

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2004

BUDGET ACTIVITY
3 - Advanced technology development

PE NUMBER AND TITLE
**0603654A - Line-Of-Sight Technology
Demonstration**

PROJECT
460

COST (In Thousands)		FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
460	LOSAT TECHNOLOGY DEMO	29931	8739	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 provides light forces needed lethality and the foundation for the Future Force Kinetic Energy Missile integration. 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 casualties 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 and can be dropped or sling loaded 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 Systems. The cited work is consistent with Strategic Planning Guidance, the Army Science and Technology Master Plan (ASTMP), the Army Modernization Plan, and the Defense Technology Area Plan (DTAP). Work is performed at the Program Executive Office for Tactical Missiles, Redstone Arsenal, AL. 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.

Accomplishments/Planned Program	FY 2003	FY 2004	FY 2005
In FY03 supported system ground and flight qualification tests, safety certification, and man-rating assessment.	5130	0	0
In FY03-04, fabrication, assembly, qualification and test support for 12 prototype Fire Units.	12606	1694	0
In FY03-04, fabrication, assembly, qualification testing, and flight testing of 37 prototype missiles.	10315	6791	0
In FY03, completed and certified Fire Unit and Missile software design, code, unit level test, and system level test.	880	0	0

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Accomplishments/Planned Program B(continued)

	FY 2003	FY 2004	FY 2005
In FY03, supported Early Soldier involvement training and execute force on force Dismounted Battlespace Battlefield Lab	1000	0	0
Small Business Innovative Research/Small Business Technology Transfer Programs	0	254	0
Totals	29931	8739	0

B. Program Change Summary

	FY 2003	FY 2004	FY 2005
Previous President's Budget (FY 2004)	26955	8847	0
Current Budget (FY 2005 PB)	29931	8739	0
Total Adjustments	2976	-108	0
Congressional program reductions		-75	
Congressional rescissions			
Congressional increases			
Reprogrammings	2976	-33	
SBIR/STTR Transfer			
Adjustments to Budget Years			

Significant Change Explanation.

FY03 - Funds increased to support the LOSAT Technical Demonstration.