

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

June 2001

BUDGET ACTIVITY

5 - ENG MANUFACTURING DEV

PE NUMBER AND TITLE

0604817A - Combat Identification

COST (In Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	17511	5313	3014	0	0	0	0	0	0	0
482 GROUND CID (BCIS)	8598	2358	0	0	0	0	0	0	0	0
902 INDIVIDUAL COMBAT IDENTIFICATION SYSTEM (ICIDS)	8913	2955	3014	0	0	0	0	0	0	0

A. Mission Description and Budget Item Justification:

PLEASE NOTE: This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

The dominant maneuver tactics that allow smaller, more lethal, forces to succeed on the modern battlefield also increase the potential for friendly fire casualties. Thus, a key enabler of complex warfare is the rapid, reliable identification of friends, foes and neutrals. Positive identification at the point-of-engagement is complicated by the capabilities of modern weapons that allow engagements well beyond the range where visual identification is possible, significantly increasing the potential for fratricide. These programs are directed toward the design and development of distinct systems to help minimize this battlefield deficiency within the overall Combat Identification architecture. Project D482 addresses the ground-to-ground vehicle mounted mission and Project D902 addresses the individual soldier-to-soldier mission. Survivability is one of the seven tenets of the Army Transformation Strategy and these Combat Identification programs represent an integral part of that strategy as they work to reduce incidents of fratricide. These systems support the Legacy transition path of the Transformation Campaign Plan (TCP), as well as providing a critical link to ensuring compatibility and interoperability to the Future Combat System and to the Objective Warrior System.

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<u>B. Program Change Summary</u>	FY 2000	FY 2001	FY 2002	FY 2003
Previous President's Budget (FY2001 PB)	8566	5362	0	0
Appropriated Value	8658	5362		
Adjustments to Appropriated Value	0	0		
a. Congressional General Reductions	0	0	0	
b. SBIR/STTR	-411	0	0	
c. Omnibus or Other Above Threshold Reprogrammings	6937	0	0	
d. Below Threshold Reprogramming	2278	0	0	
e. Rescissions	-134	-49	0	
Adjustments to Budget Years Since FY2001 PB	0	0	3014	
Current Budget Submit (FY 2002/2003 PB)	17328	5313	3014	0

Change Summary Explanation:

FY 2000 - \$6.935 transferred from Procurement Ammunition, Army (PAA) to RDTE to fund ICIDS cost growth
 \$1.478M reprogrammed to D482 for ASCIET
 \$.800M reprogrammed to D902 to fund ICIDS cost growth
 FY 2002 \$3.014M transferred from PAA (BA0515) to D902 to support IOT

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June 2001

BUDGET ACTIVITY 5 - ENG MANUFACTURING DEV				PE NUMBER AND TITLE 0604817A - Combat Identification					PROJECT 902	
COST (In Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
902 INDIVIDUAL COMBAT IDENTIFICATION SYSTEM (ICIDS)	8913	2955	3014	0	0	0	0	0	0	0

A. Mission Description and Budget Item Justification: The identification of friendly forces on future battlefields will be more complex due to the highly mobile, dispersed, non-linear formations found in unconventional warfare. The Individual Combat Identification System (ICIDS) is a lightweight, laser-based, question and answer type system, used by the individual soldiers to positively identify friendly soldiers. The system includes a compact, eyesafe laser interrogator, a laser detector assembly, an electronic processor unit, and an omni-directional RF responder. The laser interrogator includes an aiming laser pointer for aiming the soldier's weapon at night when using Night Vision Goggles and provides an embedded training capability that is interoperable with MILES/MILES 2000 training systems. The system will provide combat identification beyond the effective range of the weapon and will exceed the soldier's target acquisition capability under degraded atmospheric conditions. The system will also be directly interoperable and have a commonality and a migration path with the combat ID functions to be embedded in the Land Warrior equipment suite. The system will fulfill requirements stated in the Operational Requirements Document for use by Army, Marine and Special Operations Forces. Survivability is one of the seven tenets of the Army Transformation Strategy and ICIDS represents an integral part of that strategy as it works to reduce incidents of fratricide and increase combat effectiveness. This system supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP), as well as providing a critical link to ensuring compatibility and interoperability to the Objective Warrior System.

FY 2000 Accomplishments

- 1940 Completed redesign of helmet electronics and weight reduction.
 - 6748 Continued fabrication, assembly and test of 50 EMD hardware systems to support technical testing.
 - 225 Completed Phase I, Development Testing (DT).
- Total 8913

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0604817A - Combat Identification

PROJECT

902

FY 2001 Planned Program

- 1469 Complete fabrication, assembly and test of 50 EMD hardware systems to support technical testing.
- 353 Complete Phase II, Development Testing.
- 251 Perform data reduction and analysis from government test.
- 402 Conduct Detection Acquisition and Recognition and Identification (DARI) Test.
- 392 Conduct Airborne Certification.
- 88 Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR).

Total 2955

FY 2002 Planned Program

- 2260 Conduct Initial Operational Test (IOT).
- 500 Perform data reduction and analysis from government test.
- 254 Production Readiness Review preparation.

Total 3014

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PROJECT
902

<u>B. Other Program Funding Summary</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Compl	Total Cost
OPA2, SSN BA0515 Combat ID/Aiming Light	0	10939	8503	0	0	0	0	0	0	0

C. Acquisition Strategy: A competitive, cost plus incentive fee (CPIF) contract for the design, fabrication and testing of 50 units was awarded in July 1997. A follow-on, Fixed Price (FP), sole source, Low Rate Initial Production (LRIP) contract, based on demonstrated technical test results, will be awarded in June 2001 to provide an orderly ramp up to production. A follow-on FP, sole-source, production contract will be awarded in FY03.

<u>D. Schedule Profile</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Govt Development Test, Phase I	4Q			0	0	0	0	0
Complete fabrication of 50 hardware systems		1Q		0	0	0	0	0
Development Test, Phase II		1-2Q		0	0	0	0	0
Airborne Certification		3Q		0	0	0	0	0
LRIP IPR		3Q		0	0	0	0	0
LRIP Award		3Q		0	0	0	0	0
DARI		4Q		0	0	0	0	0
Initial Operational Test & Evaluation (IOT&E)			4Q	0	0	0	0	0
Production Readiness Review				0	0	0	0	0
Production Award				0	0	0	0	0
FUE (Production representative EMD units)				0	0	0	0	0

ARMY RDT&E COST ANALYSIS(R-3)

June 2001

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0604817A - Combat Identification

PROJECT
902

I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Hardware	C/CPIF	Motorola, Scottsdale, AZ	20979	1319	1Q	0		0	0	0	0	0
Subtotal:			20979	1319		0		0		0	0	0

II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Sys Eng/Tech Assist	C/T&M	Misc	120	0		0		0	0	0	0	0
b . Matrix Support	MIPR	Misc	641	142	1Q	89	1Q	0	0	0	0	0
Subtotal:			761	142		89		0		0	0	0

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PROJECT
902

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Test Planning/Execution	MIPR	CECOM, ATEC, WSMR, SLAD, etc	804	133	1Q	465	1Q	0	0	0	0	0
b . Development Test, Phase I, II	MIPR	WSMR, OTC, ATEC, etc	0	694	2Q	0		0	0	0	0	0
c . DARI	MIPR	WSMR	0	300	1-2Q	0		0	0	0	0	0
d . IOTE	MIPR	ATEC, OTC	0	0		2271	4Q	0	0	0	0	0
Subtotal:			804	1127		2736		0		0	0	0
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Program Management		PM Combat ID	799	279	1Q	189	1Q	0	0	0	0	0
b . SBIR/STTR			0	88		0		0	0	0	0	0
Subtotal:			799	367		189		0		0	0	0
Project Total Cost:			23343	2955		3014		0		0	0	0