

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2004

BUDGET ACTIVITY

5 - System Development and Demonstration

PE NUMBER AND TITLE

0604713A - Combat Feeding, Clothing, and Equipment

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	80989	98960	115093	130455	143786	156757	114825	Continuing	Continuing
548 MIL SUBSISTENCE SYS	1711	1964	2034	3450	2923	2441	2439	Continuing	Continuing
667 LAND WARRIOR	53949	81029	91279	104793	115729	128791	86853	Continuing	Continuing
668 SOLDIER ENHANCE PGM	9935	10039	15859	13975	15909	16073	16163	Continuing	Continuing
C40 SOLDIER SUPPORT EQUIPMENT - ED	11003	2860	574	297	298	298	297	Continuing	Continuing
L40 CLOTHING & EQUIPMENT	4391	3068	5347	7940	8927	9154	9073	Continuing	Continuing

A. Mission Description and Budget Item Justification: This program element (PE) supports System Development and Demonstration (SDD) and Non-Developmental Item (NDI) evaluation of unit/organizational equipment, clothing, individual equipment, field shelters, field service equipment, subsistence, and food service equipment that will enhance soldier efficiency, effectiveness, lethality, sustainability and survivability. The system integration of demonstrated subsystems, components, or NDI in order to reduce integration risks associated with system development and demonstration of various commodities, components, and technologies are also included in this PE. The program element also supports demonstration of engineered development models and the associated developmental and operational testing of systems, components, and commodities prior to their transition to the Production and Deployment phase to include a new generation of field service support items of soldier equipment. The Land Warrior program will produce the first fully integrated fighting system for dismounted combat soldiers. The Soldier Enhancement Program supports soldier items that will transition into production in three years or less.

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

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	FY 2003	FY 2004	FY 2005
Previous President's Budget (FY 2004)	86449	67283	66748
Current Budget (FY 2005 PB)	80989	98960	115093
Total Adjustments	-5460	31677	48345
Congressional program reductions		-941	
Congressional rescissions			
Congressional increases		32717	
Reprogrammings	-5460	-99	
SBIR/STTR Transfer			
Adjustments to Budget Years			48345

FY04 and FY05 increases support the LW-Stryker Interoperable Capability Increments (LW-SI) requirement to meet key performance parameters for Army Battle Command System (ABCS) Interoperability, as well as weight and power reduction initiatives.

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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
548 MIL SUBSISTENCE SYS	1711	1964	2034	3450	2923	2441	2439	Continuing	Continuing

A. Mission Description and Budget Item Justification: This project supports the development and demonstration and Non-Developmental Item (NDI) evaluation of combat feeding equipment to enhance soldier efficiency and survivability, and to reduce food service logistics requirements for all four services. The project supports multi-fuel, rapidly deployable field food service equipment initiatives and engineering and manufacturing development to improve equipment, enhance safety in food service, and decrease fuel and water requirements. This project develops critical enablers that support the Army's Future Force Capabilities and Joint Expeditionary Mindset by maintaining readiness through fielding and integrating new equipment, by enhancing the field soldier's well-being and providing soldier usable equipment, 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 Force Capabilities for projecting and sustaining Joint Expeditionary Forces.

Accomplishments/Planned Program

	FY 2003	FY 2004	FY 2005
FY 03: Conducted testing for cold-weather operation of the Modern Burner Unit (MBU), and initiated design for thermostatic control. Analyzed combustion by-products in the kitchen environment for design of ventilation configuration.	461	0	0
FY 03: Tested two new/advanced food service equipment items for shipboard applications. Conducted technical and user testing and listed four items in the Navy Food Service Equipment Catalog. Continued development of the stainless steel lined oven and modular ovens for submarines. Conducted New Equipment Training (NET) for the Navy Food Service Equipment. FY 04: Prepare evaluation report on labor saving equipment and food technologies for the Navy. Continue evaluation of new shipboard food service equipment such as stainless steel liner in convection oven to improve galley efficiencies, reduce costs, and improve quality of life. FY 05: Initiate programs for preservation of fresh fruit and vegetables, modernization of food service equipment and shipboard ice makers. These programs are all aimed at reduction of shipboard manpower and improving the quality of life for the sailor.	358	334	587
FY 03: Completed fabrication and conducted technical evaluations on prototype kitchen International Standardization Organization (ISO) container to be compatible with the Army's Load Handling System (LHS) without the need for additional material handling equipment.	237	0	0

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Accomplishments/Planned Program (continued)

	FY 2003	FY 2004	FY 2005
FY 03: Conducted an analysis of Single Pallet Expeditionary Kitchen (SPEK) to determine upgrades requires to prepare A-rations. Developed equipment designs for oven and griddle. FY 04-05: Fabricate and test oven and griddle, prepare final designs and conduct technical and user tests. Upgrade Technical Data Package (TDP) for procurement by the Air Force.	71	204	236
FY 03: Completed in-house technical and user testing of upgraded Tray Ration Heater System to demonstrate enhanced mobility, increased ration preparation capability and cost savings. Developed a water recycling system for the Tray Ration Heater to conserve water and reduce wastewater disposal. FY 04: Complete testing, prepare technical data package and transition to Marine Corps and other services.	249	203	0
FY 03: Conducted equipment and ration evaluation with focus on optimizing the future Mobile Kitchen Trailer (MKT) configuration and initiated development of technical data necessary for incorporating advancements in a rebuild program.	108	0	0
FY 03: Completed the design analysis and initiated the fabrication of an Advanced Design Refrigerator (ADR1200) prototype that will maximize storage capabilities and enhance transportability and thermal efficiency. FY 05: Complete the fabrication and conduct developmental and operational testing; prepare performance specification and transition to the Air Force for procurement.	227	0	81
FY 04: Incorporate cold weather operation changes for the Modern Burner Unit (MBU) into the production contract, complete testing of the thermostatic control, and fabricate, test, and transition to production, the thermostatic control and prognostic controls for the MBU.	0	293	0
FY 04: Develop configuration design, procure Non Developmental Item (NDI) components, and initiate Developmental Testing of the highly mobile Assault Kitchen for feeding the Future Force.	0	157	0
FY 04-05: Continue to develop and evaluate improvements to fielded feeding systems as required by the services for integration into existing and future systems.	0	157	161
FY 04: Conduct Developmental Testing on the 8x8x10 refrigerated ISO container, prepare Performance Specification and transition to Marine Corps for procurement.	0	150	0
FY 04: Develop revisions to the configuration and conduct user evaluation of the Containerized Kitchen (CK) to accommodate the Heavy Expanded Mobility Tactical Truck Load Handling System (HEMTT-LHS) bail bar, and revise component listing of the CK and build a prototype for evaluation to facilitate its use with the Medical Command (MEDCOM).	0	295	0
FY 05: Conduct field evaluations of reconfigured CK with the MEDCOM.	0	0	322
FY 05: Fabricate and test a high output MBU for use in the Food Sanitation Center (FSC) and initiate development of an improved skillet for fielded kitchens that use the MBU.	0	0	402

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Accomplishments/Planned Program (continued)

	FY 2003	FY 2004	FY 2005
FY 04: Complete development of technical data for use in a rebuild program that optimizes the future Mobile Kitchen Trailer (MKT) configuration.	0	114	0
FY 05: Complete Developmental and Operational Testing of the Assault Kitchen.	0	0	245
Small Business Innovative Research/Small Business Technology Transfer Programs	0	57	0
Totals	1711	1964	2034

B. Other Program Funding Summary

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
RDTE, 0603747.610, Food Adv Dev	3509	3700	3901	3445	2667	3698	3789	Continuing	Continuing
OPA3, M65803, Kitchen, Containerized, Field	11984	7233	8081	10041	9999	10001	10082	Continuing	Continuing
OPA 3, M65802, Sanitation Center, Field Feeding	9616	8669	6098	8902	10379	9001	9302	Continuing	Continuing
OPA3, M65801, Refrigerated Containers	0	0	5884	9216	9169	9444	9761	Continuing	Continuing

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

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5 - System Development and Demonstration					0604713A - Combat Feeding, Clothing, and Equipment					548			
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 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 combat feeding eq, multi-fuel and water eq	In-House	SBCCOM, NSC	9439	725	1-4Q	1086	1-4Q	935	1-4Q	Continue	12185	Continue	
b . Contracts	Various	Various	2078	242	2-4Q	395	1-4Q	345	1-4Q	Continue	3060	Continue	
c . PEO CS&CSS	In-House	PM Force Sustainment System (FSS)	0	137	1-4Q	120	1-4Q	204	1-4Q	Continue	461	Continue	
Subtotal:			11517	1104		1601		1484		Continue	15706	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	
Remarks: Not Applicable													

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5 - System Development and Demonstration					0604713A - Combat Feeding, Clothing, and Equipment					548			
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	TECOM/OEC/ATC	3492	534	2-4Q	274	1-4Q	348	1-4Q	Continue	4648	Continue	
Subtotal:			3492	534		274		348		Continue	4648	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	907	73	2-4Q	89	1-4Q	202	1-4Q	Continue	1271	Continue	
Subtotal:			907	73		89		202		Continue	1271	Continue	
Project Total Cost:			15916	1711		1964		2034		Continue	21625	Continue	

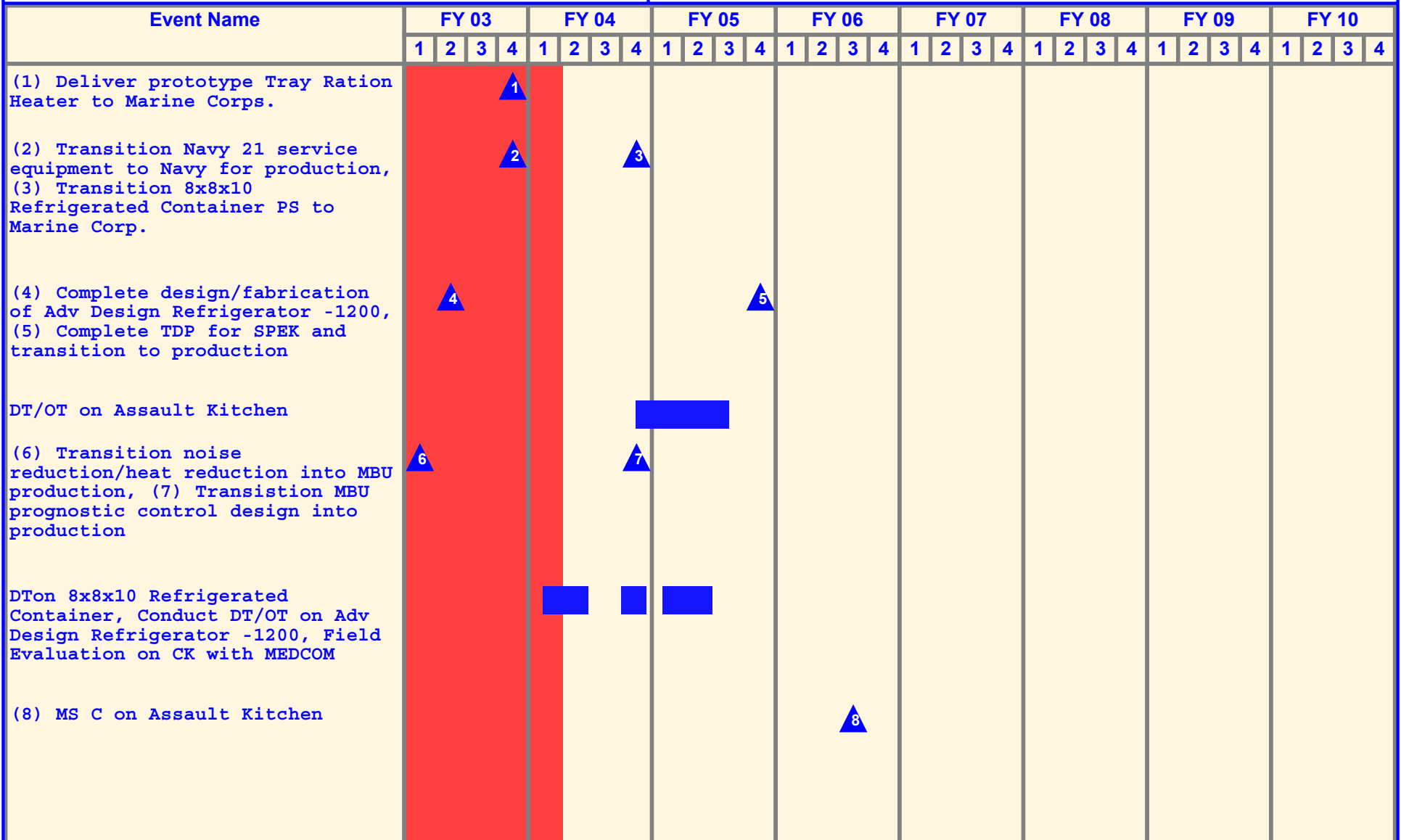
Schedule Profile (R4 Exhibit)

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Schedule Detail (R4a Exhibit)						February 2004	
BUDGET ACTIVITY 5 - System Development and Demonstration			PE NUMBER AND TITLE 0604713A - Combat Feeding, Clothing, and Equipment			PROJECT 548	
<u>Schedule Detail</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>
Deliver prototype Tray Ration Heater to Marine Corps.	4Q						
Transition Navy 21 service equipment to Navy for production.	4Q						
Complete TDP for SPEK and transition to production.			4Q				
Complete design and fabrication of Advanced Design Refrigerator - 1200 prototype	2Q						
Conduct Developmental and Operational Testing for the Advanced Design Refrigerator -1200		4Q					
Transition noise reduction and heat output changes into MBU production	1Q						
Transistion MBU prognostic control design into production.		4Q					
Conduct Containerized Kitchen (CK) field evaluation with MEDCOM.			1-2Q				
Complete CK field evaluation with MEDCOM.			2Q				
Initiate Assault Kitchen DT and OT.		4Q					
Complete Assault Kitchen DT and OT.			3Q				
Conduct Milestone C on Assault Kitchen.				3Q			
Initiate 8x8x10 Refrigerated Container Developmental Test.		1Q					
Complete 8x8x10 Refrigerated Container Developmental Test.		2Q					
Transition 8x8x10 Refrigerated Container performance specification to Marine Corp.		4Q					

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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
667 LAND WARRIOR	53949	81029	91279	104793	115729	128791	86853	Continuing	Continuing

A. Mission Description and Budget Item Justification: Currently in the system development and demonstration phase, Land Warrior (LW) establishes the Infantryman as the Army's unique weapons platform. It is a first generation integrated fighting system for Soldiers that provides combat overmatch for the five types of Infantry (air assault, airborne, light, mechanized, and ranger), and Army Special Operations Forces in the close and personal fight. Land Warrior provides enhanced capabilities to the Infantryman. The LW-Initial Capability (LW-IC), Block I was intended to provide initial capability to the field. The LW-IC (Block I) system was not viable to enter Low Rate Initial Production (LRIP) in 2004, based upon lower than expected system readiness as confirmed during the Reliability Growth testing. As a result, LW-IC was ended early in FY03 and LW Stryker Interoperable (LW-SI), Block II, was begun as part of the Army Systems Acquisition Review Council (ASARC) approved program baselining activity. LW-SI (Block II) includes Stryker integration, tactical internet connectivity/interface with the Army Battle Command System, and weight/power advancements. LW-Advanced Capability (LW-AC), Block III, systems will leverage the technological advancements transitioned from the Science and Technology (S&T) community and Objective Force Warrior (OFW) Advance Technology Demonstration (ATD).

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

Accomplishments/Planned Program	FY 2003	FY 2004	FY 2005
For FY03: Fabricated Land Warrior (LW) systems that were used for Development Testing (DT) and Operational Testing (OT) for LW-IC (Block I). Conducted contractor acceptance testing to validate system functionality and integration prior to formal government testing. Provided contractor logistics support of hardware and software on test units during early fightability assessments and safety testing. In FY04/05, obtain miniaturized Global Positioning System (GPS) Selective Availability Anti-Spoofing Module (SAASM) Cards, and other government furnished equipment (GFE) items to support LW-SI (Block II) system. Funds are planned in FY04 and FY05 to support the Army Strategic Software Improvement Program.	12519	334	2227

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Accomplishments/Planned Program (continued)		FY 2003	FY 2004	FY 2005
Transition from LW-IC (Block I) to LW-SI (Block II) design. Begin LW-SI development which addresses LW to Stryker integration to meet the Key Performance Parameter (KPP) for Army Battle Command System (ABCS) interoperability with Light Digital Tactical Operations Center (TOC) and to provide on-board power recharging capability in Stryker vehicles for LW equipped Soldiers. Fabricate and conduct contractor testing on General Dynamics (GD) LW-SI systems that will be used for formal Government DT. Continue LW demonstrations to other countries to demonstrate system capability and functionality.		27917	61901	52391
In FY03 conducted DT for LW-IC (Block I). The LW-IC program stopped in FY03 and the FY04 start up of the LW-SI program requires a limited amount of Government test support activity. In FY05, conduct user fightability assessment, and obtain necessary safety releases. Conduct limited operational assessments and conduct government system assessment of operational test results. Develop detailed test plans and OT threat instrumentation to support DT and OT. Develop training program of instruction, lesson plans, and computer based training and interactive multimedia instruction. Develop range, targetry, and marksmanship tasks and training, tactics and procedures (TTP). Update and transition training package and manuals to electronic format. Develop interactive training scenarios and evaluate integrated training environment. Develop Training Aids, Devices, Simulators and Simulations (TADSS) to meet Army Vice Chief of Staff guidance.		2641	510	11800
Program management and systems engineering support for overall program efforts. Continue operation of PM Land Warrior - Fort Monmouth, and maintain appropriate activity at PM Land Warrior - Fort Bragg. Program development and execution of Memoranda of Agreement (MOAs) and support agreements with other PMs related to LW vehicle and communication integration kit activities. Conduct technical and program reviews for DA Level In Process Review (IPR), ASARC Milestone C preparations, develop, maintain, report out on required ACAT 1 program documentation requirements. Support NATO Land Group 3 and other partnered countries to ensure compatibility with potential multinational military operations.		10872	14899	20297
Small Business Innovative Research/Small Business Technology Transfer Programs		0	3385	4564
Totals		53949	81029	91279

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B. Other Program Funding Summary

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
RDTE, 0603001, DJ50, Future Warrior Technology Integration	37499	44476	56676	62579	47880	74806	75220	Continuing	Continuing
OPA3, M80500, Land Warrior	0	1538	8896	89700	193458	157673	149960	Continuing	Continuing
RDTE, 0603747, D669 Clothing and Equipment	4567	8766	9594	8105	8134	9355	9540	Continuing	Continuing
RDTE, 0604713, DL40 Clothing and Equipment	4391	3068	5347	7940	8927	9154	9073	Continuing	Continuing
OPA4, MS3610, Land Warrior Initial Spares	0	667	711	851	967	490	128	Continuing	Continuing
RDTE, 0604817, D902 Combat Identification	4983	8313	0	0	0	0	0	Continuing	Continuing

C. Acquisition Strategy: The Land Warrior (LW) is the first holistic, integrated system of systems focused on the needs of the individual Soldier. The LW builds on the Soldier's inherent abilities and appropriately equips the Soldier to endure environmental threats while integrating him into the digital battlefield. In keeping with a holistic view, the LW system includes Soldier equipment such as uniform, ballistic and Nuclear, Biological and Chemical (NBC) protection, and a personal electronics system, which provides power, computation, network communications, and geo-location. The acquisition concept developed by PM Soldier Warrior (PM-SWAR) is grounded in a strategy of evolutionary acquisition (Block improvements) based on time-phased user requirements outlined in the November 1, 2002, Army approved Operational Requirement Document (ORD). The program minimizes the use of LW-unique hardware and software using an open systems architecture. This architectural approach will provide greater flexibility to incorporate technology upgrades as they become available, reduce intellectual and proprietary rights issues, and reduce developmental and support costs. The LW system development will conform to standards identified in Interface Control Documents (ICD's), and System Performance Specifications, which will be controlled by the Government. The follow-on production effort will utilize government provided system level performance specifications and system level ICD's. The LW total procurement objective is approximately 58,900 units. The LW Program supports the Army's vision of establishing lethal forces through the use of commercial technologies to lighten the force; increase Soldier lethality, and making the force more survivable, more mobile, and more deployable.

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

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BUDGET ACTIVITY 5 - System Development and Demonstration					PE NUMBER AND TITLE 0604713A - Combat Feeding, Clothing, and Equipment					PROJECT 667		
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 . Other Transactions Agreement (OTA)	FFP	LW OTA Consortium, Vienna, VA	80727	9476	1-2Q	0		0		0	90203	90203
b . Global Positioning Systems Cards/Antennas	T&M	ARINC, Annapolis, MD	780	134	2Q	0		0		0	914	914
c . Develop LW-SI (M&S,Stryker integration, etc.)	CPFF	GDDS, Scottsdale, Arizona	0	27917	1-2Q	61901	1-3Q	52391	1Q	Continue	142209	Continue
d . Multifunction Laser/Thermal Weapon Sights, etc.	MIPR	PM Night Vision, Fort Belvoir, VA	1064	2500	1-2Q	200	3Q	1977	1Q	0	5741	5782
e . Computer Based Training/Interactive Multimedia Ins	IDIQ/MIPR	OMEGA, Columbus GA; PEO STRI, Orlando, FL	650	209	2Q	0		0		0	859	859
f . Coalition Combat ID - ACTD MOUNT Exercise	FFP	GDDS, Scottsdale, Arizona	0	200	2-3Q	0		0		0	200	200
g . Army Strategic Software Improvement Program	MIPR	ASA(ALT), Ft. Belvoir, VA	0	0		134	1Q	250	1Q	Continue	384	Continue
Subtotal:			83221	40436		62235		54618		Continue	240510	Continue
Remarks: Award dates covering multiple quarters reflect multiple awards.												

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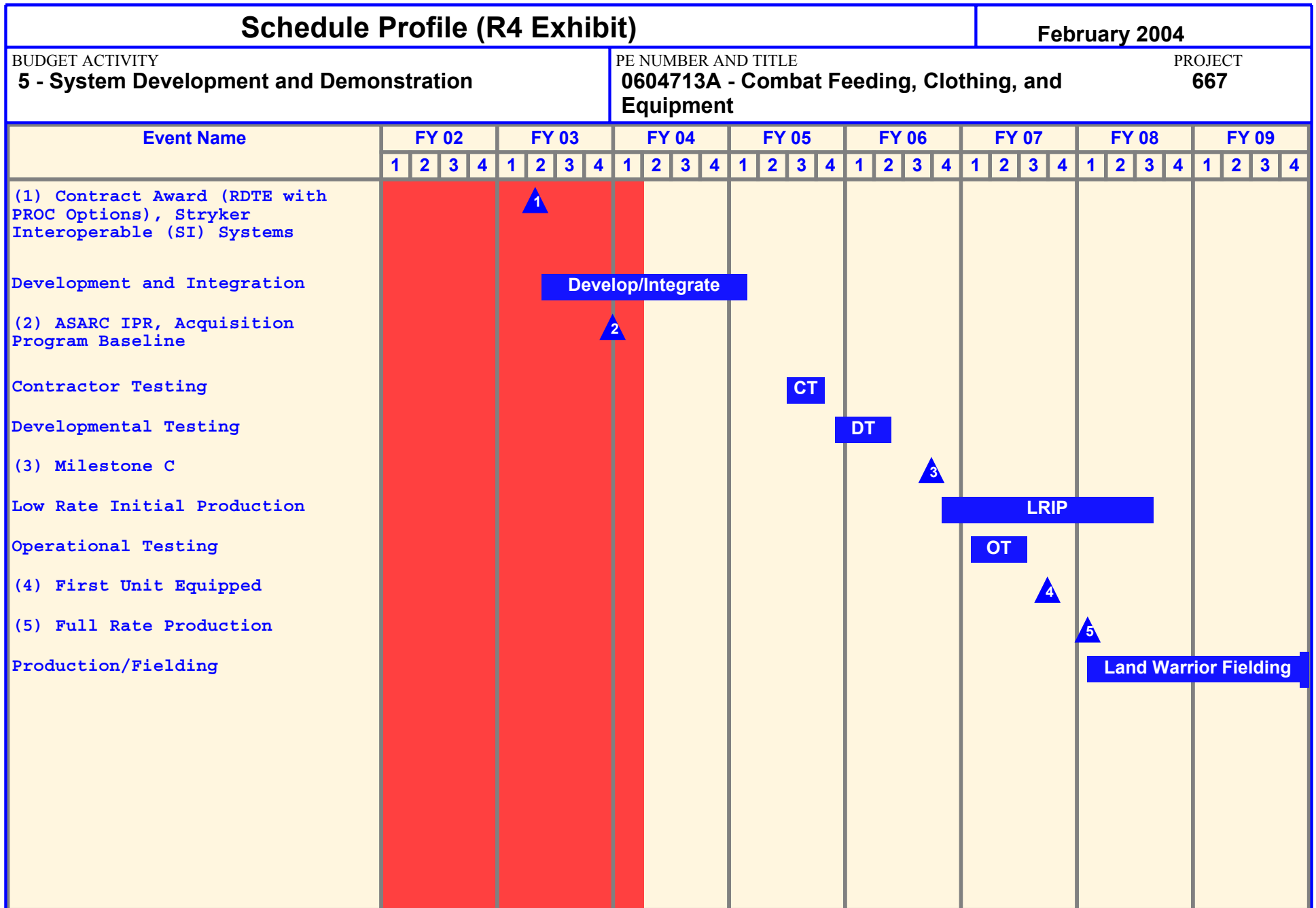
PROJECT

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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 . PM Land Warrior-North Program Support	MIPR	CECOM, Fort Monmouth, NJ	12020	400	1-2Q	298	1-2Q	1250	1-3Q	Continue	13968	Continue
b . TSM-Soldier program support	MIPR	TSM Soldier, Fort Benning, GA	1550	350	1-3Q	592	1-3Q	752	1-3Q	Continue	3244	Continue
c . Modern Tech Inc. - support contractors	Task Order	Modern Tech Inc., Springfield, VA	10124	2429	1Q	4081	1Q	4501	1Q	Continue	21135	Continue
d . System Engineering support	T&M	Various	1290	540	1Q	300	1Q	236	1Q	Continue	2366	Continue
e . PM Land Warrior in-house support	In-house	PM Land Warrior, Fort Belvoir, VA	11458	736	1-4Q	540	1-4Q	529	1-4Q	Continue	13263	Continue
f . Physical Integration Team - LW integration support	MIPR	SBCCOM - Natick, MA	482	150	1Q	0		0		0	632	632
g . NVESD Program Matrix Support	MIPR	CECOM NVESD, Fort Belvoir, VA	899	218	1-3Q	282	1-3Q	312	1-3Q	Continue	1711	Continue
h . Other Government Agencies Program Support	MIPR	Various	285	128	1-2Q	102	1-4Q	102	1-4Q	Continue	617	Continue

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II. Support Cost (continued)	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:			38108	4951		6195		7682		Continue	56936	Continue
Remarks: Buys government and contract engineering and logistical support for overall program support.												
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 . Testing Organizations - Developmental testing	MIPR	ATC, TTC/YPG/DTC/EPG/ ARL-SLAD, etc.	5812	1386	1-2Q	185	1-3Q	2453	1-3Q	Continue	9836	Continue
b . Testing Organizations - Operational testing/evaluation	MIPR	OTC, AEC	8343	834	1-3Q	320	1-3Q	3327	1-3Q	Continue	12824	Continue
c . Test Equip/Support/Soldiers	Various	Various	4208	421	1-2Q	0		0		0	4629	4629
d . Airworthiness/Airborne Certification	MIPR	Various	170	0	1-2Q	5	1-2Q	120	1-2Q	Continue	295	Continue
e . Test Program Sets/Direct Support Manuals/Built in test	MIPR/T&M	Huntsville, AL; Fort Monmouth, NJ	50	0	1-2Q	0	2-3Q	5900	1-2Q	Continue	5950	Continue
Subtotal:			18583	2641		510		11800		Continue	33534	Continue

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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 . PM Soldier Warrior oversight of LW program - Various	In-House/Task Order	PM Soldier Warrior, Fort Belvoir, VA	11597	2874	1-4Q	8328	1-4Q	12335	1-4Q	Continue	35134	Continue
b . Management Support/Cost Analysis Support	Task Order	Wexford Group, Vienna, VA/Camber Corp	2644	200		0		0		0	2844	2844
c . PEO Support/DA Support	Task Order	Camber Corp/SY-Tech, Springfield, VA	808	700	1-4Q	376	1-4Q	280	1-4Q	Continue	2164	Continue
d . Demo Maintenance Support	GSA	Exponent, Menlo Park, CA	825	850	1-4Q	0		0		0	1675	1675
e . Power Initiatives	Various	Various	300	1297	1-3Q	0		0		0	1597	1600
f . Small Business Innovative Research/Small Business Technology Transfer Program			0	0	1-4Q	3385	1-4Q	4564	1-4Q	Continue	7949	Continue
Subtotal:			16174	5921		12089		17179		Continue	51363	Continue
Remarks: Award dates covering multiple quarters reflect multiple awards.												
Project Total Cost:			156086	53949		81029		91279		Continue	382343	Continue



Schedule Detail (R4a Exhibit)						February 2004	
BUDGET ACTIVITY 5 - System Development and Demonstration			PE NUMBER AND TITLE 0604713A - Combat Feeding, Clothing, and Equipment			PROJECT 667	
<u>Schedule Detail</u>	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Award Developmental Contract/Follow On Options - SI	2Q	1Q	1Q				
Conduct LW Preliminary Design Review (PDR) (LW-SI)	4Q						
Conduct LW Critical Design Review (CDR) (LW-SI)		3Q					
Accept prototypes for government testing			3Q				
Conduct developmental test planning/testing and prepare reports			3-4Q	1-2Q			
Conduct Initial Operational Test and Evaluation (IOTE)					1-3Q		
Milestone C (ASARC)				3Q			
Full Rate Production (FRP)						1-2Q	
Production Contract Award/Subsequent Options			1Q	1Q	1Q	1Q	1Q
First Unit Equipped (FUE)					3Q		
Initial Operational Capability (IOC) - SI						3Q	
Fielding						1-4Q	1-4Q

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

February 2004

BUDGET ACTIVITY

5 - System Development and Demonstration

PE NUMBER AND TITLE

0604713A - Combat Feeding, Clothing, and Equipment

PROJECT

668

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
668 SOLDIER ENHANCE PGM	9935	10039	15859	13975	15909	16073	16163	Continuing	Continuing

A. Mission Description and Budget Item Justification: This project supports accelerated integration, modernization, and enhancement efforts of lighter, more lethal weapons, and improved Soldier items including lighter, more comfortable load-bearing equipment, field gear, survivability items, communications equipment, and navigational aids. Soldiers are managed in three categories: dismounted Soldiers, combat crews (air and ground), and other Soldiers. Projects are generally completed in three years or less. This program supports the Current to Future transition path of the Transformation Campaign Plan (TCP).

Accomplishments/Planned Program	FY 2003	FY 2004	FY 2005
Completed evaluation/type classified/transition into production for several efforts in include: Instrumented Mine Blast Testing, Protective gloves, SEA Mark 11, Law Enforcement Equipment Bags, Individual Riot control Agent Dispenser, Parachute Drop Bags, Access Egress Survival Knife and Command Digital Assistant.	6171	0	0
Continue evaluation/procure prototypes and/or test for several efforts such as Close Combat Mission Capability Kit, XM102 Reloadable Stun Grenade, Semi-automatic sniper system, Electronic Stun Baton, Blast Protective Footware, POL Handler Glove, Compact Metal Detector, Enhanced Fuel Bar, Modular Glove System, Close Quarters Battle Kit and Rapid Wall Breaching Kit.	2409	3995	3220
Initiate continue evaluation for such items as: Water Purification Pen, Integrated Laser White Pointer (ILWLP), Small Tactical Optical Ranging Module (STORM) micro-Laser Range Finder (MLRF) sytem.	0	1123	2689
Initiate market surveys and/or evaluations on new items to commence development and demonstration. New items started will continue evaluation/procure prototypes.	0	2431	6820
Continue in house engineering support services, conduct technical evaluation and program reviews.	1355	2199	3130
Small Business Innovative Research/Small Business Technology Transfer Program	0	291	0
Totals	9935	10039	15859

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

February 2004

BUDGET ACTIVITY

5 - System Development and Demonstration

PE NUMBER AND TITLE

0604713A - Combat Feeding, Clothing, and Equipment

PROJECT

668

B. Other Program Funding Summary

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
OPA3, MA6800, Soldier Enhancement	4921	20135	7275	4810	8950	7015	3321	Continuing	Continuing
OPA2, BA5300, Soldier Enhancement	3169	7965	25952	13378	19765	14183	4361	Continuing	Continuing
WTCV, GC0076, Small Arms (SEP)	3526	1237	3492	3921	2634	5326	1237	Continuing	Continuing
WTCV, GZ1290, Squad Automatic Wpn (Mods)	11658	5473	3382	1300	5006	11192	4074	Continuing	Continuing
WTCV, GZ2800, M16 Rifle Mods	0	2351	2345	2045	0	3904	0	Continuing	Continuing
WTCV, GB3007, M4 Carbine Mods	33272	22907	13777	10270	10642	10103	2770	0	103741
WTCV, G01500, Sniper Rifle	8955	8688	8871	8867	8082	191	0	0	45772
WTCV, GC0925, Mods	7905	3334	3245	739	1269	741	488	Continuing	Continuing
PAA, F47500, 7.62mm AP	2414	400	400	400	400	0	0	0	71517
PAA, F47600, 5.56mm AP	3559	1600	1600	600	600	0	0	0	24464
PAA, F00900, 40mm Canister	5548	0	0	0	0	0	0	0	5548
OMA, 121017, Central Funding & Fielding	424095	88778	141770	136115	161051	159302	115700	Continuing	Continuing

C. Acquisition Strategy: The Soldier Enhancement Program (SEP) focuses on developmental initiatives and integration efforts that lend themselves to accelerated acquisition and fielding in the near term (within three years). New SEP candidates are reviewed and approved annually. SEP items are procured from multiple appropriations, i.e., OMA, OPA, WTCV, and PAA.

ARMY RDT&E COST ANALYSIS(R3)									February 2004			
BUDGET ACTIVITY 5 - System Development and Demonstration					PE NUMBER AND TITLE 0604713A - Combat Feeding, Clothing, and Equipment					PROJECT 668		
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 . Various	MIPR	SBCCOM, MA	4508	861	1Q	485	1Q	550	1Q	0	6404	0
b . Various	MIPR	PM-SA, NJ	13838	2099	1Q	1638	1Q	3226	1Q	0	20801	0
c . Various	MIPR	ERDEC, Edgewood, MD	598	66	1Q	400	1Q	380	1Q	0	1444	0
d . Contracts	Various	SBCCOM, MA	1822	0	2Q	250	3Q	2949	2Q	0	5021	0
e . Various	MIPR	CECOM, NJ	223	6344	1Q	0		0		0	6567	0
f . Contracts	MIPR	DSCP, Philadelphia, PA	0	52	1Q	0		0		0	52	0
g . ILWLP Development Support	MIPR	NVESD, Fort Belvoir	0	0		300	2-3Q	240	1-2Q	0	540	0
Subtotal:			20989	9422		3073		7345		0	40829	0
Remarks: Candidates for the Soldier Enhancement Program are received, reviewed, and approved annually. Contractual efforts primarily are focused on procuring prototypes for testing.												

ARMY RDT&E COST ANALYSIS(R3)									February 2004			
BUDGET ACTIVITY					PE NUMBER AND TITLE					PROJECT		
5 - System Development and Demonstration					0604713A - Combat Feeding, Clothing, and Equipment					668		
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 . Various	MIPR	TSM-SDR, GA	631	0	1Q	230	1Q	235	1Q	0	1096	0
b . Various	Contracts	Various	9073	21	3Q	890	2Q	2629	3Q	0	12613	0
c . DCD Support - Military Police	MIPR	GSA/FEDLEARN	324	160	1Q	145	1Q	150	1Q	0	779	0
d . Logistics Support	MIPR	Army Logistics Support Activity	123	91	1Q	60	1Q	65	1Q	0	339	0
e . Various	MIPR	NVEOD, VA	329	0		522	1Q	0		0	851	0
Subtotal:			10480	272		1847		3079		0	15678	0
Remarks: Support costs vary annually depending on the type of items we are evaluting. Research Development and Engineering Centers support to evaluate items also varies annually depending on the number and types of items.												

ARMY RDT&E COST ANALYSIS(R3)									February 2004			
BUDGET ACTIVITY 5 - System Development and Demonstration					PE NUMBER AND TITLE 0604713A - Combat Feeding, Clothing, and Equipment					PROJECT 668		
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	SBCCOM(OFIG), Natick, MA	75	0		50	3Q	50	3Q	0	175	0
b . Various	MIPR	OPTEC/ATEC	2951	150	2Q	1580	2Q	1695	1Q	0	6376	0
c . ILWLP Test Support	MIPR	Various	0	0		700	2-3Q	560	1-2Q	0	1260	0
d . STORM Test Support	MIPR	Various	0	0		595	2-3Q	0		0	595	0
Subtotal:			3026	150		2925		2305		0	8406	0
Remarks: Testing costs vary annually by item(s) and are primarily funded by customers using the program dollars we send to them.												
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	MIPR	PM-Soldier Equipment, Fort Belvoir, VA	5741	67	1Q	2194	1Q	3130	1Q	0	11132	0
b . In-House	MIPR	Natick, MA	0	24	1Q	0		0		0	24	0
Subtotal:			5741	91		2194		3130		0	11156	0
Remarks: Costs vary annually depending on number and type of items being evaluated.												
Project Total Cost:			40236	9935		10039		15859		0	76069	0

Schedule Profile (R4 Exhibit)																				February 2004												
BUDGET ACTIVITY 5 - System Development and Demonstration										PE NUMBER AND TITLE 0604713A - Combat Feeding, Clothing, and Equipment																		PROJECT 668				
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) Glove, Light Duty, Utility									▲1 MS-C																							
(2) Water Purification Pen									▲2 MS-C																							
(3) Standoff Blast Resistant Footwear System									▲3 MS-C																							
(4) Infantry Wall Breaching Kit									▲4 MS-C																							
(5) Individual Ration Heater System									▲5 MS-C																							
(6) 12-guage Peacekeeping Round													▲6 MS-C																			

Schedule Detail (R4a Exhibit)						February 2004	
BUDGET ACTIVITY 5 - System Development and Demonstration			PE NUMBER AND TITLE 0604713A - Combat Feeding, Clothing, and Equipment			PROJECT 668	
<u>Schedule Detail</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>
Tactical Assault Ladder System: achieve MS C and transition to production.	4Q						
Collapsible Grappling Hook: achieved MS C and transitioned to production.							
Survival Egress Air (SEA) MK 2.0: achieved MS C and transitioned to production.	2Q						
Individual Riot Control Agent Disperser: achieve MS C and transition to production.	2Q						
Combat Uniform for Soldiers: achieve MS C and transition to production.	3-4Q						
Aircrew Survival/Egress Knife: achieve MS C and transition to production.	4Q						
Improved Combat Shelter: achieve MS C and transition to production.	4Q						
Close Combat Mission Capability Kit: achieve MS C and transition to production.			3Q				
M9 Pistol Rail: achieve MS C and transition to production.		3Q					
Enhanced Fuel Bar achieve MS C and transition to production.		1Q					
Close Quarters achieve MS C and transition to production.		1Q					
Glove Light Duty Utility: achieve MS C and transition to production.			3Q				
Water Purification Pen: achieve MS C and transition to production.			3Q				
Standoff Blast Resistant Footwear System: achieve MS C and transition to production.		4Q					
Infantry Wall Breaching Kit: achieve MS C and transition to production.			1-4Q				

Schedule Detail (R4a Exhibit)						February 2004	
BUDGET ACTIVITY 5 - System Development and Demonstration			PE NUMBER AND TITLE 0604713A - Combat Feeding, Clothing, and Equipment			PROJECT 668	
Schedule Detail (continued)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Integrated Laser White Light Pointer (ILWLP) Development and Testing		2-4Q	1-4Q				
Electric Stun Devices - MSC		4Q					
Family of Metal Detectors		4Q					
.30 Cal Semi Auto Sniper System Developmental Testing			2-3Q				
Close Quarter Battle Kit Developmental Testing			3-4Q				
Small Tactical Optical Ranging Module (Storm) - micro-Laser Range Finder (MLRF) Development/Testing		2-4Q					
NOTE: Numerous individual projects are ongoing under the Soldier Enhancement Program (SEP) and each project has its own milestone schedule.							

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

February 2004

BUDGET ACTIVITY

5 - System Development and Demonstration

PE NUMBER AND TITLE

0604713A - Combat Feeding, Clothing, and Equipment

PROJECT

C40

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
C40 SOLDIER SUPPORT EQUIPMENT - ED	11003	2860	574	297	298	298	297	Continuing	Continuing

A. Mission Description and Budget Item Justification: This project historically supports the system development and demonstration of field shelters, showers, latrines, heaters, environmental control units, mortuary affairs, organizational equipment, cargo parachutes, airdrop containers, and other combat service support equipment to improve unit sustainability and combat effectiveness. This project supports development and type classification of personnel parachutes, and other aerial delivery equipment to improve safety and efficiency of airborne operations. This project supports the Current to Future transition path of the Transformation Campaign Plan (TCP).

Accomplishments/Planned Program	FY 2003	FY 2004	FY 2005
Completed Developmental Testing for Advanced Tactical Parachute System (ATPS).	362	0	0
Procured Operational Test items and conduct Operational Testing for ATPS.	1228	1034	0
Conduct Milestone C and purchase data rights for ATPS.	747	1743	21
Conduct product improvements to ATPS.	0	0	553
Procured test items and conducted Developmental Testing for the 500 ft. Low Velocity Airdrop System (LVADS).	2366	0	0
Conducted Developmental Testing on Space Heater Large (SHL).	1500	0	0
Conducted Developmental Testing on the Enhanced Container Delivery System (ECDS).	1482	0	0
Developed improvements to Tent Extendable Modular Personnel (TEMPER) based on technologies inserted into Lightweight Maintenance Enclosure (LME).	500	0	0
Completed Developmental and Operational Testing on Containerized Batch Laundry (CBL) and conducted Milestone C.	1500	0	0
Completed design and evaluation of Modular General Purpose Tent (MGPTs) floors, liners and plenums. Developed Technical Data Package (TDP).	430	0	0
Conducted Developmental Testing on Authorized Stockage List Mobility System (ASLMS) and conducted limited user test.	888	0	0
Small Business Innovative Research/Small Business technology Transfer Programs.	0	83	0
Totals	11003	2860	574

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)	February 2004
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BUDGET ACTIVITY 5 - System Development and Demonstration	PE NUMBER AND TITLE 0604713A - Combat Feeding, Clothing, and Equipment	PROJECT C40
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B. Other Program Funding Summary	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
RDTE, 0603747.C09, Soldier Support Equipment - AD	11588	1338	199	198	198	198	197	Continuing	Continuing
OPA, MA7801, Advance Tactical Parachute Delivery System (ATPS)	0	4856	14288	39644	41054	41898	43901	Continuing	Continuing

C. Acquisition Strategy:Provides for system integration and initial operational test followed by a transition into production.

ARMY RDT&E COST ANALYSIS(R3)									February 2004				
BUDGET ACTIVITY					PE NUMBER AND TITLE					PROJECT			
5 - System Development and Demonstration					0604713A - Combat Feeding, Clothing, and Equipment					C40			
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 . SBCCOM	MIPR	SBCCOM (NRDEC), Natick, MA	7450	2000	1-4Q	0		0		Continue	9450	9665	
b . Contracts	Various	Various	16700	3900	2Q	0		0		Continue	20600	30549	
Subtotal:			24150	5900		0		0		Continue	30050	40214	
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 5 - System Development and Demonstration					PE NUMBER AND TITLE 0604713A - Combat Feeding, Clothing, and Equipment					PROJECT C40		
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 . TECOM/OEC	MIPR	Various	14383	4498	1-4Q	2527	3Q	0		Continue	21408	25208
Subtotal:			14383	4498		2527		0		Continue	21408	25208
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 . Program Management	In-House	PM Force Sustainment Systems, Natick	2200	605	1-4Q	0		0		Continue	2805	4479
b . Program Managment	In-House	PM Soldier, Fort Belvoir, VA	0	0		333	1Q	574	1Q	Continue	907	0
Subtotal:			2200	605		333		574		Continue	3712	4479
Project Total Cost:			40733	11003		2860		574		Continue	55170	69901

Schedule Profile (R4 Exhibit)																						February 2004											
BUDGET ACTIVITY 5 - System Development and Demonstration												PE NUMBER AND TITLE 0604713A - Combat Feeding, Clothing, and Equipment																PROJECT C40					
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) Conduct MS C for ATPS Conduct Design Validation for Low Velocity Airdrop System Conduct DT for Enhanced Containerized Delivery System (2) Conducted Milestone C for Containerized Batch Laundry																																	

Schedule Detail (R4a Exhibit)						February 2004	
BUDGET ACTIVITY 5 - System Development and Demonstration			PE NUMBER AND TITLE 0604713A - Combat Feeding, Clothing, and Equipment				PROJECT C40
<u>Schedule Detail</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>
Conduct MS C for Advanced Tactical Parachute System (ATPS).		4Q					
Conduct Design Validation (DV) for Low Velocity Airdrop System (LVADS).	3Q	1Q					
Conduct Developmental Test (DT) for Enhanced Containerized delivery System (ECDS).	4Q	1Q					
Conducted Milestone C for Containerized Batch Laundry (CBL).	4Q						

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)							February 2004		
BUDGET ACTIVITY 5 - System Development and Demonstration				PE NUMBER AND TITLE 0604713A - Combat Feeding, Clothing, and Equipment				PROJECT L40	
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
L40 CLOTHING & EQUIPMENT	4391	3068	5347	7940	8927	9154	9073	Continuing	Continuing
<p>A. Mission Description and Budget Item Justification: The funding in this project supports pre-production development of state-of-the-art individual clothing and equipment to improve the survivability, mobility, and sustainment affecting the quality of life of the individual soldier. This project supports the Current to Future transition path of the Army's Transformation Campaign Plan.</p>									
Accomplishments/Planned Program							FY 2003	FY 2004	FY 2005
Advanced Combat Helmet(ACH)-Procure test items, initiate integration efforts and award developmental contract.							350	418	0
Advanced Combat Uniform (ACU)-Complete developmental contract and initiate operational testing.							0	242	2967
Military Eye Protection System (MEPS)-Provide engineering support services and conduct technical evaluation to meet Army ballistic requirements. Incorporate successful combat eye protection (CEP) designs into the Government Direct Vendor Program to support future procurements.							511	620	0
Extended Cold Weather Clothing System (ECWCS)-Evaluated alternative fabric to migrate fabric alternatives with respect to wet weather gear.							1143	0	0
Service Uniform Modernization-Provide engineering support, design shop services, fabric supplies, accessories supplies, insignia and patches. Update fabrics and style changes for dress clothing as approved by the Army Uniform Board.							448	255	350
Modular Lightweight Load-Carrying Equipment (MOLLE) P3I-Conduct testing for improved frame, improved suspension, improved hydration, improved assault pack, MBITR pouches, flashbang pouch and continue technical data evaluations on-going.							1053	936	0
Improve Chemical Protective Gear-Provided engineering support for Legacy Chemical protective clothing.							168	0	0
Advanced Bomb Suit (ABS)-Provide engineering support services and capability upgrades to currently fielded ABS.							243	246	0
Improve Small Arms Protective Insert (SAPI)-Investigated lighter, more producible ceramic materials for increased ballistic protection.							254	0	0
Undershirt Moisture Managing T-Shirt-Provide engineering support, conduct developmental testing, award contracts for prototype t-shirts, and testing of any additional prototypes.							0	261	0

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

February 2004

BUDGET ACTIVITY

5 - System Development and Demonstration

PE NUMBER AND TITLE

0604713A - Combat Feeding, Clothing, and Equipment

PROJECT

L40

Accomplishments/Planned Program (continued)

	FY 2003	FY 2004	FY 2005
Concealable Body Armor (CBA)-Provided engineering support and first article testing.	221	0	0
Clothing Bag Modernization- Specification upgrades to legacy field and Garrison Uniform components.	0	0	905
Universal Camo Pattern-Investigate alternative patterns and colors matched with IR reflectance for field gear.	0	0	570
Permethrin Treatment of Clothing-Provide engineering support services and capability upgrades to legacy coveralls.	0	0	115
Multi-Fuel Stove- Assess and modify commercial multi-fuel stoves that provide greater safety, efficiency and unit self sufficiency.	0	0	440
Small Business Innovative Research/Small business Technology Transfer Programs.	0	90	0
Totals	4391	3068	5347

B. Other Program Funding Summary

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
RDTE, 0603747.669, Clothing & Equipment	4567	8766	9594	8105	8134	9355	9540	Continuing	Continuing
OMA, 121017, Central Funding and Fielding	419923	88778	141770	136115	161051	159302	115700	Continuing	Continuing

C. Acquisition Strategy: Soldier modernization will be accomplished by various methods. Acquisition strategies will vary from: 1) quick fixes in 36 months or less from concept to Type Classification (TC) similar to Soldier Enhancement Programs (SEP), 2) modular improvements which require limited RDT&E and will be completed in more than 36 months from concept to Type Classification, 3) fully integrated development that will require substantial RDT&E funding and will be completed in 4 years or more.

ARMY RDT&E COST ANALYSIS(R3)									February 2004			
BUDGET ACTIVITY 5 - System Development and Demonstration					PE NUMBER AND TITLE 0604713A - Combat Feeding, Clothing, and Equipment					PROJECT L40		
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 . Various	MIPRS	SBCCOM, Natick, MA	5095	3111	1Q	2507	1Q	3917	1Q	Continue	14630	Continue
b . Various	Contracts	Various	2851	400	3Q	105	2Q	750	2Q	Continue	4106	Continue
Subtotal:			7946	3511		2612		4667		Continue	18736	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	Various	246	100	1Q	100	1Q	100	1Q	0	546	0
Subtotal:			246	100		100		100		0	546	0

ARMY RDT&E COST ANALYSIS(R3)									February 2004			
BUDGET ACTIVITY 5 - System Development and Demonstration					PE NUMBER AND TITLE 0604713A - Combat Feeding, Clothing, and Equipment					PROJECT L40		
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	MIPRS	ATEC	1461	100	3Q	150	2Q	130	3Q	0	1841	0
b . Various	MIPRS	SBCCOM (OFIG), Natick, MA	205	500	1Q	50	2Q	300	2Q	0	1055	0
Subtotal:			1666	600		200		430		0	2896	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 . In-House Support		PM-CIE Soldier Equipment, Ft Belvior VA	746	180	1-4Q	156	1-4Q	150	1-4Q	0	1232	0
Subtotal:			746	180		156		150		0	1232	0
Project Total Cost:			10604	4391		3068		5347		Continue	23410	Continue

Schedule Profile (R4 Exhibit)																				February 2004												
BUDGET ACTIVITY 5 - System Development and Demonstration										PE NUMBER AND TITLE 0604713A - Combat Feeding, Clothing, and Equipment														PROJECT L40								
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 Helmet	1 MS-C																															
(2) Advanced Bomb Suit					2 MS-C																											
(3) Military Eye Protection System					3 MS-C																											

Schedule Detail (R4a Exhibit)						February 2004			
BUDGET ACTIVITY 5 - System Development and Demonstration			PE NUMBER AND TITLE 0604713A - Combat Feeding, Clothing, and Equipment				PROJECT L40		
<u>Schedule Detail</u>			FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Advanced Combat Helmet MS C			2Q						
Advanced Bomb Suit MS C				1Q					
Military Eye Protection System MS C				1Q					