ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)				February 2003				
BUDGET ACTIVITY  3 - Advanced technology development	ре number <b>0603654A</b>			echnology	<b>Demons</b>	tration	PROJECT <b>460</b>	
COST (In Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
460 LOSAT TECHNOLOGY DEMO	72530	26955	8847	0	0	0	0	0

A. Mission Description and Budget Item Justification: Line-of-Sight Anti-Tank (LOSAT) and the Kinetic Energy Missile (KEM) technology provide the foundation for the Objective Force. This program focuses on the integration of the LOSAT weapon system into a light, early deployable configuration in order to help remedy the urgent need for the early entry force lethality shortfall against heavy armor in support of the Army Transformation. The LOSAT weapon system consists of a kinetic energy (KE) missile launcher mounted on a heavy High Mobility Multi-purpose Wheeled Vehicle (HMMWV) chassis. LOSAT offers a highly mobile, near-term, advanced capability for overwhelming armor destruction with a high rate of fire, increased range, and increased force survivability. LOSAT, deployed in the early entry force, will provide the decisive edge to win swiftly with minimum casualities and provides an assault support weapon capability. LOSAT is strategically and tactically deployable, giving Commanders and decision makers greater flexibility. Once in theater, LOSAT is extremely mobile, to include air droppable and sling loading under CH-47 and UH-60L aircraft. The performance of this hypervelocity kinetic energy missile (velocity of a mile per second) is not affected by the proliferation of emerging threat active protective systems and enhanced reactive armors, which are both rapidly becoming available on the global marketplace. LOSAT was initiated as a DoD-approved Advanced Concept Technology Demonstration (ACTD) program in FY 1998 to position the technology for future acquisition decisions; demonstrate subsystem capabilities in flight tests and dirty battlefield environments; evaluate the utility of the LOSAT technology for the early entry forces; demonstrate an integrated HMMWV-based LOSAT system in-flight tests and advanced war fighting experiments; and evaluate affordability issues. The ACTD program is a cost-effective means to assess the operational value of LOSAT to the early entry force through deployment with the XVIII Airborne Corps while longer-term applied research efforts continue for a small Compact Kinetic Energy Missile and an objective Future Combat System. The work in this program element is consistent with the Army Science and Technology Master Plan, and the Army Modernization Plan. In December 1999, the Army and OSD funded the LOSAT accelerated advanced development and procurement as part of the Army Transformation by adding additional design activities, reducing risk, completing system qualification testing, and adding additional Operational tests to support transition to limited production of the LOSAT Weapon System, with entry into Low Rate Initial Production (LRIP) starting in FY 2004. This ACTD Plus System Development and Demonstration (SDD) effort is funded in PE 0604819A and is concurrent with the ACTD contract. This system supports the Objective Force transition path of the Transformation Campaign Plan. No Defense Emergency Response Funds have been provided to this program.

Accomplishments/Planned Program	FY 2002	FY 2003	FY 2004	FY 2005
In FY02 completed Fire Unit detail designs.	34229	0	0	0
In FY02 completed Missile detail designs.	19238	0	0	0
In FY02 completed tool design and fabrication.	1646	0	0	0
In FY02 completed Virtual Prototype Simulator Upgrade.	1130	0	0	0
In FY02 completed Training Device designs and fabrication.	1202	0	0	0

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

February 2003
PROJECT

460

BUDGET ACTIVITY

## 3 - Advanced technology development

PE NUMBER AND TITLE

0603654A - Line-Of-Sight Technology Demonstration

Accomplishments/Planned Program (continued)	FY 2002	FY 2003	FY 2004	FY 2005
In FY03 support system ground and flight qualification tests, safety certification, and man-rating assessment.	0	5130	0	0
In FY02-04, fabrication, assembly, qualification and test support for 12 prototype Fire Units.	6100	12606	694	0
In FY02-04, fabrication, assembly, qualification testing, and flight testing of 37 prototype missiles.	4809	7339	5653	0
In FY02-03, Fire Unit and Missile software design, code and unit level test, system level test and certification.	3280	880	0	0
In FY02-04, support Early Soldier involvement training and execute force on force DBBL Demonstration.	896	1000	2500	0
Totals	72530	26955	8847	0

Y 2002 69859	FY 2003	FY 2004	FY 2005
69859	20202		
	28283	0	0
72530	26955	8847	0
2671	-1328	8847	0
	-396		
2671	-155		
	-777		
		8847	
	72530 2671	72530 26955 2671 -1328 -396 2671 -155	72530 26955 8847 2671 -1328 8847 -396 2671 -155 -777

Change Summary Explanation: Funding - FY 2004: Funds increased to support completion of the LOSAT ACTD in FY04.