

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605601A: ARMY TEST RANGES AND FACILITIES							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	356.720	352.845	393.937	0.000	393.937	363.893	370.526	370.192	368.148	Continuing	Continuing
F30: ARMY TEST RANGES & FACILITIES	356.720	352.845	393.937	0.000	393.937	363.893	370.526	370.192	368.148	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project provides the institutional funding required to operate the developmental test activities, in accordance with Section 232 of the FY2003 National Defense Authorization Act (NDAA), required by Department of Defense (DoD) Program Executive Officers, Program and Product Managers, and Research, Development, and Engineering Centers. This project provides resources to operate six elements of the DoD Major Range and Test Facility Base (MRTFB): White Sands Missile Range (WSMR), New Mexico; Aberdeen Test Center (ATC), Aberdeen Proving Ground, Maryland; Electronic Proving Ground (EPG), Fort Huachuca, Arizona; and Yuma Proving Ground (YPG), Arizona, Cold Regions Test Center (CRTC), Fort Greely, Alaska and Tropic Regions Test Center (TRTC) at various locations. This project also funds the Army's developmental test capability at Aviation Technical Test Center (ATTC), Fort Rucker, Alabama; and Redstone Technical Test Center (RTTC), Redstone Arsenal, Alabama. Test planning and safety verification at Headquarters, U.S. Army Developmental Test Command (DTC), Aberdeen Proving Ground, Maryland is also supported by this program element. This project finances the overhead (institutional) test operating costs not appropriately billed to test customers, test infrastructure/capability sustainment requirements, replacement of test equipment, test operating procedures, and test revitalization/upgrade projects to maintain current testing capabilities and improvements to safety, environmental protection, efficiency of test operations, and technological advances. The developmental test capabilities at these test ranges have been uniquely established, are in place to support test and evaluation (T&E) requirements of funded weapons programs, and are required to assure technical performance, adherence to safety requirements, reliability, logistics supportability, Title 10 Live Fire Test and Evaluation and quality of materiel in development and in production. In accordance with the FY03 NDAA, this project funds the indirect test costs associated with the rapid testing of systems and equipment needed in support of the Long War Against Terrorism, such as Individual soldier protection equipment and Counter Measures for Improvised Explosive Devices (IEDs) and uparmoring the Army's wheeled vehicle fleet. This project sustains the developmental Test & Evaluation capability required to support Army as well as Joint Service or Other Service systems, materiel, and technologies. Types of systems scheduled for developmental testing include; Aircraft, Air Delivery, Unmanned Aerial Systems, Unmanned Ground Vehicles, Engineering Equipment, Direct fire, Indirect fire, Nonlethal weapons, Ammunition, Automotive Systems, Intelligence Surveillance and Reconnaissance, Ground Soldier Systems, Missiles, Rockets, Directed Energy Weapons, Network Centric and Command, Control, and Communication. Specific systems supported in FY08 with continued support in FY09 include: Future Combat Systems (FCS), other weapon systems such as: up-armoring vehicle ballistic protection on route clearance vehicles, Family of Medium Tactical Vehicles Long Term Armor Strategy (FMTV LTAS), and Joint Light Tactical Vehicle (JLTV); Stryker upgrades; armor gun shields for tactical vehicles; reactive and active armor; Personnel Screening Systems; the Mine Resistant Ambush Protected (MRAP)Vehicles; Future Combat Systems (FCS) Manned Ground Vehicles; Counter-Rocket Artillery Mortar (C-RAM); High Mobility Artillery Rocket System (HIMARS); Guided Multiple Launch Rocket System (GMLRS) Unitary Rocket; Unattended Ground Sensors; Intelligence Surveillance and Reconnaissance (ISR); Counter Remote Control IED (RCIED) Electronic Warfare (CREW); Warfighter Information Network Tactical (WIN-T); Distributed Common Ground System - Army (DCGS-A); Aerial Common Sensor (ACS); Non Line-of-Sight Launch System (NLOS-LS); Body Armor; High Mobility Multipurpose Wheeled Vehicle

UNCLASSIFIED

R-1 Line Item #136

Page 1 of 8

89 of 897

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army			DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
2040: Research, Development, Test & Evaluation, Army		PE 0605601A: ARMY TEST RANGES AND FACILITIES			
BA 6: RDT&E Management Support					
(HMMWV); Aviation Transformation (AH-64 Block III, Recon Helicopter, UH-60M Upgrade, JCA); aviation protection systems (Common Missile Warning System (CMWS) and Advanced Threat Infrared Countermeasure (ATIRCM)); missile defense (PAC-3, Terminal High Altitude Area Defense (THAAD), Surfaced Launched Advanced Medium Range Air-to-Air Missile (SLAMRAAM), Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS)); Unmanned Aerial Systems (Tactical Unmanned Aerial Vehicle, Micro Air Vehicle, Raven B, Extended Range Multi-Purpose, Hunter) , and Unmanned Ground Vehicles (Rabbit, DOK-ING MV-4, MARCBot, PackBot, SWORDS, Talon, Autonomous Navigation System, FCS Class I and IV). Direct costs are borne by materiel developers in accordance with DoD Directive 3200.11 and DoD Financial Management Regulation 7000.14R.					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	346.431	354.693	323.792	0.000	323.792
Current President's Budget	356.720	352.845	393.937	0.000	393.937
Total Adjustments	10.289	-1.848	70.145	0.000	70.145
• Congressional General Reductions		-1.848			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.990	0.000			
• SBIR/STTR Transfer	-5.815	0.000			
• Adjustments to Budget Years	0.000	0.000	70.145	0.000	70.145
• OMNIBUS Reprogramming	15.114	0.000	0.000	0.000	0.000
Change Summary Explanation					
FY11 - \$70,145 increase Reqs Adj, EE DOR Test and Evaluation (RL02, RL07) Decisions; \$75,400 - 5,255 = 70,145, \$5,255 reduction - Funds for HELSTF infracture, Transfer to AF to support the Joint Base Elmendorf-Richardson					

UNCLASSIFIED

R-1 Line Item #136

Page 2 of 8

90 of 897

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605601A: <i>ARMY TEST RANGES AND FACILITIES</i>				PROJECT F30: <i>ARMY TEST RANGES & FACILITIES</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
F30: <i>ARMY TEST RANGES & FACILITIES</i>	356.720	352.845	393.937	0.000	393.937	363.893	370.526	370.192	368.148	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project provides the institutional funding required to operate the developmental test activities, in accordance with Section 232 of the FY2003 National Defense Authorization Act (NDAA), required by Department of Defense (DoD) Program Executive Officers, Program and Product Managers, and Research, Development, and Engineering Centers. This project provides resources to operate six elements of the DoD Major Range and Test Facility Base (MRTFB): White Sands Missile Range (WSMR), New Mexico; Aberdeen Test Center (ATC), Aberdeen Proving Ground, Maryland; Electronic Proving Ground (EPG), Fort Huachuca, Arizona; and Yuma Proving Ground (YPG), Arizona, Cold Regions Test Center (CRTC), Fort Greely, Alaska and Tropic Regions Test Center (TRTC) at various locations. This project also funds the Army's developmental test capability at Redstone Test Center (RTC), Redstone Arsenal and Fort Rucker, Alabama. Test planning and safety verification at Headquarters, U.S. Army Developmental Test Command (DTC), Aberdeen Proving Ground, Maryland is also supported by this program element. This project finances the overhead (institutional) test operating costs not appropriately billed to test customers, test infrastructure/capability sustainment requirements, replacement of test equipment, test operating procedures, and test revitalization/upgrade projects to maintain current testing capabilities and improvements to safety, environmental protection, efficiency of test operations, and technological advances. The developmental test capabilities at these test ranges have been uniquely established, are in place to support test and evaluation (T&E) requirements of funded weapons programs, and are required to assure technical performance, adherence to safety requirements, reliability, logistics supportability, Title 10 Live Fire Test and Evaluation and quality of materiel in development and in production. In accordance with the FY03 NDAA, this project funds the indirect test costs associated with the rapid testing of systems and equipment needed in support of the Overseas Contingency Operations (OCO), such as Individual soldier protection equipment and Counter Measures for Improvised Explosive Devices (IEDs) and up-armoring the Army's wheeled vehicle fleet. This project sustains the developmental Test & Evaluation capability required to support Army as well as Joint Service or Other Service systems, materiel, and technologies. Types of systems scheduled for developmental testing include; Aircraft, Air Delivery, Unmanned Aerial Systems, Unmanned Ground Vehicles, Engineering Equipment, Direct fire, Indirect fire, Nonlethal weapons, Ammunition, Automotive Systems, Intelligence Surveillance and Reconnaissance, Ground Soldier Systems, Missiles, Rockets, Directed Energy Weapons, Network Centric and Command, Control, and Communication.

Specific systems supported in FY09 with continued support in FY10 include: Personnel protective equipment (including Body Armor), Army Brigade Combat Team Modernization (ABCTM) spin-out early infantry brigade combat team units sets, up-armoring vehicle ballistic protection on route clearance vehicles, Family of Medium Tactical Vehicles Long Term Armor Strategy (FMTV LTAS), and Joint Light Tactical Vehicle (JLTV); Stryker upgrades; armor gun shields for tactical vehicles; reactive and active armor; Personnel Screening Systems; the Mine Resistant Ambush Protected (MRAP) Vehicles; Counter-Rocket Artillery Mortar (C-RAM); High Mobility Artillery Rocket System (HIMARS); Guided Multiple Launch Rocket System (GMLRS) Unitary Rocket; Unattended Ground Sensors; Intelligence Surveillance and Reconnaissance (ISR); Counter Remote Control IED (RCIED) Electronic Warfare (CREW); Warfighter Information Network Tactical (WIN-T); Distributed Common Ground System - Army (DCGS-A); Aerial Common Sensor (ACS); Non Line-of-Sight Launch System (NLOS-LS); High Mobility Multipurpose Wheeled

UNCLASSIFIED

R-1 Line Item #136

Page 3 of 8

91 of 897

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605601A: ARMY TEST RANGES AND FACILITIES		PROJECT F30: ARMY TEST RANGES & FACILITIES		
Vehicle (HMMWV); Aviation Transformation (AH-64 Block III, Recon Helicopter, UH-60M Upgrade, JCA); aviation protection systems (Common Missile Warning System (CMWS) and Advanced Threat Infrared Countermeasure (ATIRCM)); missile defense (PAC-3, Terminal High Altitude Area Defense (THAAD), Surfaced Launched Advanced Medium Range Air-to-Air Missile (SLAMRAAM), Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS)); Unmanned Aerial Systems (Tactical Unmanned Aerial Vehicle, Micro Air Vehicle, Extended Range Multi-Purpose, Hunter) , and Unmanned Ground Vehicles (Rabbit, DOK-ING MV-4, MARCBot, PackBot, Talon). Direct costs are borne by materiel developers in accordance with DoD Directive 3200.11 and DoD Financial Management Regulation 7000.14R.						
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1		121.237	120.000	133.317	0.000	133.317
Mission Support. Funds support test equipment upgrades and maintenance; test facility maintenance; routine calibration; handling and disposal of hazardous materials, transportation, postage, administrative supplies; tools; software; spare parts; test support vehicle maintenance; mission unique installation costs; temporary duty/training of civilian and contractor personnel; printing and reproduction; communications; land leases; and range road maintenance. Funding supports indirect cost previously paid by the customer for which funding was realigned, as approved by Assistant Secretary of the Army for Acquisition, Logistics and Technology and validated by Deputy Assistant Secretary of the Army for Cost and Economics, from the Army PEO/PMs and non-Army DOD customers.						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #2		142.001	142.000	155.000	0.000	155.000

UNCLASSIFIED

R-1 Line Item #136

Page 4 of 8

92 of 897

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605601A: ARMY TEST RANGES AND FACILITIES	PROJECT F30: ARMY TEST RANGES & FACILITIES				
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
T&E Civilian Pay. This funding supports the overhead costs of the civilian labor for Program Budget Guidance (PBG) authorizations. The balance is customer funded. The test customer pays all direct costs that are directly attributable to the use of a test facility or resource for testing of a particular program. Funding is essential to maintain core T&E skills as part of the Government civilian workforce. FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO						
Program #3 Contractor Pay. This funding supports contractor labor costs not appropriately billable to the customer. Contract labor is essential to augment core civilian T&E personnel. Functions performed include range operations, automotive test support, radar maintenance, warehousing support, project management, maintenance of support fleet aircraft, recurring/general maintenance to test facilities and data acquisition support. Funding supports contractor efforts related to mission support. FY 2009 Accomplishments: FY 2009		78.368	76.000	80.000	0.000	80.000

UNCLASSIFIED

R-1 Line Item #136

Page 5 of 8

93 of 897

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support		R-1 ITEM NOMENCLATURE PE 0605601A: ARMY TEST RANGES AND FACILITIES		PROJECT F30: ARMY TEST RANGES & FACILITIES		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #4 Revitalization/Upgrade of test infrastructure and capabilities. MRTFB elements are required to use institutional funding to sustain, upgrade or create capabilities that support multiple customers. For FY09 through FY10 funding will be focused on improving test and evaluation capabilities for distributed test operations, joint and Army network centric testing. FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO		15.114	4.343	24.808	0.000	24.808
Program #5		0.000	0.740	0.812	0.000	0.812

UNCLASSIFIED

R-1 Line Item #136

Page 6 of 8

94 of 897

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605601A: ARMY TEST RANGES AND FACILITIES	PROJECT F30: ARMY TEST RANGES & FACILITIES			
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Provides funding for sustainment and maintenance for the Automotive Technology Facility (ATEF). ATEF is an engineered test track located at Aberdeen Proving Ground, Maryland for sustained high speed testing of the entire gamut of wheeled and tracked vehicles, manned and robotic, ranging from 2 to 119 tons on multiple surfaces. FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO					
Program #6 Small Business Innovative Research/Small Business Technology Transfer Programs FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base	0.000	9.762	0.000	0.000	0.000

UNCLASSIFIED

R-1 Line Item #136

Page 7 of 8

95 of 897

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605601A: <i>ARMY TEST RANGES AND FACILITIES</i>	PROJECT F30: <i>ARMY TEST RANGES & FACILITIES</i>						
<u>B. Accomplishments/Planned Program (\$ in Millions)</u>								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2011 OCO Plans:</i> FY 2011 OCO								
Accomplishments/Planned Programs Subtotals				356.720	352.845	393.937	0.000	393.937
<u>C. Other Program Funding Summary (\$ in Millions)</u>								
N/A								
<u>D. Acquisition Strategy</u>								
N/A								
<u>E. Performance Metrics</u>								
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.								

UNCLASSIFIED

R-1 Line Item #136

Page 8 of 8

96 of 897