

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)								June 2001		
BUDGET ACTIVITY 3 - ADV TECHNOLOGY DEV				PE NUMBER AND TITLE 0603654A - Line-of-Sight Technology Demo				PROJECT 460		
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
460 LOSAT TECHNOLOGY DEMO	37326	50262	57384	0	0	0	0	0	0	0
<p><u>A. Mission Description and Budget Item Justification:</u></p> <p><u>PLEASE NOTE:</u> 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.</p> <p>Project D460-LOSAT Technology Demonstration: 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 an air-mobile configuration in order to help remedy the early entry force lethality shortfall against heavy armor. 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. 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 warfighting 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 (in PE 0604819A) and procurement as part of the New Army Vision/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 production funds starting in FY 2004. This system supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).</p> <p><u>FY 2000 Accomplishments</u></p> <ul style="list-style-type: none"> • 1100 - Completed Fire Unit exterior structural design for Risk Reduction Flight test. • 675 - Initiated Fabrication of Fire Unit structural prototype for use in Risk Reduction Flight test. • 27966 - Continued Fire Unit electronic and interior preliminary designs (including major subcontractors). • 725 - Continued Fire Unit software requirements analysis. 										

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)**June 2001**

BUDGET ACTIVITY

3 - ADV TECHNOLOGY DEV

PE NUMBER AND TITLE

0603654A - Line-of-Sight Technology Demo

PROJECT

460**FY 2000 Accomplishments (Continued)**

- 265 - Supported Dismounted Battlespace Battle Lab Early Soldier Involvement exercises.
- 475 - Continued Virtual Prototype Simulator Upgrade.
- 6120 - Continued Missile electronic and mechanical preliminary designs (including subcontractors).

Total 37326

FY 2001 Planned Program

- 517 - Complete fabrication of one Fire Unit structural prototype for Risk Reduction Flight test.
- 2067 - Complete fabrication of missile hardware for two Risk Reduction Flight tests.
- 2280 - Conduct two Risk Reduction Flight tests.
- 30930 - Fire Unit electronic and interior mechanical detail designs; and initiate fabrication (including major subcontractors).
- 9816 - Missile electronic and mechanical detail designs; and initiate fabrication (including major subcontractors).
- 432 - Continue tooling design and initiate fabrication.
- 1345 - Complete Fire Unit Software requirements analysis; initiate design, code, and test.
- 500 - Support Dismounted Battlespace Battle Lab Early Soldier Involvement exercises.
- 2375 - Continue test equipment design, initiate fabrication.

Total 50262

FY 2002 Planned Program

- 29957 - Complete Fire Unit detail designs; continue fabrication, assembly and test of twelve prototypes.
- 19345 - Complete Missile detail designs; continue fabrication, assembly and test 37 prototypes.
- 1646 - Complete tool design and fabrication.
- 1130 - Complete Virtual Prototype Simulator Upgrade.
- 1130 - Complete Training Device designs; initiate fabrication.
- 896 - Support Early Soldier involvement training, and planning for ACTD Company in 82nd Airborne Division.
- 2780 - Complete Fire Unit software design, code and test; initiate system level test.
- 500 - Complete Missile Software update design, code, and unit level test; initiate system level test.

Total 57384

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)**June 2001**

BUDGET ACTIVITY

3 - ADV TECHNOLOGY DEV

PE NUMBER AND TITLE

0603654A - Line-of-Sight Technology Demo

PROJECT

460

<u>B. Program Change Summary</u>	FY 2000	FY 2001	FY 2002	FY 2003
Previous President's Budget (FY2001 PB)	37845	50727	57127	0
Appropriated Value	38000	50727	0	0
Adjustments to Appropriated Value	0	0	0	0
a. Congressional General Reductions	0	0	0	0
b. SBIR / STTR	-1019	0	0	0
c. Omnibus or Other Above Threshold Reduction	-155	0	0	0
d. Below Threshold Reprogramming	500	0	0	0
e. Rescissions	0	-465	0	0
Adjustments to Budget Years Since FY2001 PB	0	0	257	0
Current Budget Submit (FY 2002/2003 PB)	37326	50262	57384	0