

**UNCLASSIFIED**

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)</b>	DATE <b>February 1999</b>
---	------------------------------

<b>BUDGET ACTIVITY</b> <b>6 - Management and Support</b>	<b>PE NUMBER AND TITLE</b> <b>0605601A Army Test Ranges and Facilities</b>
---	---

COST <i>(In Thousands)</i>	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	114970	118571	137193	134335	132680	135692	154984	176946	Continuing	Continuing
DF30 Army Test Ranges & Facilities	112750	118571	137193	134335	132680	135692	154984	176946	Continuing	Continuing
D699 Non-Major Sys Test Design and Evaluation	2220	0	0	0	0	0	0	0	0	2220

**A. Mission Description and Budget Item Justification:** This Program Element sustains an objective test capability for developmental testing and integrated developmental/operational testing of DoD materiel, weapons and weapons systems from concept through production within the acquisition cycle at three Major Range and Test Facility Bases: Yuma Proving Ground, AZ (to include management of Army environmental testing); Aberdeen Test Center, Aberdeen Proving Ground, MD; and White Sands Missile Range, NM. This program also sustains an objective developmental test capability at: Aviation Technical Test Center, Fort Rucker AL; Redstone Technical Test Center, Redstone Arsenal, AL; Electronic Proving Ground, Fort Huachuca, AZ; Cold Regions Test Center, Forts Greely and Wainwright, AK; and a capability to provide for integrated test planning plus safety assessment/verification. Developmental test capabilities at each test range have been uniquely established, are in place to support independent test and evaluation (T&E) requirements of funded weapons programs, and are required to assure technical performance, adherence to safety requirements, reliability, logistics supportability, and quality of materiel in development and in production. Program funding includes efforts toward leveraging technologies to include procurement of essential equipment, personnel training and facility modernization to support the warfighter's testing requirements. It also provides for leverage, integration and use of virtual and synthetic test tools/capabilities for reduction of test costs and program acquisition costs. Current testing capabilities are not duplicated within DoD and they represent baseline requirements to assure acceptable risk to the soldier as new technologies emerge into fielded weapons systems. As part of the DoD RELIANCE initiative, the Army (via this program) has committed at the highest senior service levels to be the lead agency for ground vehicles, gun munitions, electric guns, and surface-to-air missiles. This initiative is currently supported by the Services' Vice Chiefs of Staff in their role as the T&E Board of Directors. This program finances indirect test operating costs not billable to test customers, replacement of test equipment and test facility modernization projects to maintain current testing capabilities and improvements to safety, environmental protection, efficiency of test operations, and technological advances. This program does not finance reimbursable costs directly identified to a user of these ranges. These direct costs are borne by materiel developers and project/product managers in accordance with DoD Directive 7000.14R. It also supports integrated Army evaluation for decision makers at milestone reviews, includes the development of test design, evaluation plans, and subsequent independent evaluations at all acquisition milestones to include recommendations for type classification and materiel release of non-major systems. Evaluation results will be incorporated into a single Army evaluation and presented at all acquisition milestones.

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

DATE  
**February 1999**

BUDGET ACTIVITY

**6 - Management and Support**

PE NUMBER AND TITLE

**0605601A Army Test Ranges and Facilities**

<b>B. Program Change Summary</b>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
Previous President's Budget ( <u>FY 1999</u> PB)	118327	119553	119882	121679
Appropriated Value	122117	119553		
Adjustments to Appropriated Value				
a. Congressional General Reductions	-3790	-982		
b. SBIR / STTR	-2967			
c. Omnibus or Other Above Threshold Reductions	-979			
d. Below Threshold Reprogramming	+589			
e. Rescissions				
Adjustments to Budget Years Since FY 1999 PB			17311	12656
Current Budget Submit ( <u>FY 2000/2001</u> President's Budget Submission)	114970	118571	137193	134335

Change Summary Explanation: FY00/01 plus-ups of 17311/12656 increase the level of contractor labor supporting known test program/schedule requirements. The increased funding is necessary to keep Army major acquisition programs from being delayed, to keep Army from moving programs into operational testing (OT) before problems are thoroughly identified, and from fielding items that might not work in the hands of soldiers. It also provides funding to offset the most critical and severe test facility deterioration essential to preserve critical test capabilities and assets at Aberdeen Test Center, MD; White Sands Missile Range, NM; Yuma Proving Ground, AZ; Redstone Technical Test Center, AL; and Aviation Technical Test Center, AL.

**UNCLASSIFIED**

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)								DATE February 1999		
BUDGET ACTIVITY <b>6 - Management and Support</b>				PE NUMBER AND TITLE <b>0605601A Army Test Ranges and Facilities</b>					PROJECT <b>DF30</b>	
COST (In Thousands)	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
DF30 Army Test Ranges & Facilities	112750	118571	137193	134335	132680	135692	154984	176946	Continuing	Continuing

**A. Mission Description and Justification:** Sustains an objective test capability for developmental testing and support to operational testing of DoD materiel, weapons and weapons systems from concept through production within the acquisition cycle at three Major Range and Test Facility Bases: Yuma Proving Ground, AZ (to include management of Army environmental testing); Aberdeen Test Center, Aberdeen Proving Ground, MD; and White Sands Missile Range, NM. This program also sustains an objective developmental test capability at: Aviation Technical Test Center, Fort Rucker AL; Redstone Technical Test Center, Redstone Arsenal, AL; Electronic Proving Ground, Fort Huachuca, AZ; Cold Regions Test Center, Forts Greely and Wainwright, AK; and a capability to provide for integrated test planning plus safety assessment/verification. Developmental test capabilities at each test range have been uniquely established, are in place to support independent test and evaluation (T&E) requirements of funded weapons programs, and are required to assure technical performance, adherence to safety requirements, reliability, logistics supportability, and quality of materiel in development and in production. Program funding includes efforts toward leveraging technologies to include procurement of essential equipment, personnel training and facility modernization to support the warfighter's testing requirements. It also provides for leverage, integration and use of virtual and synthetic test tools/capabilities for reduction of test costs and program acquisition costs. Current testing capabilities are not duplicated within DoD and they represent baseline requirements to assure acceptable risk to the soldier as new technologies emerge into fielded weapons systems. As part of the DoD RELIANCE initiative, the Army (via this program) has committed at the highest senior service levels to be the lead agency for ground vehicles, gun munitions, electric guns, and surface-to-air missiles. This initiative is currently supported by the Services' Vice Chiefs of Staff in their role as the T&E Board of Directors. This program finances indirect test operating costs not billable to test customers, replacement of test equipment and test facility modernization projects to maintain current testing capabilities and improvements to safety, environmental protection, efficiency of test operations, and technological advances. This program does not finance reimbursable costs directly identified to a user of these ranges. These direct costs are borne by materiel developers and project/product managers in accordance with DoD Directive 7000.14R.

**FY 1998 Accomplishments:**

- 112310 Command-wide test management including test planning, safety assessment/verification and conduct of test operations. Involvement in over 760 Integrated Product Team efforts and issuance of over 350 safety releases and over 100 safety confirmations were conducted on both major and non-major acquisition programs/experiments. No range modernization was affordable. Some of the major systems tested include:
 

Wide Area Mine (HORNET)	Naval ship structures programs/experiments
Artillery Systems (CRUSADER)	LONGBOW HELLFIRE
COMANCHE Helicopter Subsystems	JAVELIN Block II
Light/Medium Tactical Vehicles (4X4)	Army Tactical Missile System (ATACMS) Block II
Theater Missile Defense (TMD)	Theater High Altitude Area Defense (THAAD)

**UNCLASSIFIED**

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)</b>		DATE <b>February 1999</b>
BUDGET ACTIVITY <b>6 - Management and Support</b>	PE NUMBER AND TITLE <b>0605601A Army Test Ranges and Facilities</b>	
<b>FY 1998 Accomplishments: (continued)</b>		
	Brilliant Anti-Armor Submunition (BAT) Enhanced Fiber Optic Guided Missile (EFOG) Aircraft Survivability Equipment Airborne Avionics Air Reconnaissance Low M915A2 Line Haul Truck M1 Breacher LAND WARRIOR Heavy Utility Truck	Multiple Launch Rocket System (MLRS) Improved Target Acquisition System/TOW (Tube Lanch'd, Opti. Tracked, Wire Guided) Heavy Assault Bridge Forward Area Air Defense Ground Based Sensor EH-60 QUICKFIX Advanced Field Artillery Tactical Data System (AFATDS) Advanced Tank Armaments Close Combat Tactical Trainer (CCTT) Ground Combat Identification
•	440 Airborne Engineering Evaluation Support Activity (AEESA), Fort Monmouth, NJ	
Total	112750	
<b>FY 1999 Planned Program:</b>		
•	116455 Command-wide test management including test planning, safety assessment/verification and conduct of test operations. Involvement in significant numbers of Integrated Product Team efforts and issuance of safety releases and safety confirmations will be conducted on both major and non-major acquisition programs/experiments. No range modernization is affordable. Some of the major systems to be tested include: Close Combat Tactical Trainer (CCTT) Naval Ship Structures Programs/Experiments LONGBOW HELLFIRE Light/Medium Tactical Vehicles (4X4) Theater Missile Defense (TMD) Brilliant Anti-Armor Submunition (BAT) Enhanced Fiber Optic Guided Missile (EFOG) Aircraft Survivability Equipment Airborne Avionics JAVELIN Block II Mine Neutralization M1 Breacher LAND WARRIOR	
		High Mobility Multi-Purpose Wheeled Vehicle Prototype Artillery Systems (CRUSADER) COMANCHE Helicopter Subsystems Army Tactical Missile System (ATACMS) Block II Theater High Altitude Area Defense (THAAD) Multiple Launch Rocket System (MLRS) Improved Target Acquisition System/TOW Heavy Assault Bridge Forward Area Air Defense Ground Based Sensor EH-60 QUICKFIX Advanced Field Artillery Tactical Data System (AFATDS) Navy Standard & Rolling Airframe Missiles Secure Mobile Anti-Jam Reliable Tactical – Terminal (SMART-T)

**UNCLASSIFIED**

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)</b>		DATE <b>February 1999</b>
BUDGET ACTIVITY <b>6 - Management and Support</b>	PE NUMBER AND TITLE <b>0605601A Army Test Ranges and Facilities</b>	
<b>FY 1999 Planned Program: (continued)</b>		
	Improved Recovery Vehicle	Improved Cargo Helicopter
	10 Ton Recovery Truck	2-1/2 T, 5 T, & High Mobility Multi-Purpose Whl Veh (HMMWV) Ext Svc Life Program
	Multipurpose Individual Munitions	
•	479 Airborne Engineering Evaluation Support Activity (AEESA)	
•	1637 Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Programs	
Total	118571	
<b>FY 2000 Planned Program:</b>		
•	136631 Command-wide test management including test planning, safety assessment/verification and conduct of test operations. Involvement in significant numbers of Integrated Product Team efforts and issuance of safety releases and safety confirmations will be conducted on both major and non-major acquisition programs/experiments. Only limited range modernization is affordable. Some of the major systems to be tested include:	
	FIREFINDER P3I	Naval ship structures programs/experiments
	Artillery Systems (CRUSADER)	LONGBOW HELLFIRE
	COMANCHE Helicopter Subsystems	Multipurpose Individual Munition
	STINGER RMP PIP	Army Tactical Missile System (ATACMS) Block IIA
	Theater Missile Defense (TMD)	Theater High Altitude Area Defense (THAAD)
	Brilliant Anti-Armor Submunition (BAT)	Multiple Launch Rocket System (MLRS)
	Sngl Chan Anti-Jam Man Prtbl (SCAMP) Blk III	Aircrew Integrated Systems
	Mine Neutralization/Detection	GUARDRAIL Common Sensor
	Improved Cargo Helicopter	High Mobility Multi-Purpose Wheeled Veh (HMMWV) Prototype
	SMART-T	Army Joint Standoff Target Attack Radar System (JSTARS)
	Maneuver Control System (MCS)	Advanced Field Artillery Tactical Data System (AFATDS)
	M1 Breacher	Advanced Tank Armaments
	LAND WARRIOR	SENTINEL
•	562 Airborne Engineering Evaluation Support Activity (AEESA)	
Total	137193	
<b>FY 2001 Planned Program:</b>		
•	133784 Command-wide test management including test planning, safety assessment/verification and conduct of test operations. Involvement in significant numbers of Integrated Product Team efforts and issuance of safety releases and safety confirmations will be conducted on both major and non-major acquisition programs/experiments. Only limited range modernization is affordable. Some of the major systems to be tested include:	

**UNCLASSIFIED**

<p align="center"><b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)</b></p>		<p>DATE <b>February 1999</b></p>
<p>BUDGET ACTIVITY <b>6 - Management and Support</b></p>	<p>PE NUMBER AND TITLE <b>0605601A Army Test Ranges and Facilities</b></p> <p align="right">PROJECT <b>DF30</b></p>	
<p><b>FY 2001 Planned Program: (continued)</b></p>		
<p>• 551 Total</p>	<p>Wide Area Mine (HORNET)                      Artillery Systems Dem/Val (CRUSADER)                      COMANCHE Helicopter Subsystems                      Improved Cargo Helicopter                      Theater Missile Defense (TMD)                      Brilliant Anti-Armor Submunition (BAT)                      STINGER RMP PIP                      Multipurpose Individual Munition                      SMART-T                      Soldier Enhancement Program                      SCAMP Block II                      M1 Breacher                      LAND WARRIOR                      Aircrew Integrated Systems                      Airborne Engineering Evaluation Support Activity (AEESA)</p>	<p>Naval ship structures programs/experiments                      FIREFINDER P3I                      Maneuver Control System (MCS)                      Army Tactical Missile System (ATACMS) Block II                      Theater High Altitude Area Defense (THAAD)                      Guided Multiple Launch Rocket System (MLRS)                      Tube Launched, Optically Tracked, Wire Guided (TOW) Missile PIP                      Mine Neutralization/Detection                      Forward Area Air Defense Command and Control                      Objective Individual Combat Weapon                      Advanced Field Artillery Tactical Data System (AFATDS)                      Fire Support Team Vehicle Integration                      Ground Combat Identification</p>
<p>Project DF30</p>	<p align="center"><i>Page 6 of 7 Pages</i></p>	<p align="right">Exhibit R-2A (PE 0605601A)</p>

**UNCLASSIFIED**

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)								DATE February 1999		
BUDGET ACTIVITY <b>6 - Management and Support</b>				PE NUMBER AND TITLE <b>0605601A Army Test Ranges and Facilities</b>					PROJECT <b>D699</b>	
COST (In Thousands)	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
D699 Non-Major Sys Test Design and Evaluation	2220	0	0	0	0	0	0	0	0	2220
<p><b>Mission Description and Justification:</b> Project D699 provides independent evaluations of all Army non-major systems. This project supports integrated Army evaluations for decision makers at milestone reviews, development of test designs, evaluation plans, and subsequent independent evaluations of all acquisition milestones to include recommendations for type classification and materiel release of non-major systems. Evaluation results are incorporated into single Army evaluations and presented at all acquisition milestones. Starting in FY 1999, funding for Project 699 has been restructured to PE 0605716A, Army Evaluation Center, established under US Army Operational Test and Evaluation Command (OPTEC) to perform the Army's consolidated developmental and operational evaluation function</p> <p><b>FY 1998 Accomplishments:</b></p> <ul style="list-style-type: none"> <li>• 2220 Funded 35 civilian authorizations required to continue test design and evaluation (TD&amp;E) programs, addressing new developments, production, and materiel changes. TD&amp;E programs included: <ul style="list-style-type: none"> <li>- Non-Lethal Ammo Family Suite of Integrated Radio Frequency Countermeasures</li> <li>- TRAILBLAZER Sorbent Decontamination System</li> <li>- Air Warrior Mounted Warrior</li> <li>- Modular Body Armor Armored Security Vehicle</li> <li>- Joint Biological Detector Counter Proliferation Long Range Biological Standoff Detector</li> <li>- Close Combat Tactical Trainer Force XXI Battle Command Brigade and Below</li> <li>- Ground Based Command Sensor - Light Joint Service Lightweight Integrated Suit Technology</li> </ul> </li> </ul> <p>Total 2220</p> <p><b>FY 1999 Planned Program:</b> Program restructured to PE 0605716A</p> <p><b>FY 2000 Planned Program:</b> Program restructured to PE 0605716A</p> <p><b>FY 2001 Planned Program:</b> Program restructured to PE 0605716A</p>										

**THIS PAGE INTENTIONALLY LEFT BLANK**