

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

February 2004

## BUDGET ACTIVITY

### 4 - Advanced Component Development and Prototypes

## PE NUMBER AND TITLE

0603747A - Soldier Support and Survivability

COST (In Thousands)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	19664	13833	13810	11705	11013	13144	13392	Continuing	Continuing
610 FOOD ADV DEVELOPMENT	3509	3729	4017	3402	2681	3591	3655	Continuing	Continuing
669 CLOTHING AND EQUIPMENT	4567	8766	9594	8105	8134	9355	9540	Continuing	Continuing
C09 SOLDIER SUPPORT EQUIPMENT - AD	11588	1338	199	198	198	198	197	Continuing	Continuing

**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. The program element supports the development of personnel parachutes to improve safety and efficiency of airborne operations; also, the component development and prototyping of joint service food and combat feeding equipment designed to reduce logistics burden.

This program supports the Current to Future transition path of the Transformation Campaign Plan (TCP).

<b>B. Program Change Summary</b>	FY 2003	FY 2004	FY 2005
Previous President's Budget (FY 2004)	19558	13987	12213
Current Budget (FY 2005 PB)	19664	13833	13810
Total Adjustments	106	-154	1597
Congressional program reductions			
Congressional rescissions			
Congressional increases			
Reprogrammings	106	-154	
SBIR/STTR Transfer			
Adjustments to Budget Years			1597

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)		February 2004
BUDGET ACTIVITY <b>4 - Advanced Component Development and Prototypes</b>		PE NUMBER AND TITLE <b>0603747A - Soldier Support and Survivability</b>
<p>HQDA realigned funding to Program Element (PE) 0603804A (K39)</p>		

# ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)

February 2004

BUDGET ACTIVITY

**4 - Advanced Component Development and Prototypes**

PE NUMBER AND TITLE

**0603747A - Soldier Support and Survivability**

PROJECT

**610**

COST (In Thousands)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
610 FOOD ADV DEVELOPMENT	3509	3729	4017	3402	2681	3591	3655	Continuing	Continuing

**A. Mission Description and Budget Item Justification:** This project provides for the 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 Food and Nutrition Research and Engineering Board as part of the Joint Service Food Program. This project develops critical enablers that support the Army's Future Force Capabilities: Joint Expeditionary Mindset by maintaining readiness through fielding and integrating new equipment, that enhances the field soldier's well-being and providing soldier usable equipment, and by reducing sustainment requirements, related Combat Support/Combat Service Support (CS/CSS) demands on lift, combat zone footprint, and costs for logistical support.

This project supports the Stryker Brigade Combat Team (SBCT) and Future Capabilities for projecting and sustaining Joint Expeditionary Forces.

<b>Accomplishments/Planned Program</b>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>
FY 03: Procured and tested flexible Insulated Food Containers (IFCs), plastic insert pans for IFCs, disposable liners and new non-stick coatings are improvements to the field feeding system, reported results which transitioned to services where applicable.	41	0	0
FY 03: Continued improvement efforts to increase variety, enhance acceptability, increase consumption and improve nutritional intake to maintain peak performance on the battlefield. Conducted comprehensive field evaluations of the Unitized Group Ration (UGR) Heat and Serve (H&S) and UGR A. Accelerated development and transition of the UGR B for the Marine Corps. Developed and transitioned short order complement to the UGR-A for OCONUS use. FY 04-05: Continue to improve fielded group operational rations to increase variety, enhance acceptability, increase consumption and improve nutritional intake to maintain peak performance on the battlefield. Integrate state-of-the-art packaging technologies and other Science and Technology (S&T) transitions into fielded group rations. Develop optimized user labeling for the UGR H&S. Initiate development of UGR H&S Surge Procurement database.	679	766	917

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)		February 2004		
BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes		PE NUMBER AND TITLE 0603747A - Soldier Support and Survivability		PROJECT 610
Accomplishments/Planned Program (continued)		FY 2003	FY 2004	FY 2005
FY 03: Continued efforts to investigate the practicality and field suitability of converting from ten cylindrical cans to Institutional Sized Pouches (ISPs) for group-serving rations, in particular as a military surge option. Obtained additional prototype pouch materials and ISP product samples and continued testing. Identified optimal pouch construction for maximized military durability. FY 04: Complete in-house testing of ISP product and packaging (material and assembly configuration). Conduct field testing of ISPs to ensure compatibility with military food service equipment. Based on performance, cost and commercial availability, prepare a recommendation for military procurement (e.g. peacetime and/or surge option) and transition to procurement.		151	284	0
FY 03: Completed field test of new Meal Ready to Eat (MRE) entrees and components. Completed industry evaluation of Health Hazard Assessment and control points for shelf stable sandwich. Completed operational ration accelerated storage evaluations and continued improvement of individual rations to improve quality and warfighter acceptability. FY 04-05: Continue improvements of individual and assault rations. Conduct field evaluations to evaluate advances in food processing and packaging technologies to improve quality and warfighter acceptability. Conduct advanced development of new brick packaging and easy open peelable seal for meal, cold weather/long range patrol ration with focus on reducing Operation and Support (O&S) costs. Conduct advanced development of nutrient supplementation fortification for operational rations.		953	864	1143
FY 03: Continued storage studies and determined correlation and validation protocols for accelerated rations storage to reduce cost and ensure that operational requirements are met. FY 05: Continue storage studies of stored items and develop predictive protocols for accelerated storage of rations and transition recommended changes to procurement documents. Initiate efforts to provide Veterinary Command (VETCOM) storage guidelines that correlate commercial use-by dates with Unitized Group Ration (UGR) shelf life requirements and develop a predictive model using accelerated storage data.		202	0	213
FY 03: Completed fabrication of two 8x8x10 refrigerated containers for the Marine Corps and conducted development testing to verify technical requirements. Modified containers as a result of tests and transition into System Development and Demonstration (SDD).		253	0	0
FY 03: Conducted Milestone B decision, finalized the Request For Proposals (RFP), and conducted technical evaluation of contractor proposals for award of a combined Research and Development (R&D) and production contract for the design and fabrication of a prototype Multi-Temperature Refrigerated Container (MTRC).		394	0	0
FY 04: Complete development, fabricate prototypes, and conduct contractor testing of the prototype Multi-Temperature Refrigerated Container (MTRC).		0	300	0

# ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)

February 2004

## BUDGET ACTIVITY

### 4 - Advanced Component Development and Prototypes

## PE NUMBER AND TITLE

0603747A - Soldier Support and Survivability

## PROJECT

610

Accomplishments/Planned Program (continued)	FY 2003	FY 2004	FY 2005
FY 03: Designed and fabricated a Single Pallet Expeditionary Kitchen (SPEK) which uses commercial food service equipment. Conducted technical and user tests, prepared technical data package for transition to the Air Force.	173	0	0
FY 05: Conduct developmental and operational testing and obtain a production decision on the Multi-Temperature Refrigerated Container.	0	0	360
Completed field evaluation of biocide agents and sanitizing wipes for enhanced field feeding sanitation.	122	0	0
FY 04: Conduct technical testing and prepare performance specification for the advanced design refrigeration 1200 cubic foot for the Air Force. Transition to procurement.	0	203	0
Obtain Milestone B. Prepare and release performance specification and RFP for the development of the Battlefield Kitchen.	0	0	134
FY 03: Designed and procured prototype shipboard freezer space to accommodate the transition to advanced foods and support shortages in mission endurance loading requirements, using modular technology. FY 04: Install and test the Shipboard Modular Refrigerator on an aircraft carrier selected by the Navy. Prepare specification for use in Navy procurement.	183	177	0
FY 03: Designed and built a sanitation steam heater using a high temperature cast alloy fire chamber to provide steam, hot water for beverages and warm water for hand wash. Conducted technical and user tests. FY 04: Prepare technical data package and transition to the Air Force for procurement.	176	188	0
FY 05: Complete development of final package configuration for compressed meal technology. Complete producibility and field testing of compressed meals and transition technology to procurement.	0	0	378
FY 04: Initiate final design changes for Remote Unit Self-Heating Meal (RUSHM) and conduct pre-production testing to validate commercial producibility. Initiate final confirmatory field tests validating utility for remote site feeding. FY05: Complete producibility demonstrations and field testing of RUSHM and transition performance-based contract requirements to procurement.	0	398	380
FY 04: Conduct Developmental/Operational testing of prototype storage/dosing system(s) for fresh fruits and vegetables.	0	188	0
FY 03: Completed evaluation of nanocomposite-enhanced barrier layer for current polymeric tray design, monolayer tray design and other enhancements to optimize polymeric tray producibility, cost, shelf life, utility in the field and survivability in frozen environments. Transitioned incremental poly tray design improvements and optimized seal quality criteria into the item performance specification for greater overall tray utility and producibility. Leveraged Defense Logistics Agency Manufacturing Technology (DLA MANTECH) efforts to optimize poly tray producibility by providing technical support to tray flange coining, ultrasonic sealing and non-destructive test method projects.	182	0	0

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)							February 2004					
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT				
4 - Advanced Component Development and Prototypes				0603747A - Soldier Support and Survivability				610				
<b>Accomplishments/Planned Program (continued)</b>							FY 2003	FY 2004	FY 2005			
FY 04: Review ice makers presently used on Navy ships. Procure and evaluate commercial icemakers, down select and test on sea vessels. Prepare specification, and list acceptable products in the Navy Food Service Catalog.							0	252	0			
FY 05: Award contract for the development of lightweight sanitation components for the field food sanitation system.							0	0	217			
FY 05: Initiate development of an integrated power co-generator for mobile field kitchens to reduce operating and support costs							0	0	275			
Small Business Innovative Research/Small Business Technology Transfer (SBIR/STTR)							0	109	0			
Totals							3509	3729	4017			
<b>B. Other Program Funding Summary</b>				FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
RDTE, 0604713.548, Military Subsistence System				1711	1964	2034	2450	2923	2441	2439	Continuing	Continuing
OPA 3, M65801, Refrigerated Containers				0	0	5884	9216	9169	9444	9761	Continuing	Continuing
<b>C. Acquisition Strategy:</b> Project development transition to System Development & Demonstration into procurement.												

ARMY RDT&E COST ANALYSIS(R3)									February 2004			
BUDGET ACTIVITY <b>4 - Advanced Component Development and Prototypes</b>					PE NUMBER AND TITLE <b>0603747A - Soldier Support and Survivability</b>					PROJECT <b>610</b>		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Joint Service Food/Combat Feeding Equipment	In-House	SBCCOM, Natick, MA	18940	1490	1-4Q	1530	1-4Q	1515	1-4Q	Continue	23475	Continue
b . Joint Service Food/Combat Feeding Equipment	Contracts	Various	7353	1373	1-3Q	1491	1-4Q	1474	1-4Q	Continue	11691	Continue
Subtotal:			26293	2863		3021		2989		Continue	35166	Continue
II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:			0	0		0		0		0	0	0

ARMY RDT&E COST ANALYSIS(R3)									February 2004			
BUDGET ACTIVITY <b>4 - Advanced Component Development and Prototypes</b>					PE NUMBER AND TITLE <b>0603747A - Soldier Support and Survivability</b>					PROJECT <b>610</b>		
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Joint Service Food/Combat Feeding Equipment	MIPR	DTC, Maryland & AEC, Virginia	3302	565	1-3Q	579	1-4Q	665	1-4Q	Continue	5111	Continue
Subtotal:			3302	565		579		665		Continue	5111	Continue
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Project Ofc Management	In-House	SBCCOM, Natick, MA	1494	81	1-4Q	129	1-4Q	363	1-4Q	Continue	2067	Continue
Subtotal:			1494	81		129		363		Continue	2067	Continue
Project Total Cost:			31089	3509		3729		4017		Continue	42344	Continue

# Schedule Profile (R4 Exhibit)

February 2004

## BUDGET ACTIVITY

4 - Advanced Component Development and Prototypes

## PE NUMBER AND TITLE

0603747A - Soldier Support and Survivability

## PROJECT

610

Event Name	FY 03				FY 04				FY 05				FY 06				FY 07				FY 08				FY 09				FY 10			
	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) Field Test MRE enhancements, (2) , (3) , (4) , (5) , (6) , (7)			▲1				▲2				▲3				▲4				▲5			▲6				▲7						
(8) Field Test on UGR Enhancements, (9) , (10) , (11) , (12) , (13) , (14)			▲8				▲9				▲10				▲11				▲12			▲13				▲14						
(15) Field test of Water, Heater, Individual rations, (16) Field Eval of Sanitizing wipes, (17) Test SMR with Navy			▲15	▲16			▲17																									
(18) Producibility and Field test of Compressed Meal											▲18																					
(19) Pre-Production testing of RUSHM, (20) Field test of RUSHM, (21) Test prototype design of MFSS for DDX, (22) test MFSS aboard Navy ship							▲19				▲20						▲21			▲22												
(23) Test & Evaluate Multi-Ration Heater/Tray Ration Heater enhancement, (24) Field test RFID technology																					▲23	▲24										
(25) MS B for MTRCS, (26) BK, (27) JSMAK, (28) MS C for MTRCS, (29) BK			▲25								▲26	▲28								▲27		▲29										
DT/OT on MTRCS, DT/OT on BK																																

Schedule Detail (R4a Exhibit)						February 2004	
BUDGET ACTIVITY <b>4 - Advanced Component Development and Prototypes</b>			PE NUMBER AND TITLE <b>0603747A - Soldier Support and Survivability</b>			PROJECT <b>610</b>	
<u><b>Schedule Detail</b></u>	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Conduct field test on Meals Ready to Eat (MRE) enhancements.	3Q	3Q	3Q	3Q	3Q	3Q	3Q
Transition new Individual rations to DSCP and Services.	4Q	4Q	4Q	4Q	4Q	4Q	4Q
Conduct field test on UGR enhancements.	3Q	3Q	3Q	3Q	3Q	3Q	3Q
Transition new Group Rations to DSCP and services.	4Q	4Q	2Q	2Q	2Q	2Q	2Q
Conduct field test of Water, Heater, Individual rations.	3Q						
Transition Technical Data Package (TDP) of Water Heater to DSCP.	4Q						
Complete fabrication and testing of 8x8x10 Refrigerated Container.	3Q						
Develop design for SPEK and complete technical tests.	3-4Q						
Conduct field evaluation of sanitizing wipes.	4Q						
Design and procure additional Shipboard Modular Refrigerator (SMR).	3Q						
Test SMR with Navy.		3Q					
Draft specification of SMR for use in Navy procurement.		3Q					
Fabricate prototype sanitation steam heater.	3Q						
Prepare TDP for sanitation steam heater and transition to Air Force.		4Q					
Complete producibility and field test of Compressed Meal.			2Q				
Conduct pre-production testing of Remote Unit Self Heating Meal (RUSHM).		2Q					
Conduct field test of RUSHM and transition to procurement.			2Q				
Procure and test commercial items for sea vessels.		3Q					
Test prototype design of Modular Food system for DDX.					2Q		
Test Modular Food Service System aboard Navy ship.						1Q	

Schedule Detail (R4a Exhibit)						February 2004			
BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes			PE NUMBER AND TITLE 0603747A - Soldier Support and Survivability				PROJECT 610		
<u>Schedule Detail (continued)</u>			<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Transition the Modular Food Service System for DDX to Navy.								4Q	
Test new equipment and systems for shipboard and submarine feeding.						3Q	3Q	3Q	
Transition new equipment and systems to Navy for shipboard and submarine feeding.							3Q	3Q	3Q
Prepare TDP and transition Surface Scanning Biosensor to VETCOM.						4Q			
Transition performance contract requirements for Tamper Evident Packaging to DSCP and services.								4Q	
Test and evaluate Multi-Ration Heater/Tray Ration Heater enhancements.								2Q	
Conduct field tests on Radio Frequency Identification (RFID) technology.								3Q	
Transition heat-driven refrigerator to advanced development.						1Q			
Transition component shelf life guidelines correlated to commercial use by dates to VETCOM.						4Q			
Transition the Compressed Meals to DSCP for procurement.						4Q			
Transition Lightweight Insulated Food Containers to procurement.							4Q		
Integrate Hydrogen Management System to RUSHM.						1Q			
Complete demonstrations of Modular Individual Water Heater and transition to MEP/SEP.						4Q			
Complete Technical Demonstration (TD) of Flameless Combustion.									4Q
Complete TD of Thermoelectric Water Heater Chiller and transition to Future Combat Vehicle (FCV).							1Q		
Complete technical demonstration of Durable Nonstick Coatings.						4Q			

Schedule Detail (R4a Exhibit)						February 2004	
BUDGET ACTIVITY			PE NUMBER AND TITLE				PROJECT
4 - Advanced Component Development and Prototypes			0603747A - Soldier Support and Survivability				610
<u>Schedule Detail (continued)</u>	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Transition Beverage Chiller to Advanced Development.						1Q	
Complete technical demonstration of Solar Powered Refrigerated Container.							4Q
Conduct Milestone B for Battlefield Kitchen (BK).			1Q				
Award contract for design and fabrication of BK.				1Q			
Initiate DT of BK.					2Q		
Complete DT of BK.					4Q		
Initiate OT of BK.						1Q	
Complete OT for BK.						2Q	
Conduct Milestone C for BK.						4Q	
Conduct Milestone B for Joint Service Modular Kitchen System (JSMAK).						1Q	
Conduct Milestone B for Multi Temp Refrigerated Container System (MTRCS).	2Q						
Conduct DT and OT on the MTRCS.			1-2Q				
Complete Milestone C for the MTRCS.			3Q				

# ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)

February 2004

BUDGET ACTIVITY

**4 - Advanced Component Development and Prototypes**

PE NUMBER AND TITLE

**0603747A - Soldier Support and Survivability**

PROJECT

**669**

COST (In Thousands)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
669 CLOTHING AND EQUIPMENT	4567	8766	9594	8105	8134	9355	9540	Continuing	Continuing

**A. Mission Description and Budget Item Justification:** This project develops state-of-the-art technology to improve tactical and non-tactical clothing and individual equipment to enhance the lethality, survivability, sustainability, and mobility of the individual soldier. This project supports the Current to Future transition path of the Army's Transformation Campaign Plan (TCP).

<b>Accomplishments/Planned Program</b>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>
Advanced Combat Uniform (ACU)-Completed initial testing and commenced developmental contract.	2126	3173	3090
Modular Boot System-Obtained concept items and initiated technical testing. Prototype purchase planned for extended user evaluation.	298	786	1080
Improved Small Arms Protective Insert (SAPI)-Investigate lighter, more producible ceramic materials for increased ballistic protection.	576	2080	1270
Individual Water Purification/Generation System-Conducted market survey and evaluated the availability of technology to allow individual soldiers to purify/generate water.	124	0	0
NBC Compatible Drink System-Achieve Milestone A/B, solicit sample items from industry, and initiate technical testing.	0	111	1036
Military Eye Protection System (MEPS)-Completed independent operational testing of MEPS non-laser configurations.	1331	0	0
Glove Enhancement Initiative-Conduct technical testing, and provide engineering support.	112	390	254
Combat Vehicle Crewman (CVG) NVG Mount-Prototype development.	0	844	0
Cold/Wet Trouser Parka (CWTP)-Engineering support, technical testing and procure test items for side by side comparison.	0	596	0
Light Duty Utility Glove-Conduct DT/OT testing.	0	256	0
Silk Weight Environmental Protection-Type classify and establish logistic support.	0	280	0
Ballistic Protective Technology Advancements-Investigate lighter, less expensive, superior performance eyewear and footwear.	0	0	2731
Encapsulated Chemical Protective Ensemble Enhancements-Conduct Certification and standards qualification experiments.	0	0	133
Small Business Innovative Research/Small Business Technology Transfer Programs.	0	250	0
<b>Totals</b>	<b>4567</b>	<b>8766</b>	<b>9594</b>

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)</b>	<b>February 2004</b>
--	----------------------

BUDGET ACTIVITY <b>4 - Advanced Component Development and Prototypes</b>	PE NUMBER AND TITLE <b>0603747A - Soldier Support and Survivability</b>	PROJECT <b>669</b>
---	--	-----------------------

<b>B. Other Program Funding Summary</b>	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
RDTE, 0604713.L40, Clothing and Equipment	4391	3068	5347	7940	8927	9154	9073	Continuing	Continuing
OMA, 121017, Central Funding and Fielding	419923	88778	141770	136115	161051	159302	115700	Continuing	Continuing

**C. Acquisition Strategy:**Programs will transition to System Development and Demonstration (SDD).

ARMY RDT&E COST ANALYSIS(R3)									February 2004			
BUDGET ACTIVITY <b>4 - Advanced Component Development and Prototypes</b>					PE NUMBER AND TITLE <b>0603747A - Soldier Support and Survivability</b>					PROJECT <b>669</b>		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Clothing & Individual Equipment	MIPR	SBCCOM, Natick, MA	2278	1578	2Q	3089	2Q	4607	2Q	Continue	11552	Continue
b . Clothing & Individual Equipment	Contracts	Various	6402	1275	2Q	2654	2Q	2622	2Q	Continue	12953	Continue
Subtotal:			8680	2853		5743		7229		Continue	24505	Continue
II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Misc Support	MIPR	LOGSA, AL	150	50	2Q	133	2Q	200	2Q	Continue	533	Continue
b . Misc Support	Contract	Various	0	200	2Q	550	2Q	600	2Q	0	1350	0
Subtotal:			150	250		683		800		Continue	1883	Continue

ARMY RDT&E COST ANALYSIS(R3)									February 2004			
BUDGET ACTIVITY <b>4 - Advanced Component Development and Prototypes</b>					PE NUMBER AND TITLE <b>0603747A - Soldier Support and Survivability</b>					PROJECT <b>669</b>		
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Various	MIPR	ATEC, VA	1048	564	2Q	1415	2Q	615	2Q	Continue	3642	Continue
Subtotal:			1048	564		1415		615		Continue	3642	Continue
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . In-House Support		PM-CIE Soldier Equipment, Ft Belvior VA	800	900	1-4Q	925	1-4Q	950	1-4Q	0	3575	0
Subtotal:			800	900		925		950		0	3575	0
Project Total Cost:			10678	4567		8766		9594		Continue	33605	Continue

Schedule Profile (R4 Exhibit)																				February 2004														
BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes												PE NUMBER AND TITLE 0603747A - Soldier Support and Survivability																PROJECT 669						
Event Name		FY 03				FY 04				FY 05				FY 06				FY 07				FY 08				FY 09				FY 10				
		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) Advanced Combat Uniform											1 MS-C								2 MS-C															
(2) Modular Combat Boot																																		

Schedule Detail (R4a Exhibit)									
-------------------------------	--	--	--	--	--	--	--	--	--

February 2004

**BUDGET ACTIVITY**  
**4 - Advanced Component Development and Prototypes**

PE NUMBER AND TITLE  
**0603747A - Soldier Support and Survivability**

PROJECT  
**669**

Schedule Detail									
-----------------	--	--	--	--	--	--	--	--	--

	FY 2003
--	---------

FY 2004

	FY 2005
--	---------

FY 2006

FY 2007

	FY 2008
--	---------

	FY 2009
--	---------

Advanced Combat Uniform MS C

	3Q

Modular Combat Boot MS C

1Q

# ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)

February 2004

BUDGET ACTIVITY

**4 - Advanced Component Development and Prototypes**

PE NUMBER AND TITLE

**0603747A - Soldier Support and Survivability**

PROJECT

**C09**

COST (In Thousands)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
C09 SOLDIER SUPPORT EQUIPMENT - AD	11588	1338	199	198	198	198	197	Continuing	Continuing

**A. Mission Description and Budget Item Justification:** This project historically supported component development and prototyping of critical Soldier support systems such as shelter systems, showers, latrines, heaters, environmental control units, and other combat service support equipment that will improve unit sustainability and combat effectiveness. This project supports advanced component development of aerial delivery systems for personnel and equipment, with emphasis on reduced incidence of injuries, improved safety and accuracy, and increased survivability of aircraft, personnel, and equipment. This project supports the Current to Future transition path of the Army's Transformation Campaign Plan (TCP).

<b>Accomplishments/Planned Program</b>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>
Prepared Milestone A decision and contract solicitation to develop initial test prototypes of Mobile Integrated Remains Collection System (MIRCS).	1221	0	0
Purchased initial developmental test items and data items for Extraction Parachute Jettison System (Heavy) EPJS(H). Awarded contracts for EPJS-H component development.	2776	0	0
Completed Market Survey for Cargo Bed Covers (CBC) Type 5 and 6.	544	0	0
Purchased data rights for Advanced Tactical Parachute System (ATPS).	1427	0	0
Procure Developmental Testing (DT) test items, conduct testing, and conduct Milestone B for ATPS Automatic Activation Device (AAD).	0	1299	0
Initiate product improvements to ATPS Operational Requirements Document (ORD) objectives not met during initial design due to technology limitation.	0	0	199
Completed Milestone B for Space Heater Convective 60K British Thermal Unit (BTU).	1000	0	0
Awarded developmental contract for Low Cost Aerial Delivery System (LCADS) components.	2000	0	0
Fabricated prototypes of Large Capacity Field Heater (LCFH) and conducted initial evaluation of operational suitability.	833	0	0
Fabricated urgent requirement of the Trailer Mounted Shelter System (TMSS) prototype. Conducted initial testing and evaluation of TMSS.	287	0	0
Completed Market Investigation and consolidated existing data to support a Milestone A Decision on the Precision Airdrop System. Conducted initial testing to evaluate integrated technologies and assess integration risks.	1500	0	0
Small business Innovative Research/Small Business Technology Transfer Programs.	0	39	0

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)</b>							<b>February 2004</b>		
BUDGET ACTIVITY <b>4 - Advanced Component Development and Prototypes</b>				PE NUMBER AND TITLE <b>0603747A - Soldier Support and Survivability</b>				PROJECT <b>C09</b>	

  

<b><u>Accomplishments/Planned Program (continued)</u></b>							FY 2003	FY 2004	FY 2005
Totals							11588	1338	199

  

<b><u>B. Other Program Funding Summary</u></b>	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
RDTE, 0604713.C40, Soldier Support	11003	2860	574	297	298	298	297	Continuing	Continuing
RDTE, 0604713.C40, Advance Tactical Parachute Delivery System (ATPS)	0	4856	14288	39644	41054	41898	43901	Continuing	Continuing

  

**C. Acquisition Strategy:** Systems will progress to System Development & Demonstration.

ARMY RDT&E COST ANALYSIS(R3)									February 2004			
BUDGET ACTIVITY <b>4 - Advanced Component Development and Prototypes</b>					PE NUMBER AND TITLE <b>0603747A - Soldier Support and Survivability</b>					PROJECT <b>C09</b>		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Soldier Support Equipment	In-House	SBCCOM (NRDEC), Natick, MA	18486	1540	1-4Q	1338	3-4Q	199		Continue	21563	0
b . Cecom - Ft Belvoir	Contracts	Various	0	537		0		0		Continue	537	0
c . Soldier Support Equipment	Contracts	Various	14886	3760	2Q	0		0		Continue	18646	0
Subtotal:			33372	5837		1338		199		Continue	40746	0
II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:			0	0		0		0		0	0	0

ARMY RDT&E COST ANALYSIS(R3)									February 2004			
BUDGET ACTIVITY <b>4 - Advanced Component Development and Prototypes</b>					PE NUMBER AND TITLE <b>0603747A - Soldier Support and Survivability</b>					PROJECT <b>C09</b>		
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Soldier Support Equipment	MIPR	DTC, MD & ATC, VA	6955	3201	1-4Q	0		0		0	10156	0
Subtotal:			6955	3201		0		0		0	10156	0
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Project Management Support	In-House	PM Force Sustainment Systems, Natick, MA	0	1200	1-4Q	0		0		0	1200	0
b . Project Management Support	In-House	PM-Soldier, Fort Belvoir, VA	3579	1350	1-4Q	0		0		0	4929	0
c . Project Management Support	In-House	SBCCOM, Natick, MA	361	0		0		0		0	361	0
Subtotal:			3940	2550		0		0		0	6490	0
Project Total Cost:			44267	11588		1338		199		Continue	57392	0

Schedule Profile (R4 Exhibit)																					February 2004											
BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes										PE NUMBER AND TITLE 0603747A - Soldier Support and Survivability															PROJECT C09							
Event Name	FY 02				FY 03				FY 04				FY 05				FY 06				FY 07				FY 08				FY 09			
	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) Completed Market Investigation for the MIRCS								1																								
(2) Purchase Initial Developmental Test Items for Extraction Parachute Jettison								2																								
(3) Conduct Milestone B for Automatic Activation Device										3																						
(4) Completed Milestone B for Space Heater Activation Device							4																									
(5) Awarded developmental Contract for Low Cost Aerial Delivery Sys Components								5																								
(6) Fabricated Prototypes and Conducted Initial Eval of Large Cap Fld Heater								6																								

<b>Schedule Detail (R4a Exhibit)</b>	<b>February 2004</b>
--------------------------------------	----------------------

PROJECT C09

#### 4 - Advanced Component Development and Prototypes

## 0603747A - Soldier Support and Survivability

**C09**

<u>Schedule Detail</u>	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Completed Market Investigation for the Mobile Integrated Remains Collection System (MIRCS).	4Q						
Purchased initial developmental test items for Extraction Parachute Jettison System (Heavy).	3Q						
Conduct Milestone B for Automatic Activation Device (AAD).		1Q					
Completed Milestone B for Space Heater Convective.	2Q						
Awarded developmental contract for Low Cost Aerial Delivery System components.	2Q						
Fabricated prototypes and conducted initial evaluation of Large Capacity Field Heater.	3Q						