

**BY ORDER OF THE
SECRETARY OF THE AIR FORCE**

AIR FORCE INSTRUCTION 99-109

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Test and Evaluation



**MAJOR RANGE AND TEST FACILITY BASE
(MRTFB) TEST AND EVALUATION
RESOURCE PLANNING**

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This Air Force Instruction (AFI) implements Air Force Policy Directive (AFPD) 99-1, Test and Evaluation Process, which describes requirements for management of test and evaluation (T&E) facilities including the Air Force major range and test facility base (MRTFB) activities. This instruction defines MRTFB test resource advocates; identifies types, purpose and planning processes of test resource programs; and identifies responsibilities associated with test resource planning. Department of Defense Directive (DoDD) 3200.11, *Major Range and Test Facility Base*, identifies MRTFB activity locations, policy and responsibilities. Department of Defense Instruction (DoDI) 3200.18, *Management and Operation of the Major Range and Test Facility Base*, expands on DoDD 3200.11. Reference Department of Defense (DoD) 7000.14-R, *Financial Management Regulation (FMR)* and AFI 65-601, *Budget Guidance and Procedures*, for MRTFB customer charging policies. Reference AFI 63-118, *Civil Engineering Research, Development and Acquisition*, for civil engineering resource planning or investments. Also see AFI 61-101, *Management of Science and Technology*, for Air Force science and technology planning, governance, and execution. Refer to DoDI 5134.16, *Deputy Assistant Secretary of Defense for Systems Engineering (DASD(SE))* for DoD Systems Engineering policy. Refer proposed supplements or changes about this instruction to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate functional chain of command. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items. Ensure all

records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual (AFMAN) 33-363, Management of Records, and are disposed of IAW the Air Force Records Disposition Schedule (RDS) in the Air Force Records Information Management System (AFRIMS).

SUMMARY OF CHANGES

This document has minor revisions that represent the current state of AF resource planning related to the MRTFB and does not change implementation procedures.

1. Test Resource Planning. The Air Staff, Major Commands (MAJCOMs) and associated MRTFB activities conduct test resource planning. MRTFB activities are identified in DoDD 3200.11. MRTFB activities require an adequate supply of airspace, water ranges, land ranges and spectrum resources as well as test infrastructure, workforce, and resources to support T&E requirements. Planning and funding of test resources is accomplished through the Headquarters Air Force, Test and Evaluation Directorate (AF/TE) and Planning, Programming, Budgeting and Execution (PPBE) processes or by the acquisition programs (customers). The annual Test and Training Range Summit provides a cross flow of needs and discussions for consideration in MRTFB resource planning. Any action stated in DoDD 3200.11 that requires approval by Office of the Secretary of Defense (OSD) Test and Resource Management Center (TRMC) is coordinated through the MRTFB activities, their MAJCOM chain of command and AF/TE prior to submission to TRMC.

2. Test Resources. Test resources encompass but are not limited to test ranges, facilities, capabilities, air, space and ground support equipment, manpower, travel and training, research and development, test support aircraft and associated maintenance, flying hours, threat systems, modeling and simulation (M&S), distributed assets (live, virtual and constructive), targets, sensors, instrumentation, communications, range safety, information technology, data management, security and associated costs.

3. Test Resource Programs. Test resource funding is managed through Air Force and other DoD unique Program Elements (PEs). Execution is accomplished by various Air Force field activities through their MAJCOM and OSD agencies that fund test capabilities. Headquarters Air Force, Test and Evaluation Resource and Infrastructure Division (AF/TEP) provides test and evaluation resources oversight and guidance to the Air Force MRTFB activities through their respective parent MAJCOM.

3.1. Air Force Materiel Command (AFMC) MRTFB T&E Operations.

3.1.1. T&E Support. PE 65807F funds T&E support functions for AFMC MRTFB activities and is executed through the Air Force Test Center (AFTC) at Edwards Air Force Base (AFB). The Research, Development, Test and Evaluation (RDT&E) funding support includes civilian and contractor labor; associated supplies, travel, training, and utilities; test support aircraft costs to include Depot Level Repairables, Contract Logistics Support, Periodic Depot Maintenance, aircraft maintenance, and fuel; facility operations such as ground test tunnels, cells, test tracks, and other test facilities; preventive maintenance of test equipment, photo labs, x-ray facilities, and data processing; aircraft operations and other operating expenses for the USAF Test Pilot School. Budget oversight for the PE is provided by AFMC/A3F and AF/TEP.

3.1.2. **T&E Facility Restoration and Modernization.** PE 65976F funds T&E facility restoration and modernization for AFMC MRTFB activities and is executed through AFTC. The RDT&E funding support funds facility repair, replacement and alterations; modernization of facilities; and restoration of damaged facilities for situations such as storm damage, mission bed-down, and lack of sustainment. Budget oversight for the PE is provided by AFMC/A3F and AF/TEP.

3.1.3. **T&E Facility Sustainment.** PE 65978F funds AFMC T&E facility sustainment and is executed through AFTC. The RDT&E funding support includes regularly scheduled adjustments and inspections, preventive maintenance tasks and emergency response and service calls for minor repairs. It also includes major repairs or replacement of facility components that are expected to occur periodically throughout the life cycle of facilities. This work includes roof replacement, refinishing of wall surfaces, repairing and replacement of heating and cooling systems, replacing tile and carpeting, and similar types of work. Budget oversight for the PE is provided by AFMC/A3F and AF/TEP.

3.1.4. **Resource Planning.** Resources are funded institutionally and by MRTFB customers. DoD customers using the MRTFB are charged only direct costs for testing. Per the FMR, DoD 7000.14-R, non-DoD customers may be charged additional indirect costs. The institutional resources are planned and programmed by AFMC during the PPBE process. MRTFB customer funds are planned and programmed by the customer.

3.2. **AFMC MRTFB Investments.**

3.2.1. **Threat Simulator Development.** PE 64256F funds improvement and modernization (I&M) for AFMC threat simulator development and is planned and executed through AFTC. The RDT&E funding support includes corporate-level Air Force implementation of the Electronic Warfare (EW) test projects necessary to maintain a viable ground test capability. The 412th Test Wing and 96th Test Wing manage the EW ground test infrastructure. The 96th Test Group manages the National Radar Cross-Section Test Facility (NRTF). The program also includes Air Force Foreign Materiel Program (FMP), which supports the acquisition and analysis of foreign materiel. The FMP process is outlined in AFI 99-114, *Foreign Materiel Program*. This program includes Electronic Combat Intelligence Support (ECIS) which provides funds for Foreign Materiel OT&E support. ECIS assists operational commands in the development of test effective Electronic Attack/Electronic Protection techniques and tactics. Headquarters Air Force, Special Programs Division (AF/TEZ) provides oversight of both the Air Force FMP and ECIS resources. Budget oversight for the PE is provided by AFMC/A3F and AF/TEP.

3.2.2. **Major T&E Investment.** PE 64759F funds AFMC major T&E investment projects and is planned and executed through AFTC. The RDT&E funding support is designed to help test organizations keep pace with emerging weapon system technologies. Test areas supported are Airframe, Propulsion, and Avionics; Armament and Munitions; Space; and Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR). The program provides planning, improvements and modernization for test capabilities managed by the 96th Test Wing, 412th Test Wing, Arnold Engineering Development Complex (AEDC), and 96th Test Group. Budget oversight for the PE is provided by AFMC/A3F and AF/TEP.

3.2.3. Resource Planning. Resources are planned and programmed using the Test Investment Planning and Programming (TIPP) process. The TIPP process is managed by AFMC/A3F with active participation by AF/TEP, the Deputy Assistant Secretary of Defense for Developmental Test and Evaluation (DASD (DT&E)) Council, AFMC MRTFB activities and coordinated with the AF EW T&E Consortium and Reliance Panels. The TIPP process identifies and prioritizes projects funded by the Major T&E Investment and Threat Simulator Development programs. TIPP develops prioritized infrastructure needs and solutions for Air Force DT&E in support of AFMC T&E Program Objective Memorandum (POM) inputs. The process also feeds the Reliance process which identifies projects to recommend as Central Test and Evaluation Investment Program (CTEIP) candidates.

3.3. Air Force Space Command (AFSPC) MRTFB T&E Operations.

3.3.1. Eastern and Western Range Spacelift Operations. Prior to FY15, PE 35181F funded the 30th Space Wing (Western Range) T&E support activity and PE 35182F funded the 45th Space Wing (Eastern Range) T&E support activity. Beginning in fiscal year 2015, use PE 35182F to fund both the 30th and 45th Space Wings. The Operations and Maintenance (O&M) funding support includes funds for civilian, military, and contractor labor necessary to operate, maintain, sustain, recapitalize and modernize a common range facility/hardware and software core for spacelift operations as well as T&E and non-T&E mission activity. This program element also funds Eastern and Western Range facility sustainment and is executed through AFSPC/A3SR. This program element includes regularly scheduled adjustments and inspections, preventative maintenance tasks and emergency response and service calls for minor repairs. It also includes major repairs or replacement of facility components that are expected to occur periodically throughout the life cycle of facilities, as well as contracts to sustain, recapitalize and modernize common range facilities, hardware and software, and Weapon System Sustainment designated efforts. Budget oversight for the PE's O&M funds is provided by AFSPC/A3SR and AF/A3SO.

3.3.2. Resource Planning. Resources are funded institutionally and by MRTFB customers. DoD customers using the MRTFB are charged only direct costs for testing. Per the FMR, DoD 7000.14-R, non-DoD customers may be charged additional indirect costs. The institutional resources are planned and programmed by AFSPC during the PPBE process. MRTFB customer funds are planned and programmed by the customer.

3.4. AFSPC MRTFB Investments. PE 35182F funds improvement, modernization, and sustainment projects for the Western and Eastern Ranges using RDT&E and Other Procurement funds. These projects are executed by AFSPC's Spacelift Range and Network Systems Program, Space and Missile Systems Center (SMC/RN). They are planned and programmed by AFSPC/A3SR in the AFSPC POM during the PPBE process. Budget oversight for the PE's RDT&E and Other Procurement funding is provided by AFSPC/A3SR and SAF/AQSL.

3.5. Air Combat Command (ACC) MRTFB T&E Operations.

3.5.1. Nevada Test and Training Range (NTTR) and Utah Test and Training Range (UTTR). PE 27428F funds range contracts and operations and maintenance for NTTR and UTTR. The O&M funding support funds technical and service contracts to maintain

the basic infrastructure for scoring activities; threat simulators; civilian labor and associated supplies, travel, and training; and other range maintenance such as road maintenance, target construction, and range cleanup. NTTR supports large force exercise training as well as operational test activities. UTTR is primarily an overland, long range weapons test range. Budget oversight for the PE is provided by ACC/A3A and AF/A3O-BA.

3.5.2. Resource Planning. Resources are funded institutionally and by MRTFB customers. DoD customers using the MRTFB are charged only direct costs for testing. Per the FMR, DoD 7000.14-R, non-DoD customers may be charged additional indirect costs. The institutional resources are planned and programmed by ACC during the PPBE process. MRTFB customer funds are planned and programmed by the customer.

3.6. ACC MRTFB Investments. There is no dedicated PE for investment on NTTR and UTTR. Investments for training assets are provided by PE 27429F which is the investment PE for all training ranges. Budget oversight for the PE is provided by ACC/A5T.

3.7. Central Test and Evaluation Investment Program (CTEIP). The OSD in 1990 established the CTEIP PE 64940D in response to congressional direction to improve the coordination and planning of investments in RDT&E capabilities. PE 64940D is managed by TRMC and AF/TEP provides oversight for Air Force-led CTEIP projects. The program includes the development of T&E capabilities to promote range commonality and interoperability among the Services. CTEIP has two main investment categories: Joint Improvement and Modernization (JIM) and Resource Enhancement Project (REP). Execution of JIM and REP projects is detailed in the appropriate Planning and Execution Guide developed by TRMC. CTEIP project execution oversight is the responsibility of the OSD Test Investment Coordinating Committee (OTICC), which has Service representation from the Air Force, Army, and Navy. The AF/TEP Division Chief is the Air Force OTICC member.

3.7.1. Joint Improvement and Modernization (JIM). JIM projects are developed bi-annually through the Reliance process, endorsed by the T&E executives and submitted to TRMC for funding. Projects address critically needed T&E functional area investments and comprise the bulk of CTEIP investment funds. JIM projects are developmental in nature and usually have multi-Service applicability.

3.7.2. JIM Resource Planning. The Reliance process is used to identify, validate and prioritize JIM candidate projects. Test capability needs are submitted by uploading these into the Technology Development Acquisition Program (TDAP) database for consideration by the appropriate Reliance Panel. The Reliance Panels review and prioritize the needs for review by the T&E executives. The T&E executives select the needs for solution development and submit a prioritized list of the top projects to TRMC. TRMC provides funds for selected projects. Studies may be initiated to assure TRMC that a project is clearly defined, required, and affordable. A lead-Service is assigned to oversee the endorsed and funded projects. AF/TEP has oversight of Air Force projects.

3.7.3. Resource Enhancement Project (REP). REP projects are developed annually through a data call for candidate projects. REP funds near-term shortfalls in operational test capabilities. REP funding is appropriate when the timeframe between the identification of a test need and critical test dates does not allow enough time in the

budget cycle to program for the required capability. REP projects are typically one to two year projects.

3.7.4. REP Resource Planning. The REP Working Group manages the project identification and funding process. The REP Working Group is co-chaired by TRMC and Director, Operational Test & Evaluation (DOT&E) and consists of representatives from each Service and the Joint Interoperability Test Command (JITC), Threat Systems Office, Defense Intelligence Agency (DIA) and other DoD agencies. AF/TEP provides the Air Force REP Working Group member. Air Force proposed projects are identified through an Operational Test Investment Panel (OTIP). The panel members include AF/TEP and Air Force Operational Test and Evaluation Center (AFOTEC). The OTIP recommends projects and relative priorities to AF/TE. AF/TE endorses the proposals and forwards them to TRMC and DOT&E for funding consideration through the REP Working Group. DOT&E makes the final decisions on prioritization and approval of all REP candidates and TRMC provides execution oversight of funded projects.

3.8. Test and Evaluation/Science and Technology (T&E/S&T). OSD PE 63941D funds T&E/S&T projects. The projects exploit new technologies and expedite their transition to T&E capabilities. They support risk reduction and Technology Readiness Level (TRL) maturity for multiservice JIM projects as well as Service I&M projects. TRMC manages T&E/S&T with a designated Service program manager to provide project oversight. Initial focus areas are T&E/S&T proposals come from the Services, other DoD agencies, academia, and industry partners. TRMC publishes program details, including Focus Area Roadmaps and projects, annually in the Test Technology Area Plan (TTAP).

3.8.1. T&E/S&T Operations. The T&E/S&T Program Manager (PM) selects Executing Agents (EAs) from the Services to initiate and manage projects within the program's Test Technology Areas (TTAs).

3.8.2. Resource Planning. The EAs chair TTA Tri-Service working groups to identify and evaluate T&E technology needs and recommend candidate proposals for funding. Annually, the EAs develop and submit a prioritized list of candidate technologies to the T&E/S&T PM. For selected candidates, Broad Area Announcements (BAAs) are sent to DoD Agencies, Academia, and Industry for proposals to develop the technology. The T&E/S&T PM selects the best proposals and TRMC makes the final decision on funding. In coordination with AF/TEP, the T&E/S&T PM selects Project Managers for Air Force T&E/S&T programs.

3.9. Threat Systems Program (TSP). OSD PEs 64940D and 65804D fund threat system initiatives. TSP is not a CTEIP program, but CTEIP funds can be used for these projects.

3.9.1. TSP Projects. The projects anticipate threat simulator shortfalls by applying new technologies and innovations to improve threat representations. Threat simulators include digital models and simulations, hardware simulators, and hybrid (hardware and software) representations. Coordination and management of threat simulator investments are accomplished through the Threat Systems Working Group (TSWG) and chaired by a representative from the Test and Evaluation Threat Resource Activity (TETRA). Members are comprised of the offices of the Service T&E principals and DIA. AF/TEP is the Air Force member on the TSWG. Other participants, to include DOT&E, can be called upon as needed. DOT&E makes final decisions on priorities and funding approval.

3.9.2. **Resource Planning.** TSP projects are reviewed semiannually and funded annually. TETRA manages the proposal, evaluation and funding process with active participation by each Service, TRMC, and DOT&E. Proposals are submitted through the Services to the TSWG. AF/TEP leads an Air Force peer technical review of all Air Force submitted proposals. TSWG recommends funding priorities to TETRA. TETRA reviews the proposals and funding priorities with DOT&E and TRMC. TETRA notifies the Services and/or agencies of approved projects and issues a Test Package Directive (TPD). The Air Force projects are typically executed by the submitting organization with AF/TEP oversight.

4. Test Resource Usage.

4.1. **Securing T&E Ranges and Facilities.** Test planners need to contact potential test sites early to obtain estimates of costs and availability.

4.2. **Use of Government Test Facilities.** Test customers should take full advantage of investments in DoD ranges and facilities, and other resources, including the use of embedded instrumentation. They should plan to use Air Force T&E facilities first, followed by other DoD facilities next.

4.3. **Use of Non-Government Facilities.** Non-Government and/or contractor facilities should be used only when government facilities are not available or are impractical to use. If the T&E strategy or Integrated Test Plan calls for testing at non-government facilities, the PM must conduct a cost benefit analysis and provide that analysis and any facility requirements to the appropriate contracting activity. The PM supports the acquisition process as required and documents the final award in the Test and Evaluation Master Plan (TEMP).

5. **Test Resource Reporting.** Report test and evaluation resource funding IAW DoD 7000.14-R, FMR, Vol 2B, Chapter 19. The MRTFB budget exhibits are provided semi-annually and support the Air Force POM and the President's Budget (PB). The Budget exhibits are consistent with the RDT&E Exhibit R-2 Descriptive Summary as well as other budgetary submission material. The exhibits use the format described in DoD 7000.14-R FMR, Vol 2B, Chapter 19. Each MRTFB activity will submit budget exhibits through the MAJCOM to AF/TEP.

6. Responsibilities.

6.1. AF/TE.

6.1.1. Provide corporate Air Force management perspectives on MRTFB T&E resources for infrastructure and investments (modernization, improvement and sustainment) with respect to Air Force, OSD and Government-wide test requirements, to include appropriate derivative guidance for the Air Force POM and PB preparation efforts.

6.1.2. Advocate test resource concerns with affected Air Staff organizations and with and other DoD activities.

6.1.3. Serve as Air Force focal point for MRTFB customer charging policy and issues.

6.1.4. Serve as Air Force focal point for MRTFB Budget Exhibits.

6.1.5. Serve as Air Force focal point for annual TRMC T&E Budget certification.

6.1.6. Establish guidance for Air Force MRTFB test resource improvement and modernization. (See DoDD 3200.11 and DoDI 3200.18). As part of this responsibility:

6.1.6.1. Provide direction for test resource improvement and modernization programs.

6.1.6.2. Issue a consolidated, corporate T&E strategy for tradeoffs between operations and sustainment of current T&E resources and the improvement and modernization of current or proposed T&E resources. This strategy needs to consider tri-Service T&E and DoD Agency capabilities and requirements, especially when capabilities are added or deleted. Unwarranted duplication of capabilities is to be avoided.

6.1.7. Manage AFMC T&E PEs at the Air Staff as the Program Element Monitor (PEM). As part of this responsibility:

6.1.7.1. Establish appropriate AF PEs to budget test resource investments.

6.1.7.2. Provide program guidance and oversight for AF test resource PEs.

6.1.8. Serve as the Air Force focal point for all Joint Service test resource initiatives:

6.1.8.1. Serve as Air Force representative and focal point for the OSD CTEIP as OTICC member.

6.1.8.2. Submit Air Force test resource investment projects for potential CTEIP funding through the Reliance process.

6.1.8.3. Serve as Air Force representative and focal point for the TSWG

6.1.8.4. Serve as the Air Force representative on the T&E Board of Directors Executive Secretariat (BoD(ES)).

6.1.8.5. Serve as AF REP working group member.

6.1.9. Assess the resource needs imposed on the T&E community by OSD, Air Force, Congress, and other regulatory requirements. Alert the community of impending changes to regulations that require additional resources.

6.1.10. Coordinate AF/TE proposed guidance affecting financial management with the appropriate SAF/FMB and SAF/AQ offices.

6.2. AF/A30-BA.

6.2.1. Provide corporate Air Force management perspectives on integrating ACC T&E resource activities with test and training mission resources and requirements for infrastructure and investments (modernization, improvement and sustainment) with respect to Air Force, OSD, and government-wide requirements to include appropriate derivative guidance for POM and PB preparation efforts.

6.2.2. Serve as PEM for ACC T&E PEs.

6.2.3. Provide program guidance and oversight for ACC PEs to ensure appropriate and effective integration of operational and T&E requirements.

6.2.4. Serve as Air Force focal point for all Air Force, DoD, civil and commercial resource concerns affecting ACC test and training activities.

6.2.5. Serve as Air Force focal point for negotiating and resolving operational and T&E issues affecting the training mission. Assess the resource needs imposed on the operational and T&E communities by DoD, Air Force, Joint Service, civil, and other regulatory requirements. Alert the community of impending changes to regulations that require additional resources.

6.3. **SAF/SP.** Ensure Air Force space activities are properly integrated and coordinated across DoD and with civil agencies by providing corporate Air Force management perspectives on integrating AFSPC MRTFB T&E resource activities with test and training mission resources and requirements for infrastructure and investments (modernization, improvement and sustainment) with respect to Air Force, OSD, and government-wide requirements.

6.4. **AF/A3SO.**

6.4.1. Serve as PEM for AFSPC T&E PEs with O&M funding.

6.4.2. Provide program guidance and oversight for AFSPC T&E PEs with O&M funding to ensure appropriate and effective integration of operational and T&E requirements to include appropriate derivative guidance for POM and PB preparation efforts.

6.4.3. Serve as Air Force focal point for all Air Force, DoD, civil and commercial resource concerns affecting AFSPC test and training activities.

6.4.4. Serve as Air Force focal point for negotiating and resolving operational and T&E issues affecting the training mission. Assess the resource needs imposed on the operational and T&E communities by DoD, Air Force, Joint Service, civil, and other regulatory requirements. Alert the community of impending changes to regulations that require additional resources.

6.5. **SAF/AQSL.**

6.5.1. Serve as PEM for AFSPC T&E PEs with RDT&E funding.

6.5.2. Provide program guidance and oversight for AFSPC T&E PEs with RDT&E funding to ensure appropriate and effective integration of operational and T&E requirements to include appropriate derivative guidance for POM and PB preparation efforts.

6.6. **MAJCOMs (AFMC/A3F, AFSPC/A3SR and ACC/A3A).**

6.6.1. Plan, program, budget, and monitor programs in accordance with the PPBE process for MAJCOM T&E resources.

6.6.2. Provide oversight of MRTFB T&E resources activities.

6.6.3. Assist AF/TE to develop and implement policy for test resources included in the Air Force MRTFB.

6.6.4. Assist technical points of contact for investments in developing test resource investment roadmaps for subsequent submittal for consideration to AF/TE.

6.6.5. Plan test resource investment and modernization efforts to improve the efficiency and cost-effectiveness of Air Force T&E capabilities.

6.6.6. Solicit and validate test resource requirements/needs from the MAJCOM T&E community.

6.6.7. Serve as MAJCOM T&E capability area expert in test investment resource planning.

6.6.8. Distribute and oversee execution of MAJCOM T&E investment funds.

6.6.9. Assess the resource needs imposed on the AFMC T&E community by other OSD, Air Force, and other regulatory requirements. Alert the community of impending changes to regulations that require additional resources, make recommendations on organizational changes, necessary to comply with the regulations, and reprogram funds when possible to meet these requirements.

6.6.10. Serve as focal point for MAJCOM MRTFB budget exhibits.

6.6.11. AFMC/A3F.

6.6.11.1. Monitor resources for both AF FMP and ECIS resources in coordination with AF/TEZ.

6.6.11.2. Manage the TIPP process. Include results in the AFMC POM.

6.6.11.3. Validate TIPP process projects, coordinate with AF/TE, and submit tri-Service candidate proposals to the appropriate Reliance Panels for CTEIP funding consideration.

6.6.11.4. Monitor execution of Air Force-executed OSD T&E investment funds for JIM projects.

6.7. Other Air Force Activities. Air Force MRTFB locations, AFOTEC, laboratories, air logistics centers, or specialty test sites support the planning of T&E resource requirements, as necessary.

DEVIN L. CATE
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Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

DoD 7000.14-R, *Financial Management Regulation*, June 2011

DoDD 3200.11, *Major Range and Test Facility Base (MRTFB)*, 27 December 2007

DoDI 3200.18, *Management and Operation of the Major Range and Test Facility Base (MRTFB)*, 1 February 2010

DoDI 5134.16, *Deputy Assistance Secretary of Defense for Systems Engineering (DASD(SE))*, 19 August 2011

AFPD 13-6, *Space Policy*, 13 August 2013

AFPD 99-1, *Test and Evaluation Process*, 22 July 1993

AFI 33-360, *Publications and Forms Management*, 25 September 2013

AFI 61-101, *Management of Science and Technology*, 14 March 2013

AFI 63-118, *Civil Engineer Research, Development, and Acquisition*, 29 April 1994

AFI 65-601, Vol I, *Budget Guidance and Procedures*, 16 August 2012

AFI 99-103, *Capabilities Based Test and Evaluation*, 16 October 2013

AFI 99-114, *Foreign Materiel Program*, 25 October 2002

AFMAN 33-363, *Management of Records*, 1 March 2008

Concept of Operations for the Test and Evaluation Executive Agent, September 2008

Concept of Operations for the Test and Evaluation Executive Agent Reliance Panels, March 2011

Adopted Forms

AF Form 847, *Recommended Change for Publication*

Abbreviations and Acronyms

ACC—Air Combat Command

AEDC—Arnold Engineering Development Complex

AFB—Air Force Base

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFMC—Air Force Materiel Command

AFOTEC—Air Force Operational Test and Evaluation Center

AFPD—Air Force Policy Directive

AFRIMS—Air Force Records Information Management System

AFSPC—Air Force Space Command

AFTC—Air Force Test Center

BAA—Broad Agency Announcement

BoD(ES)—Board of Directors Executive Secretariat, T&E Executive Agent

C4ISR—Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance

CTEIP—Central Test and Evaluation Investment Program

DASD (DT&E)—Deputy Assistant Secretary of Defense for Developmental Test and Evaluation

DIA—Defense Intelligence Agency

DoD—Department of Defense

DoDD—Department of Defense Directive

DOT&E—Director, Operational Test and Evaluation

DT&E—Developmental Test and Evaluation

EA—Executing Agent

ECIS—Electronic Combat Intelligence Support

EW—Electronic Warfare

FMP—Foreign Materiel Program

FMR—Financial Management Regulation

I&M—Improvement and Modernization

IAW—In Accordance With

JIM—Joint Improvement and Modernization

JITC—Joint Interoperability Test Command

M&S—Modeling and Simulation

MAJCOM—Major Command

MRTFB—Major Range and Test Facility Base

NRTF—National Radar Cross-Section Test Facility

NTTR—Nevada Test and Training Range

O&M—Operations and Maintenance

OPR—Office of Primary Responsibility

OSD—Office of Secretary of Defense

OT&E—Operational Test and Evaluation

OTICC—OSD Test Investment Coordinating Committee

OTIP—Operations Test Investment Panel
PB—President’s Budget
PE—Program Element
PEM—Program Element Monitor
PM—Program Manager
POM—Program Objective Memorandum
PPBE—Planning, Programming, Budgeting and Execution
RDS—Records Disposition Schedule
RD&E—Research, Development, Test and Evaluation
REP—Resource Enhancement Project
S&T—Science and Technology
SMC—Space and Missile Systems Center
T&E—Test and Evaluation
TDAP—Technology Development Acquisition Program
TEMP—Test and Evaluation Master Plan
TETRA—Test and Evaluation Threat Resource Activity
TIPP—Test Investment Planning and Programming
TPD—Test Package Directive
TRL—Technology Readiness Level
TRMC—Test Resource Management Center
TSP—Threat Systems Program
TSWG—Threat Systems Working Group
TTA—Test Technology Area
TTAP—Test Technology Area Plan
USAF—United States Air Force
UTTR—Utah Test and Training Range

Terms

Note—Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms* and Air Force Doctrine Document (AFDD) 1-02, *Air Force Supplement*, contain standardized terms for Department of Defense and Air Force use.

Customer Funding—Reimbursable Budget Authority (RBA) funding, in addition to financing direct Air Force requirements, specifically identified for procurement of materiel or services to support customer orders received.

Developmental Test and Evaluation (DT&E)—Test and evaluation conducted to evaluate design approaches, validate analytical models, quantify contract technical performance and manufacturing quality, measure progress in system engineering design and development, minimize design risks, predict integrated system operational performance (effectiveness and suitability) in the intended environment, and identify system problems (or deficiencies) to allow for early and timely resolution. DT&E includes contractor testing and is conducted over the life of the system to support acquisition and sustainment efforts. (AFI 99-103)

Direct Costs—Costs that are readily identifiable to, and consumed by, the use of the facility or resource for testing under a particular program. See AFI 65-601, Vol 1, para 7.52.2.1 for additional description.

Indirect Costs—Is the jointly or commonly used costs of maintaining, operating, upgrading, and modernizing the facility or resource. See AFI 65-601, Vol 1, para 7.52.2.2 for additional description.

Institutional Funding—Direct Budget Authority (DBA) funding appropriated and allocated to the MRTFB.

Major Range and Test Facility Base (MRTFB)—A national asset that is sized, operated, and maintained primarily for DoD T&E support missions, but also may, in accordance with DoDD 3200.11, be available to non-DoD users having a valid requirement for its capabilities.

Operational Test and Evaluation (OT&E)—(1) The field test, under realistic combat conditions, of any item of (or key component of) weapons, equipment, or munitions for the purpose of determining the effectiveness and suitability of the weapons, equipment, or munitions for use in combat by typical military users; and the evaluation of the results of such test. (2) Testing and evaluation conducted in as realistic an operational environment as possible to estimate the prospective system's operational effectiveness, suitability, and operational capabilities. In addition, OT&E provides information on organization, personnel requirements, doctrine, and tactics. It may also provide data to support or verify material in operating instructions, publications, and handbooks. Note: The generic term OT&E is often substituted for IOT&E, QOT&E, FOT&E, OUE, or FDE, and depending on the context, can have the same meaning as those terms. (AFI 99-103)

Reliance Panels—“*Concept of Operations for the Test and Evaluation Executive Agent Reliance Panels*” establishes roles and responsibilities for T&E Reliance Panels. T&E Reliance Panels provide technical support to the T&E EA in execution of planning, infrastructure management, and investment management. They are structured into 11 functional T&E Reliance technical areas. The mission of the Reliance Panels is to evaluate test capability needs and proposed solutions and conduct studies as tasked by the Board of Directors Executive Secretariat. The Panels are composed of field level technical experts.

Reliance Process—Reliance Process is described in “*Concept of Operations for the Test and Evaluation Executive Agent*”. The Services created the T&E Reliance Process in 1990 to identify and eliminate unnecessary duplication involving T&E resources between the Services and Defense Agencies, and to improve overall T&E resource management through greater cooperation and interdependence among the Services. Reliance Process generally includes Process Preparation, Process Training, Needs Identification, Needs Adjudication, Solutions Development, Enhanced Solution Phase (ESP) execution, and Reliance Panel Reports. Reliance

Process produces Reliance Panel Reports capturing endorsed Service Investments, and nominations for Central Test and Evaluation Investment Program.

Test and Evaluation (T&E)—The act of generating empirical data during the research, development or sustainment of systems, and the creation of information through analysis that is useful to technical personnel and decision makers for reducing design and acquisition risks. The process by which systems are measured against requirements and specifications, and the results analyzed so as to gauge progress and provide feedback. (AFI 99-103)

Test and Evaluation Master Plan (TEMP)—Documents the overall structure and objectives of the T&E program. It provides a framework within which to generate detailed T&E plans and it documents schedule and resource implications associated with the T&E program. The TEMP identifies the necessary developmental, operational, and live-fire test activities. It relates program schedule, test management strategy and structure, and required resources to: Critical Operational Issues (COIs); Critical Technical Parameters (CTPs); objectives and thresholds documented in the requirements document; and milestone decision points. The program manager and the lead operational test organization update the TEMP at each major milestone or any time there is a significant change to the test program. The TEMP is exit criteria for Milestone A (Output of the Technology Development Phase) and a requirement for Milestone B and C decisions. (*Defense Acquisition Guidebook*).