

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2005

BUDGET ACTIVITY

5 - System Development and Demonstration

PE NUMBER AND TITLE

0604□13A - Combat Feeding, Clothing, and Equipment

COST (In Thousands)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	95484	98445	3383	2952	2464	2461	2099	2142	0	290419
548 MIL SUBSISTENCE SYS	1895	1946	3383	2952	2464	2461	2099	2142	0	21053
667 LAND WARRIOR	78183	72974	0	0	0	0	0	0	0	205106
668 SOLDIER ENHANCE PGM	9686	15175	0	0	0	0	0	0	0	34796
680 MOUNTED WARRIOR	0	2685	0	0	0	0	0	0	0	2685
C40 SOLDIER SUPPORT EQUIPMENT - ED	2760	549	0	0	0	0	0	0	0	14312
L40 CLOTHING & EQUIPMENT	2960	5116	0	0	0	0	0	0	0	12467

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. In FY06, Projects 668,C40, L40 transition to a new Program Element, 0604601A. Projects D667,D680 transition to Program Element, 0604827.

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	FY 2005	FY 2006	FY 2007
Previous President's Budget (FY 2005)	115093	130455	143786
Current Budget (FY 2006/2007 PB)	98445	3383	2952
Total Adjustments	-16648	-127072	-140834
Net of Program/Database Changes			
Congressional Program Reductions	-13842		
Congressional Rescissions			
Congressional Increases			
Reprogrammings			
SBIR/STTR Transfer	-2806		
Adjustments to Budget Years		-127072	-140834

In FY06, Projects D680, D667 have transitioned to PE 0604827A, Soldier Systems-Warrior Development and Projects D668, DC40 and L40 have transitioned to 0604601, Infantry Support Weapons.

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BUDGET ACTIVITY 5 - System Development and Demonstration	PE NUMBER AND TITLE 0604□13A - Combat Feeding, Clothing, and Equipment	PROJECT 54□
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COST (In Thousands)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
548 MIL SUBSISTENCE SYS	1895	1946	3383	2952	2464	2461	2099	2142	0	21053

A. Mission Description and Budget Item Justification: This project supports the development and demonstration and Non-Developmental Item (NDI)/Commercial Off The Shelf (COTS) evaluation of combat feeding equipment to enhance soldier efficiency and survivability, and to reduce food service logistics requirements for all four services. The project supports multi-fuel, rapidly deployable field food service equipment initiatives and engineering and manufacturing development to improve equipment, enhance safety in food service, and decrease fuel and water requirements. This project develops critical enablers that support the Joint Future 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.

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Accomplishments/Planned Program

FY 04: Prepared evaluation reports on labor saving equipment and food technologies for the Navy ships. Continued evaluation of new shipboard food service equipment such as stainless steel liner in submarine hatchable convection oven to improve galley and installation efficiencies, reduce costs, and improve quality of life. Evaluated and tested 26 various pieces of food service equipment. Down selected 10 for installation on board Navy vessels including ovens, steamers, grills, ice machines, etc. All approved items were listed in the Food Service Equipment catalog. Installed the first Submarine Hatchable Convection oven on board the USS Philadelphia, SSN-690. Installed two (2) Submarine Hatchable Convection Ovens, and an Accutemp 3 foot Grill on board the USS Providence SSN-719 as part of the submarine modernization program. FY 05 - FY 07: Continue effort as Food Service Equipment certifying agent for all Navy Vessels, to test and approve all Food Service Equipment utilized on board Navy vessels prior to fielding. Continue to monitor commercial development in food service to reduce shipboard labor, extend service life and quality of life. Evaluate automated food production equipment for potential applications. Continue with shipboard tests; down select; and list in Food Equipment Catalog.

FY 2004

512

FY 2005

478

FY 2006

1001

FY 2007

814

FY 04: Fabricated and tested oven, and steamer, for Single Pallet Expeditionary Kitchen-A (SPEK-A) all sub-components use the same burner base, to increase efficiency and reduce the logistical footprint. FY 05-FY06: Prepare final designs and conduct technical and user tests. Upgrade SPEK-A Technical Data Package (TDP) for procurement by the Air Force.

125

191

150

0

FY 04: Finalized design and awarded contract for Advanced Design Refrigerator (ADR1200). FY 05: Complete the fabrication of ADR1200. Conduct developmental and operational testing of the ADR1200 which will enhance transportability, thermal efficiency while reducing the external volume; prepare performance specification and transition to the Air Force.

75

143

0

0

FY 04: Fabricated and tested thermostatic control improvements to the Modern Burner Unit (MBU), completed testing of extreme cold weather MBU, and completed a prognostics feasibility study. FY 05: Develop and test integration of thermostatic controlled MBU in field kitchen appliances and field sanitation systems.

297

99

0

0

FY 04: Procured and integrated two complete Assault Kitchen (AK) systems, and conducted in-house testing and a User Demonstration at National Training Center (NTC). FY 05: Complete required AK testing based upon Army Evaluation Center (AEC) assessment of existing data from Marine Corps and conduct logistics demonstration. Prepare Milestone C documentation. FY 06: Conduct Milestone C decision for the AK and prepare technical data to support a production contract.

160

319

90

0

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Accomplishments/Planned Program (continued)

	FY 2004	FY 2005	FY 2006	FY 2007
FY 04: Completed integration of a prototype of a Load Handling System (LHS) compatible Containerized Kitchen (CK) and provided to users for evaluation. FY 05: Conduct a field evaluation on the LHS compatible CK prototype with the Army Medical Command (MEDCOM). Develop a CK augmentation kit to be used by MEDCOM. FY 06: Conduct cost analysis and design a ventilation system to effectively remove by-products of combustion from open flame burners in the CK. FY 07: Fabricate and test the recommended ventilation system for the CK.	299	215	284	127
FY 04: Completed development of technical data for use in a rebuild program that optimizes the Mobile Kitchen Trailer (MKT) configuration.	117	0	0	0
FY 07: Conduct Developmental and Operational Testing on a co-generator that produces heat for cooking and sanitation as well as electrical energy for the kitchen.	0	0	0	432
FY 04: Completed procedures for tying down Mobile Kitchen Trailer (MKT) roof, completed power supply connector and documentation for Mounted Water Ration Heater (MWRH). Evaluated consistency of non-stick coating strength for sample batch of steam table pans for submarine galleys. Procured special high temperature polymer serving utensils to protect non-stick coated pans and initiated testing. FY 05-FY 07: Continue to develop and evaluate improvements to fielded food service systems as required by services for integration into existing and future systems to reduce operability gaps and improve user acceptance of fielded equipment. Integrate equipment from Navy program into 9-2 Air Force Bare Base kitchen and Marine Corps Tray Ration Heater in order to reduce overall costs.	160	143	905	407
FY 04: Completed technical testing on the Marine Corps 8x8x10 refrigerated ISO box, which will provide enhanced storage, thermal efficiency and corrosion resistance and reduce the logistical footprint. Drafted Performance Specification and transitioned to the Marine Corps for procurement.	150	0	0	0
FY 05-FY 06: Conduct user surveys to determine changes required to update Containerized Deployment Kitchen (CDK), to present standards, in order to develop improved food service efficiency and enhance cooked food quality. Develop enhancement package, upgrade one system, conduct user test, validate package and provide to customer.	0	167	300	0
FY 05: Execute Navy Shipboard Ice Machine program. Select bulk ice machines for shipboard evaluation. Complete test of machines and dispensers. Provide specifications and recommendations to the Navy.	0	191	0	0
FY06: Develop pressurized water delivery system for field feeding sites to support field kitchen and sanitation systems. FY07: Complete testing of pressurized water system and initiate development of a containerized or trailer mounted field food sanitation system.	0	0	110	293
FY07: Conduct Market Survey, procure test items, and initiate field testing of durable nonstick coatings and disposable cookware/cookware liners for field kitchens.	0	0	0	203

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Accomplishments/Planned Program (continued)

FY06: Develop oven and skillet improvements to the Mobile Kitchen Trailer (MKT). FY07: Conduct technical and operational testing of MKT oven and skillet improvements.

FY06: Develop mess support system for field feeding site dining areas. FY07: Conduct technical and field evaluation of field messing system.

FY07: Award contract for fabrication of changes to the Multi-Ration Heating system to allow use inside the chemically protected DEPMEDS, and initiate field testing.

	FY 2004	FY 2005	FY 2006	FY 2007
Totals	1895	1946	3383	2952

B. Other Program Funding Summary

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
RDTE, 0603747.610, Food Adv Dev	3540	3848	3393	2728	3767	3860	4244	4331	Continuing	Continuing
OPA3, M65803, Kitchen, Containerized, Field	6977	8081	6816	8774	9069	8998	10343	9169	Continuing	Continuing
OPA 3, M65802, Sanitation Center, Field Feeding	8362	6021	14731	17125	17622	14862	15832	16294	Continuing	Continuing

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

ARMY RDT&E COST ANALYSIS(R3)									February 2005			
BUDGET ACTIVITY 5 - System Development and Demonstration					PE NUMBER AND TITLE 0604□13A - Combat Feeding, Clothing, and Equipment					PROJECT 54□		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Various combat feeding eq, multi-fuel and water eq	In-House	RDECOM, NSC	11181	935	1-4Q	1559	1-4Q	1334	1-4Q	Continue	15009	Continue
b . Contracts	Various	Various	2715	345	1-4Q	575	1-4Q	492	1-4Q	Continue	4127	Continue
c . PEO CS&CSS	In-House	PM Force Sustainment System (FSS)	257	204	1-4Q	340	1-4Q	291	1-4Q	Continue	1092	Continue
Subtotal:			14153	1484		2474		2117		Continue	20228	Continue
II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:			0	0		0		0		0	0	0
Remarks: Not Applicable												

ARMY RDT&E COST ANALYSIS(R3)									February 2005				
BUDGET ACTIVITY 5 - System Development and Demonstration					PE NUMBER AND TITLE 0604□13A - Combat Feeding, Clothing, and Equipment					PROJECT 54□			
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract	
a . Various	MIPR	TECOM/OEC/ATC	4300	348	1-4Q	580	1-4Q	496	1-4Q	Continue	5724	Continue	
Subtotal:			4300	348		580		496		Continue	5724	Continue	
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract	
a . CFP Management	In-House	RDECOM	1069	114	1-4Q	329	1-4Q	339	1-4Q	Continue	1851	Continue	
Subtotal:			1069	114		329		339		Continue	1851	Continue	
Project Total Cost:			19522	1946		3383		2952		Continue	27803	Continue	

Schedule Profile (R4 Exhibit)

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Event Name	FY 04				FY 05				FY 06				FY 07				FY 08				FY 09				FY 10				FY 11			
	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) Complete fabrication of Advance Design Refrigerator 1200 (ADR1200), (2) Complete DT/OT for ADR-1200, (3) Prepare Perf Spec for ADR1200 for transition to AF								▲1	▲2	▲3																						
DT on Marine Corps 8x8x10 Refrigerated Container, DT and Log Demo on Assault Kitchen																																
Conduct Field Eval for LHS compatible CK, Conduct DT/OT on Field Kitchen Co-generator																																
(4) MS C on Assault Kitchen																																
(5) Transition 8x8x10 Performance Specification to Marine Corp, (6) Upgrade SPEC-A TDP and transition documentation to AF, (7) Integrate equipment from Navy to AF Bare Base Kitchen																																
(8) Transition Advanced AF Equipment and systems to AF, (9)																																
(10) Transition advanced MC equipment and systems to MC, (11)																																
(12) Transition advanced Navy equipment and systems to Navy, (13) , (14) , (15) , (16) , (17)																																

Schedule Detail (R4a Exhibit)							February 2005	
BUDGET ACTIVITY 5 - System Development and Demonstration				PE NUMBER AND TITLE 0604□13A - Combat Feeding, Clothing, and Equipment			PROJECT 54□	
<u>Schedule Detail</u>	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Continue Developmental and Operational Testing for the Advanced Design Refrigerator -1200 (ADR-1200)		3Q						
Prepare performance specification for ADR1200 and transition to Air Force for procurement.		4Q						
Conduct Containerized Kitchen (CK) field evaluation with MEDCOM.		2-3Q						
Conduct Assault Kitchen Developmental Testing and logistics demonstration.		2-4Q						
Conduct Milestone C on Assault Kitchen.			4Q					
Initiated Marine Corps 8x8x10 Refrigerated Container Developmental Test.	1Q							
Completed 8x8x10 Refrigerated Container Developmental Test.	2Q							
Transitioned 8x8x10 Refrigerated Container performance specification to Marine Corp.	4Q							
Upgrade SPEK-A Technical Data Package and transition documentation to AF for procurement.			4Q					
Transition Advanced AF equipment and systems to AF for procurement.							4Q	4Q
Integrate equipment from Navy program to AF Bare Base Kitchen and Marine Corps Tray Ration Heater.				4Q				
Transition Advanced Marine Corps (MC) equipment and systems to MC for procurement.							4Q	4Q
Transition Advanced Navy Equipment and Systems to Navy for procurement.		4Q	4Q	4Q	4Q	4Q	4Q	4Q
Conduct DT and OT on Field Kitchen co-generator.				1-4Q				
Complete fabrication of the ADR1200.		2Q						
Installed Submarine Hatchable Convection Ovens on board the USS Philadelphia and the USS Providence.	4Q							

Schedule Detail (R4a Exhibit)									
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060413A - Combat Feeding, Clothing, and Equipment

PROJECT 54

060413A - Combat Feeding, Clothing, and Equipment

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Schedule Detail (continued)

FY 2004

FY 2005

FY 2006

FY 2007

FY 2008

FY 2009

FY 2010

FY 2011

Select bulk ice machines for shipboard evaluation.
Provide specifications and recommendations to Navy

4Q	
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COST (In Thousands)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
667 LAND WARRIOR	78183	72974	0	0	0	0	0	0	0	205106

A. Mission Description and Budget Item Justification: This project supports the Land Warrior (LW) concept which is a first generation, modular, integrated fighting system focused on the needs of the individual infantry Soldier and Soldiers in support of the close fight. LW combines state-of-the-art commercial-off-the-shelf (COTS) and government-off-the-shelf (GOTS) technologies with newly developed components and technologies to create a lethal, survivable Soldier system linked into the digitized battlefield. LW's objective is to equip the Soldier to improve lethality, survivability, battle command capability and situational awareness on the digital battlefield. LW is in the system development and demonstration phase.

In an effort to comply with Congressional intent and to leverage from the success of current developed LW components, the Army has refocused the LW program to spiral out Dismounted Battle Command System (DBCS) capabilities (e.g. Commander's Digital Assistant (CDA), Enhanced Position Location and Reporting System (EPLRS) MicroLight Radio) to Soldiers in the field for near-term capability. Accelerating components of the Land Warrior System also addresses the Soldier component of Future Combat System (FCS). Land Warrior integrated ensemble systems, to include applicable long-lead items, will be produced for a Stryker Battalion for evaluation purposes in the Fiscal Year 2006 (FY06) timeframe. The Ground Soldier System (GSS) will leverage the technological advancements transitioned from the Science and Technology (S&T) community including Future Force Warrior (FFW) to develop the Ground Soldier capability for FCS. The LW program and FFW Advanced Technology Demonstration (ATD) have made progress in consolidating in accordance with the FY05 Appropriations Language and a report has been submitted to Congress.

Beginning in FY06 this funding will be under PE 0603827A, Project S57.

Accomplishments/Planned Program

FY04: Obtained 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.
FY05: Funds support the Army Strategic Software Improvement Program; purchase Ground Based GPS Receiver Application Module SAASM and other GFE items to support DBCS capabilities.

FY 2004	FY 2005	FY 2006	FY 2007
634	2255	0	0

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BUDGET ACTIVITY		PE NUMBER AND TITLE			PROJECT	
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Accomplishments/Planned Program (continued)			FY 2004	FY 2005	FY 2006	FY 2007
FY04: Continued 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 provided on-board power recharging capability in Stryker vehicles for LW equipped Soldiers. Fabricated and conducted contractor testing by General Dynamics (GD) LW-SI systems that are to be used for formal Government DT. Continued LW demonstrations to other countries to demonstrate system capability and functionality. FY05: Continues development engineering and for developing one company's worth of prototype devices for DBCS capabilities. Continue development work on the LW integrated ensemble systems for evaluation by a Stryker Battalion.			63229	47421	0	0
FY04: Ramp up of the Land Warrior-Stryker Interoperable (LW-SI) program required government test support activity such as Brigade Combat Team testing support and interoperability test with the Army Test and Evaluation Center (ATEC). FY 05: Initiate developmental and operational test for the Dismounted Battle Command System (DBCS) capabilities for Stryker Battalions and begin developmental testing for the LW integrated ensemble systems.			2950	8850	0	0
FY04: Continued program management and systems engineering support for overall program efforts. Continued minimal operations support of PM Land Warrior - Fort Monmouth, and maintained appropriate activity at PM Land Warrior - Fort Bragg. Provided TRADOC Soldier Manager (TSM) Soldier Support funding for analysis of alternatives and other laboratory experiments. FY05: Continue Program management and systems engineering support for overall program efforts. Continue program reviews for In Process Review (IPR) to support the preparation for Milestone C, and report out on required ACAT I documentation requirements. FY04-FY05: Continue to support NATO Land Group 3 and other partnered countries to ensure compatibility with potential multinational military operations.			11370	14448	0	0
Totals			78183	72974	0	0

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B. Other Program Funding Summary	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
RDTE, 0604827, S57 Land Warrior	0	0	50218	27086	29935	29927	41877	46842	Continuing	Continuing
OPA 3, M80500, Land Warrior	1538	8862	35700	21198	49066	70884	28680	3087	Continuing	Continuing
OPA 4, MS3610, Land Warrior Initial Spares	643	708	492	1574	1622	1613	629	632	Continuing	Continuing
RDTE, 0603001, DJ50, Future Warrior Technology Insertion	43806	49143	56034	40286	44956	44998	42526	43976	Continuing	Continuing
RDTE, 0604817A, D902 Combat Identification	8021	0	0	0	0	0	0	0	0	8021
RDTE, 0604713A, Mounted Warrior	0	2685	0	0	0	0	0	0	0	2685
RDTE, 0604827, S56 Mounted Warrior	0	0	7600	0	0	0	0	0	0	7600
OPA 3, M80600, Mounted Warrior	0	0	1600	0	0	0	0	0	0	1600

C. Acquisition Strategy: The Army has moved funds from PE 0604713A-667 effective FY06. Funds are under PE 0604827A-S57 after FY 2005. In an effort to comply with Congressional intent and to leverage from the success of current developed Land Warrior (LW) components, the Army has refocused the LW program to spiral out Dismounted Battle Command System (DBCS) capabilities (e.g. Commander's Digital Assistant (CDA), Enhanced Position Location and Reporting System (EPLRS) MicroLight Radio) to Soldiers in the field for near-term capability. Accelerating components of the Land Warrior System also addresses the Soldier component of Future Combat System (FCS). Land Warrior integrated ensemble systems, to include applicable long-lead items, will be produced for a Stryker Battalion for evaluation purposes in the Fiscal Year 2006 (FY06) timeframe. The Ground Soldier System (GSS) will leverage the technological advancements transitioned from the Science and Technology (S&T) community including Future Force Warrior (FFW) to develop the Ground Soldier capability for FCS. The LW program and FFW Advanced Technology Demonstration (ATD) have made progress in consolidating in accordance with the FY05 Appropriations Language and a report has been submitted to Congress.

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668 SOLDIER ENHANCE PGM	9686	15175	0	0	0	0	0	0	0	34796

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.

<u>Accomplishments/Planned Program</u>	FY 2004	FY 2005	FY 2006	FY 2007
FY04-FY05: Continued in house engineering support services, conduct technical evaluation and program reviews.	2369	2446	0	0
FY04-FY05: Continued 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.	3995	3220	0	0
FY04-FY05: Initiates 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.	1123	2689	0	0
FY04-FY05: Initiates market surveys and/or evaluations on new items to commence development and demonstration. New items started will continue evaluation/procure prototypes.	2199	6820	0	0
Totals	9686	15175	0	0

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B. Other Program Funding Summary	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
OPA3, MA6800, Soldier Enhancement	4135	9737	4810	9165	10529	3410	7347	5451	Continuing	Continuing
OPA2, BA5300, Soldier Enhancement	8784	25433	8153	14590	13909	9587	9516	7670	Continuing	Continuing
WTCV, GC0076, Small Arms (SEP)	8080	3479	5181	2782	5459	1269	5229	4249	Continuing	Continuing
WTCV, GZ1290, Squad Automatic Wpn (Mods)	13058	3369	3095	5314	9421	4181	5141	3190	Continuing	Continuing
WTCV, GZ2800, M16 Rifle Mods	18386	2336	1970	1024	3925	1026	3599	3602	Continuing	Continuing
WTCV, GB3007, M4 Carbine Mods	48249	13724	44817	17064	13905	6332	13733	9799	0	167623
WTCV, G01500, Sniper Rifle	9172	8837	9656	8431	195	0	0	0	0	36291
WTCV, GC0925, Mods	0	3232	5146	1720	2809	501	3098	2139	Continuing	Continuing
PAA, F47500, 7.62mm AP	400	400	400	400	0	0	0	0	0	66708
PAA, F47600, 5.56mm AP	1600	1600	600	600	0	0	0	0	0	17379
PAA, F00900, 40mm Canister	0	0	0	0	0	0	0	0	0	0
OMA, 121017, Central Funding & Fielding	88778	141770	136115	161051	159302	115700	0	0	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 BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604□13A - Combat Feeding, Clothing, and Equipment

PROJECT
6□0

COST (In Thousands)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
680 MOUNTED WARRIOR	0	2685	0	0	0	0	0	0	0	2685

A. Mission Description and Budget Item Justification: Mounted Warrior (MW) provides combat crewmembers and vehicle commanders in the Current and Future force with increased mission effectiveness on the network centric battlefield in the areas of lethality, command and control, communications, survivability, mobility, and sustainability. MW Soldier Systems (MWSS) will provide the combat commander increased capabilities to conduct offensive and defensive operations by providing uninterrupted viewing of their immediate surroundings while remaining connected to on-board platform C4I capabilities, thereby providing crews with continuous situational awareness. MWSS Helmet Mounted Display extends fire control information to vehicle commanders while they are standing up in the hatch, or dismounted allowing them to maintain immediate situational awareness of the their direct battle space, while simultaneously controlling inter-netted fires, vehicle, or dismounted soldiers. MWSS will provide remote digital connectivity to the Force XXI Battle Command Brigade and Below (FBCB2) information system via the vehicles C4I capabilities. The MWSS will maximize crew mobility, providing hands free, tetherless communications.

Beginning in FY06 this funding will be under PE 0603827A, Project S56.

Accomplishments/Planned Program	FY 2004	FY 2005	FY 2006	FY 2007
Project was not funded in FY2004. This is a Congressional interest item funded in FY2005. FY2005 Planned Program: Fabricate up to 250 field hardened operational NOMAD test units ready for installation into Stryker vehicles, with appropriate instructions and support equipment. These heads-up display units will be used for associated testing and evaluation. Funds support developmental engineering to include communications subsystems and processing subsystems, prototype manufacturing, and systems engineering and program management support.	0	2685	0	0
Totals	0	2685	0	0

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2005

BUDGET ACTIVITY

5 - System Development and Demonstration

PE NUMBER AND TITLE

0604□13A - Combat Feeding, Clothing, and Equipment

PROJECT

6□0

B. Other Program Funding Summary	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
RDTE, 0604827A, S56, Mounted Warrior	0	0	7600	0	0	0	0	0	Continuing	Continuing
OPA3, M80600, Mounted Warrior	0	0	1600	0	0	0	0	0	Continuing	Continuing
RDTE, 0604713A, D667, Land Warrior	78183	72974	0	0	0	0	0	0	Continuing	Continuing
RDTE, 0604827A, S57, Land Warrior	0	0	50218	27086	29935	29927	41877	46842	Continuing	Continuing
RDTE, 0303001, DJ50, Future Warrior Technology	43806	49143	56034	40286	44956	44998	42526	43976	Continuing	Continuing
OPA4, MS3610, Land Warrior Initial Spares	643	708	492	1574	1622	1613	629	632	Continuing	Continuing
OPA3, M80500, Land Warrior	1538	8862	35700	21198	49066	70884	28680	3087	Continuing	Continuing

C. Acquisition Strategy: The Army has moved funds from PE 0604713A-680 effective FY06. The MW program provides the spiral fielding of mature technologies and advanced capabilities to meet the needs of the Combat Vehicle Crewman (CVC). The first spiral will equip a Stryker battalion with mature/existing technologies to be used to develop tactics, techniques and procedures (TTPs), which will be used to define the requirements for future spirals. This is a Congressional interest item funded in FY2005.

February 2005

PROJECT C40

[illegible]

C. Acquisition Strategy: Not applicable for this item.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)	February 2005
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February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE	PROJECT
0604□13A - Combat Feeding, Clothing, and Equipment	L40

060413A - Combat Feeding, Clothing, and Equipment

L40

[illegible]

A. Mission Description and Budget Item Justification: Not applicable for this item.

<u>Accomplishments/Planned Program</u>	Not applicable for this item.
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B. Other Program Funding Summary: Not applicable for this item.

C. Acquisition Strategy: Not applicable for this item.