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Exhibit R-2, RDT&E Project Justification							May 2009	
OPERATIONAL TEST AND EVALUATION, DEFENSE (0460) BUDGET ACTIVITY 6 (RDT&E MANAGEMENT SUPPORT)				LIVE FIRE TEST AND EVALUATION (LFT&E) PROGRAM ELEMENT (PE) 0605131OTE				
Cost (\$ In Millions)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
PE 0605131OTE	11.062	11.541	12.285					

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION

This Program Element (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 program element also supports DoD’s Joint Live Fire (JLF) Program. JLF was begun in 1984 under an Office of the Secretary of Defense (OSD) charter to test fielded front-line combat aircraft and armor systems for their vulnerabilities as well as fielded weapons, both U.S. and foreign, for their lethality against their respective targets.

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

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.

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ACCOMPLISHMENTS/PLANNED PROGRAMS

FY 2008 Accomplishments

Major Test and Evaluation Programs

Provided 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). LFT&E executed oversight of 117 survivability and/or lethality programs. DOT&E published reports on the San Antonio Class Amphibious Transport Dock (LPD-17), the SSN-774 Virginia Class Submarine, the High Mobility Rocket System with Improved Crew Protection Cab, the Stryker Mobile Gun System, and the T-AKE Lewis and Clark Class of Auxiliary Dry Cargo Ship systems.

JLF Programs

Conducted tests of fielded systems not previously tested under Air, Land, or Sea Joint Live Fire programs to support DOT&E and warfighter needs. Supported and partnered with the Joint Improvised Explosive Device Defeat Organization (JIEDDO) and to deployed forces, through extensive characterization of improvised explosive munitions. Participated in several focused initiatives that directly support warfighters deployed to OIF/OEF, and addressed issues of significant importance to the Congress. Examples include personnel body armor, tactical ground vehicle up-armorings, and small caliber rifle cartridge lethality.

JLF projects provided survivability data on currently fielded U.S. systems in order to obtain a better understanding of their vulnerability and identified ways to reduce that vulnerability. These efforts provided information to aid in combat mission planning, increased weapon system and crew combat survival and effectiveness, and provided battle damage assessment and repair training. These efforts also provided design recommendation to reduce ballistic vulnerability of current and future systems. JLF Air projects included investigations into the effectiveness of passive fire extinguishing technologies, investigations into CH-46 fuel line protection techniques, tests of vulnerability of Black Hawk subsystems, and continued investigations of vulnerabilities of aircraft in theater to RPGs, MANPADS, and unguided rockets. JLF Land projects included investigations of vulnerability of U.S. armors, vulnerability of vehicles to blast loads, and lethality against typical in-theater building construction types. JLF Sea projects continued to make progress in developing and validating key components of alternatives to traditional shock trials of ships and submarines.

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FY 2009 Plan

Major Test and Evaluation Programs

This is a continuing effort. The FY 2009 budget provides 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 their performance. Continue to support and partner with the JIEDDO. Address urgent requests that directly support deployed warfighters and issues of importance to the Congress.

Continue to perform JLF projects to provide survivability data on currently fielded U.S. systems. JLF Air projects will continue to investigate vulnerabilities of specific fielded aircraft, generic vulnerabilities to all aircraft, such as fuel ingestion and vulnerability of carried munitions, and vulnerabilities of advanced aircraft materials. JLF Land projects will continue to investigate the vulnerability of vehicles to blast, and the lethality of U.S. weapons against typical in-theater targets, as well as improving modeling and simulation tools by providing validation data. JLF Sea projects will continue to develop key components of alternatives to traditional shock trials of ships and submarines and will begin to investigate ship vulnerabilities in the areas of commercial standards, equipment damage, and compartment fires.

FY 2010 Plans

Major Test and Evaluation Programs

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JLF Programs

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(U) PROGRAM CHANGE SUMMARY

(\$ in Millions)	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
FY 2009 President's Budget	11.062	11.572	11.921
Current Budget Submit	11.062	11.541	12.285
Total Adjustments	0	-.031	+.364
Congressional general reductions	-	-.031	-
Other Realignments/Program Increases	-	-	+.364

C. (U) OTHER PROGRAM FUNDING: NA

D. (U) ACQUISITION STRATEGY: NA

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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 2008 Actual	FY 2009 Goal	FY 2010 Goal
On-Time Completion Rate	96%	97%	98%

The on-time completion rate was computed on the basis of the number of beyond low-rate initial production 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 2009 and FY 2010 through continued management emphasis on timely delivery of required reports to customer activities.