONS and JUONS gaps to meet urgent requirements.											
E. Performance Metrics											
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Army										DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603747A: Soldier Support and Survivability				PROJECT C08: RAPID EQUIPPING FORCE					
Product Development (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Dismounted IED Defeat Measures-Duraplex Antenna-JEIDDO Effort	SS/TBD	Various:Various	-	10.000		0.799		0.400		1.199	Continuing	Continuing	Continuing
Dismounted Support Operations	SS/Various	Various:Various	-	-		0.799		4.000		4.799	Continuing	Continuing	Continuing
ISR Shortfalls in Environmentally Inhospitable OE's	SS/Various	Various:Various	-	-		0.799		1.000		1.799	Continuing	Continuing	Continuing
Small COP / Patrol Base Force Protection and Village Support Operations	SS/Various	Various:Various	-	-		0.799		4.000		4.799	Continuing	Continuing	Continuing
Other-REF RIPL Priorities (5-11)	SS/Various	Various:Various	-	-		0.798		10.460		11.258	Continuing	Continuing	0.000
Base: Various Projects-Protect the Force in Counter Insurgency	SS/TBD	TBD:TBD	11.841	-		-		-		-	0.000	11.841	0.000
Base: Various Projects-Enhance Intelligence Surveillance Recon	SS/TBD	TBD:TBD	9.009	-		-		-		-	0.000	9.009	0.000
Base: Various Projects-Logistics/Medical in Counterinsurgency Ops	SS/Various	TBD:TBD	1.639	-		-		-		-	0.000	1.639	0.000
Base: Various Projects-Timeliness of Analysis and Information Dissemination	SS/Various	TBD:TBD	6.961	-		-		-		-	0.000	6.961	0.000
Congressional Add-Squad Mission Support System (SMSS)	SS/Various	TBD:TBD	1.600	-		-		-		-	0.000	1.600	0.000
SSTR/Economic Assumptions/FFRDC and SBIR	SS/Various	TBD:TBD	1.090	-		-		-		-	0.000	1.090	0.000
OCO: Rapid Equipping Force	SS/Various	TBD:TBD	19.190	-		-		-		-	0.000	19.190	0.000
Subtotal			51.330	10.000		3.994		19.860		23.854			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Army											DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603747A: <i>Soldier Support and Survivability</i>				PROJECT C08: <i>RAPID EQUIPPING FORCE</i>					
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
ATEC (REF Integrated Priority List 1-11)	TBD	Various:Various	7.779	-		2.065		-		2.065	Continuing	Continuing	Continuing
Subtotal			7.779	-		2.065		-		2.065			
			Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			59.109	10.000		6.059		19.860		25.919			
Remarks													

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Army								DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603747A: <i>Soldier Support and Survivability</i>				PROJECT C09: <i>SOLDIER SUPPORT EQUIPMENT - AD</i>			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
C09: <i>SOLDIER SUPPORT EQUIPMENT - AD</i>	48.000	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification
 This was a congressional add. we are not showing R-Form

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Congressional Add Articles: Description: Congressional Add FY 2011 Accomplishments: Congressional add - R-Form turned off	48.000 0	-	-	-	-
Accomplishments/Planned Programs Subtotals	48.000	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)
 N/A

D. Acquisition Strategy
 N/A

E. Performance Metrics
 Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.