

## UNCLASSIFIED

PE NUMBER: 0605976F

PE TITLE: Facility Restoration and Modernization - T&amp;E

## Exhibit R-2, RDT&amp;E Budget Item Justification

DATE

February 2005

## BUDGET ACTIVITY

## 06 RDT&amp;E Management Support

## PE NUMBER AND TITLE

## 0605976F Facility Restoration and Modernization - T&amp;E

Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	32.634	62.917	60.561	63.535	64.239	62.140	63.584	64.665	Continuing	TBD
06MC Facility Restoration and Modernization - T&E	32.634	62.917	60.561	63.535	64.239	62.140	63.584	64.665	Continuing	TBD

(U) **A. Mission Description and Budget Item Justification**

Restoration includes repair and replacement work to restore damaged facilities due to accident or failure attributable to inadequate sustainment, excessive age, or other causes. Modernization includes alteration of facilities to implement a new, higher standard (including regulatory changes), to accommodate new functions, or to replace building components that typically last more than 50 years (such as foundations and structural components). Other tasks associated with facilities operations (such as custodial services, grass cutting, and the provision of central utilities) are not included.

These restoration/modernization funds support the following Air Force test facilities: 46th Test Group (TG) at Holloman AFB, NM, the 46th Test Wing (TW) at Eglin AFB, FL, the Arnold Engineering and Development Center (AEDC) at Arnold AFB, TN and the Air Force Flight Test Center (AFFTC) at Edwards AFB. The activities were previously funded within PEC 06050807F, Test and Evaluation Support.

These funds will also restore and modernize the National Full-scale Aerodynamic Complex (NFAC) located at NASA's Ames Research Center, California from its current mothball condition to an operational capability. Restoration activities include repair and replacement work to restore damaged facilities due to failure attributable to inadequate sustainment, excessive age, or other causes. Modernization includes alteration of facilities to implement a new higher standard to accommodate new functions, or to replace building components that typically last more than 50 years.

This program element is in Budget Activity 6, RDT&E Management Support, because it funds the restoration/modernization of the institutional test infrastructure at the Air Force test activities which are included in the Department of Defense (DoD) Major Range and Test Facility Base (MRTFB).

(U) **B. Program Change Summary (\$ in Millions)**

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget	33.652	58.936	59.359	57.352
(U) Current PBR/President's Budget	32.634	62.917	60.561	63.535
(U) Total Adjustments	-1.018	3.981		
(U) Congressional Program Reductions				
Congressional Rescissions		-0.519		
Congressional Increases				
Reprogrammings	-1.018	4.500		
SBIR/STTR Transfer				
(U) <u>Significant Program Changes:</u>				

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## Exhibit R-2a, RDT&amp;E Project Justification

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BUDGET ACTIVITY 06 RDT&E Management Support					PE NUMBER AND TITLE 0605976F Facility Restoration and Modernization - T&E			PROJECT NUMBER AND TITLE 06MC Facility Restoration and Modernization - T&E		
Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
06MC Facility Restoration and Modernization - T&E	32.634	62.917	60.561	63.535	64.239	62.140	63.584	64.665	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

(U) **A. Mission Description and Budget Item Justification**

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This program element is in Budget Activity 6, RDT&E Management Support, because it funds the restoration/modernization of the institutional test infrastructure at the Air Force test activities which are included in the Department of Defense (DoD) Major Range and Test Facility Base (MRTFB).

(U) **B. Accomplishments/Planned Program (\$ in Millions)**FY 2004FY 2005FY 2006FY 2007

(U) Accomplishments/Planned Program:

(U) Restoration and modernization funds were previously within PE 0605807F, T&amp;E Support and restoration and modernization planning and design.

0.000

(U) 46TG: Restoration/modernization of test unique infrastructure at the 46th Test Group (TG), located at Holloman AFB, NM. Restoration projects include Test Group (TG) facility safety repairs, National Radar Cross Section (RCS) Test Facility (NRTF) Mainsite roof repairs, video tracking equipment repairs, secure phone replacement and Building 1265 (746th Test Squadron HQ Building) facility repairs and general restoration and modernization planning and design.

0.365

(U) 46TG: Projects include Kranko drive upgrade at NRTF, main site power validation/repair at NRTF, repaving camera pad/connector roads at 846th TS, and general restoration and modernization planning and design.

1.141

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(U) 46TG: Projects include repairing the holes on the RAMS Range due to weather erosion, repairing and resealing the range surface as well as continuing to repave camera pad/connector roads at 846 TS and general restoration and modernization planning and design.		1.168
(U) 46TG: Projects include Mainsite Pit Hoist Tilt Mechanism restoration at two measurement pits including brakes, cables, hydraulics, and controls. Antenna System restoration as well as the structure, wave guides, mechanical & electrical components. Projects also continue repaving camera pad/connector roads at 846 TS and general restoration and modernization planning and design.		1.178
(U) 46TW: Restoration/modernization of test unique infrastructure at the 46th Test Wing (TW), located at Eglin AFB, FL. Restoration projects include repairing piping in Climatic Lab, installing additional cooling in Test Hangar, repairing roof of Armament Research Test Facility (Bldg 463), repairing roof of Gun Test Facility (Bldg 410), repairing fire detection-alarm system in the Climatic Laboratory, repairing roof of a test facility, replacing chain link fence at Bldg 410, replacing compressed air lines at test facilities, repairing roof at Radar Facility, and repairing fence in Test Area A-24 and general restoration and modernization planning and design.	3.519	
(U) 46TW: The 46th Test Wing has an excess of 200 restoration/modernization projects effecting T&E facilities to include but not limited to the following categories: roofing, windows & doors, roads, fire protection, erosion, and HVAC. Some of these restoration/modernization projects include Bldg 8320-replacing seawall, Bldg 8550-replacing HVAC, Bldg 9270-refilling seawall, Bldg 9292-replacing soil around building foundation, Bldg 12722-replacing septic tank, Bldg 12722-replacing AC, Bldg 9403-inspecting and replacing tower bolts, Climatic Laboratory (Bldg 440) - repairing roof leaks, Climatic Laboratory (Bldg 440) - replacing existing asphalt roadway, Climatic Laboratory (Bldg 440) - refurbishing two main chamber doors, Climatic Laboratory (Bldg 440) - replacing corrosion piping for air makeup #1, Bldg 955-repairing Range Road 234, Bldg 68-repairing/replacing windows, Range Site-renovating Control Bldg, Range Site-providing & installing NEC Infrastructure Communication Power and general restoration and modernization planning and design.	4.231	
(U) 46TW: Replace roof of building 9604 at TA C-82. Replace well at TA B-70 control site. D-84 Restoration: build 50 x 50 concrete pad for Chicken Little. Expand compound at A-19. Repair/replace Coupeland tower at TA B-70. C-7 Hangar: erect Calibration Tower at D-3. Consolidation Remote Control Targets Facilities: Restoration of the Electro Optical Evaluation Facility Site C1 (Bldg 8777). Repaint Bldg. 9285 at A-13A. Repaint Bldg. 9287 at A-13A. Corrosion control of stair rails on IHAWK at A-13. Corrosion control of NIKE steel tower at A-13. Replace 20+ year old CATV system between C-7 Control and C-7A Launch Facility with fiber optic cable system. Replace 20+ year old CATV system on Range 72 with fiber optic cable system. Replace fabric on E294, the Hellfire hanger. Replace safety rails on stairs and roof of Bldg 8550. Replace Condenser Coils on 80-Ton Chiller Unit for Radar (Bldg		4.287
Project 06MC	R-1 Shopping List - Item No. 111-3 of 111-5	Exhibit R-2a (PE 0605976F)

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			February 2005	
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9960). Repair dock or seawall at Test Site A-10. Enclose heavy equipment pole barn at RMT. Complete construction of paint booth cover at 46TW. Transportation Expansion project: Improve ventilation equipment racks for vehicle. Fabricate a building to accommodate the RHIB boat(s) at building 963 and general restoration and modernization planning and design.				
(U) 46TW: Replace roof of building 8970 at TA B-70 control site. Rework parking area to enhance drainage at TA B-70 control site. Install fiber-optic cable to service building 9300 at TA B-70 control site. Refurbish interior of building 9400 at TA B75 control. Paint/refurbish exterior of building 963 and general restoration and modernization planning and design.				4.247
(U) AEDC: Restoration/modernization of test unique infrastructure at the Arnold Engineering and Development Center (AEDC), located at Arnold AFB, TN. Restoration projects which will revitalize the reliability and availability of aged equipment include repairing Tunnel A actuators, replacing low and high pressure dryer filters, replacing C-Plant heater fuel pipe, replacing T3 high pressure air valves, replacing vacuum systems control panel (G) and general restoration and modernization planning and design.	26.378			
(U) AEDC: Projects such as: revitalizing Engine Test Facilities, Propulsion Wind Tunnels, Von Karmon Test Facilities, Space and Missile chambers and facilities, supporting plant facilities and general restoration and modernization planning and design. The increased funding is required for large-scale, well -documented R&M projects at AEDC test facilities that directly support military and commercial engine development, Joint Strike Fighter, hypersonic programs and the National Missile Defense and Spacecraft test and evaluation. AEDC will manage the restoration and modernization of the National Full-scale Aerodynamic Complex (NFAC) located at NASA's Ames Research Center, California from its current mothball condition to an operational capability.		55.190	51.983	55.041
(U) AFFTC: Restoration/modernization of test unique infrastructure at the Air Force Flight Test Center (AFFTC), located at Edwards AFB, CA. Restoration projects include Benefield Anechoic Facility (BAF) Electrical Upgrades, repair air conditioning system (Bldg 1030), repairing radio frequency personnel doors (Bldg 1030), replacing network communications cable (Bldg 1440) and replacing control room floor (Bldg 145) and general restoration and modernization planning and design.	2.372			
(U) AFFTC: Projects include expanding fire sprinkler system Bldg 1020 Integrated Facility for Avionics Systems Test (IFAST), upgrading fire alarm panels and detection system in the data acquisition center, repairing radio frequency shielded personnel doors at Bldg 1030 Benefield Anechoic Facility (BAF), designing future facility modifications to IFAST and BAF, replacing control room floor (Bldg 145), replacing roof (Bldg 4795, modifying control rooms 248/249/250 phase 1 (Bldg 1440, replacing UPS (Bldg 5790), installing utility meters (Bldgs 1830 & 1440), paving drainage ditch between spurs 3 & 4 (airfield), abating and resurfacing hangar floor (Bldgs 1630 & 1635), installing tiedowns pad 29		2.355		
Project 06MC	R-1 Shopping List - Item No. 111-4 of 111-5	Exhibit R-2a (PE 0605976F)		

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(airfield), repainting taxi lines ramp 12, and general restoration and modernization planning and design.								
(U) AFFTC: Projects include modifying Mission Control Rooms 248/249/250 in Bldg 1440; installing showers in Bldg 1020; repairing raised computer flooring, Rm 224, Bldg 1020; replacing deluge tank fill line in Bldg 1020; repairing raised computer flooring, Rm 127, Bldg 1020; replacing power distribution units, F-15 Test Bay; installing UPS power, F-16 Test Bay; installing fire detection system in Bldg 4389; installing double door in Bldg 1440; installing addressable alarm system in Bldg 1440; repairing freight elevator in Bldg 1020; repairing/upgrading passenger elevator in Bldg 1020, repairing emergency generator tracking station in Bldg 4970; repairing HVAC in ABL facility Bldg 369); repairing heating in Bldg 1830; and general restoration/modernization planning and design.							3.123	
(U) AFFTC: Projects include repairing HVAC chillers in Bldg 1440; repairing EMCS system interface in Bldg 1440; installing Simulator/Dome Equipment in Bldg 1020; repairing generator in SC Lab (Bldg 1440); replacing of air compressor in Bldg 1830; upgrading conference room A/B in Bldg 1020; and general restoration/modernization planning and design. Design Funds for FY06 & contingency for 05: Expanding fire sprinkler system to remove halon (Bldg 1020), maintaining roof of BAF (Bldg 1030), repairing gas and electric meters, installing water meters Bldg 1440, replacing crane in Bldg 1830, repairing/upgrading raised computer flooring Rm 214 (Bldg 1020), replacing Halon 1301 Suppression System (Bldg 1030), modifying Rooms 124, 125, 126 in IFAST Security Office (Bldg 1020), and modifying new generator to alleviate wet-stacking problem (Bldg 4790).							3.069	
(U) Total Cost				32.634			62.917	
							60.561	
							63.535	
(U) <b>C. Other Program Funding Summary (\$ in Millions)</b>								