

UNCLASSIFIED

Exhibit R-2, RDT&E Project Justification								February 2007
OPERATIONAL TEST AND EVALUATION, DEFENSE (0460) BUDGET ACTIVITY SIX				LIVE FIRE TEST AND EVALUATION (LFT&E) PROGRAM ELEMENT (PE) 0605131OTE				
Cost (\$ In Millions)	FY 2006*	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
PE 0605131OTE		11.203	11.133	11.572	11.921	12.210	12.460	12.645

* In FY 2006 and prior years, this program was funded in PE 0605131D8Z.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION

This PE directly supports the Congressional statutory requirements for oversight of Live Fire Test and Evaluation (LFT&E). The primary objective of LFT&E is to assure that the vulnerability and survivability of Department of Defense (DoD) crew-carrying platforms and the lethality of our conventional munitions are known and acceptable before entering full-rate production. LFT&E encompasses realistic tests involving actual United States (U.S.) and foreign threat hardware or, if not available, acceptable surrogate threat hardware. The objective is to identify and correct design deficiencies early in the development process. A completed LFT&E program and test report is required before programs proceed beyond low-rate initial production (BLRIP). LFT&E also includes realistic modeling and simulation (M&S) to examine survivability and lethality attributes not assessed during testing. The LFT&E program is essential, especially in view of the escalating costs of technologically sophisticated weapons systems.

The LFT&E PE also supports DoDs Joint Live Fire (JLF) Program. JLF was begun in 1984 under an OSD charter to test fielded front-line combat aircraft and armor systems for their vulnerabilities as well as fielded weapons, both U.S. and threat, for their lethalties against their respective targets.

This PE includes funds to obtain Federally Funded Research and Development Center (FFRDC) support in performing the analyses to support described tasks, as well as travel funds to carry out oversight of the LFT&E program.

Exhibit R-2, RDT&E Budget Justification

UNCLASSIFIED

R-1 Line – Item No. 4

Page 1 of 6

UNCLASSIFIED

This program element is budgeted in Budget Activity 6, RDT&E Management Support, to support LFT&E management activities for the oversight of RDT&E of new systems, as well as RDT&E of fielded systems.

ACCOMPLISHMENTS/PLANNED PROGRAMS:

FY 2006 Accomplishments:

- Please see Live Fire Testing Program Element 0605131D8Z.

FY 2007 Plans:

Major T&E Programs:

Provide Live Fire Test and Evaluation input for Test and Evaluation Master Plans, test plans, System Acquisition Reports, Defense Acquisition Executive Summary reports, and BLRIP reports for those programs designated for oversight by DOT&E and OUSD(AT&L). The oversight list is developed and approved annually.

JLF Programs:

Conduct tests of fielded systems not previously tested under Air, Land, or Sea Joint Live Fire programs to support DOT&E and warfighter needs. The need for these tests result from systems being exposed to new threats, used in new unanticipated tactics, or being operated in new combat environments, and the subsequent need for an assessment of how they perform. Projects currently under consideration include:

- CF-6 Engine Vulnerability to MANPADS
- Kiowa Warrior Cockpit Ballistic Vulnerability
- Kiowa Warrior Fuel System Ballistic Vulnerability
- Kiowa Warrior Rotor Control Subsystem Vulnerability
- Foreign Unguided Rocket Lethality
- Fragment Restraint Solution for HH-60A/L Medevac OBOGGS

Exhibit R-2, RDT&E Budget Justification

UNCLASSIFIED

R-1 Line – Item No. 4

Page 2 of 6

UNCLASSIFIED

- MH/UH-60M Black Hawk Composite Tailcone/Driveshaft Ballistic Vulnerability
- UH-60M Black Hawk Wide Chord Main Rotor Blade Ballistic Vulnerability
- Joint Helicopter Vulnerability to MANPADS
- C-130 Flare Bucket
- Dynamic MANPADS Testing and Model Correlation
- Large Turbofan Engine Vulnerability to MANPADS
- C-130 and C-17 LAST Armor Quantification
- BROAD DAGGER Fuzing
- Probability of Incapacitation Assessments fo V-shaped hull vehicles
- Improvised Explosive Device (IED) Blast/Fragment Arena test and characterization
- U. S. Small Arms Effectiveness vs. Threat Body Armor
- 30mm Ammunition vs. Threat ERA Characterization
- Military Operations in Urban Terrain Weapons Effects
- Penetration Characterization for Titanium Fragments
- Fragmentation and Penetration Testing for Hellfire Missiles
- Advanced Shoulder Fired Weapon Characterization Test and Analysis
- Stryker Armor Multi-hit Analysis
- Blast data & Validation for JTCG/ME Database
- Penetration Equation Extension for Deflection/Material Mismatch
- PAC-3 Vulnerability and Battle Damage Assessment and Repair
- Low Speed Rod Penetration
- RPG-22 Lethality Assessment
- Explosively Formed Penetrator Vulnerability Characterization
- Fragment Penetration Test and Analysis, Masonry
- Penetration Data Collection for Large Fragments
- Penetration Data Collection for AP projectiles
- Ballistic Limit Data for Yawed Impactors
- Ship Damage Control Readiness Evaluation
- Recoverability in Network Fire Simulation
- Shipboard Space Fire Testing
- Test Alternatives to Explosive UNDEX

Exhibit R-2, RDT&E Budget Justification

UNCLASSIFIED

R-1 Line – Item No. 4

Page 3 of 6

UNCLASSIFIED

- Survivability of Ships Built to Commercial Standards
- Submarine Susceptibility to Mines
- Hydraulic Fluid Hazard Analysis and Explosion Mitigation

FY 2008 Plans:

Major T&E Programs:

Provide Live Fire Test and Evaluation input for Test and Evaluation Master Plans, test plans, System Acquisition Reports, Defense Acquisition Executive Summary reports, and BLRIP reports for those programs designated for oversight by DOT&E and OUSD(AT&L). The oversight list is developed and approved annually.

JLF Programs:

Conduct tests of fielded systems not previously tested under Air, Land, or Sea Joint Live Fire programs to support DOT&E and warfighter needs. The need for these tests result from systems being exposed to new threats, used in new unanticipated tactics, or being operated in new combat environments, and the subsequent need for an assessment of how they perform.

FY 2009 Plans:

Major T&E Programs:

Provide Live Fire Test and Evaluation input for Test and Evaluation Master Plans, test plans, System Acquisition Reports, Defense Acquisition Executive Summary reports, and BLRIP reports for those programs designated for oversight by DOT&E and OUSD(AT&L). The oversight list is developed and approved annually.

JLF Programs:

Conduct tests of fielded systems not previously tested under Air, Land, or Sea Joint Live Fire programs to support DOT&E

Exhibit R-2, RDT&E Budget Justification

UNCLASSIFIED

R-1 Line – Item No. 4

Page 4 of 6

UNCLASSIFIED

and warfighter needs. The need for these tests result from systems being exposed to new threats, used in new unanticipated tactics, or being operated in new combat environments, and the subsequent need for an assessment of how they perform.

B. (U) PROGRAM CHANGE SUMMARY

(\$ in Millions)	<u>FY 2006*</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 2007 President's Budget		11.245	11.472	11.701
Current Budget Submit		11.203	11.133	11.572
Total Adjustments			(.339)	(.129)
Congressional program reductions				
Congressional rescissions		(.042)		
Congressional increases				
Fiscal Guidance Adjustments			(.339)	(.129)
Inflation Adjustment				
Reprogramming				

C. (U) OTHER PROGRAM FUNDING: NA

D. (U) ACQUISITION STRATGEY: NA

Exhibit R-2, RDT&E Budget Justification

UNCLASSIFIED

R-1 Line – Item No. 4

Page 5 of 6

UNCLASSIFIED

E. (U) PERFORMANCE METRICS:

Performance Measure: Percentage of required live fire test planning documents, assessments, and reports applicable to acquisition programs on the OSD Test and Evaluation Oversight List and other special interest programs/legacy systems that are completed and delivered to the appropriate decision makers on time. Percentage of required live fire test planning documents, assessments, and reports applicable to acquisition programs on the OSD Test and Evaluation Oversight List and other special interest programs/legacy systems that are completed and delivered to the appropriate decision makers on time.

Actual Performance and Goals:

Live Fire Testing	FY 2006 Actual	FY 2007 Goal	FY 2008 Goal	FY 2009 Goal
On-Time Completion Rate	88%	90%	91%	91%

The on-time completion rate was computed on the basis of the number of BLRIP live fire test and evaluation reports, Joint Live Fire Quick Look Reports, and Joint Live Fire Test reports that were submitted within established time standards relative to the total number of such products that fell due during the fiscal year. DOT&E plans to achieve its goals for FY 2007 through FY 2009 through increased management emphasis on timely delivery of required reports to customer activities.

Exhibit R-2, RDT&E Budget Justification

UNCLASSIFIED

R-1 Line – Item No. 4

Page 6 of 6