

**BY ORDER OF THE COMMANDER
AIR FORCE GLOBAL STRIKE
COMMAND**



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Supplement**

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Test and Evaluation

**CAPABILITIES-BASED TEST AND
EVALUATION**

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This supplement implements and extends the guidance of Air Force Instruction (AFI) 99-103, *Capabilities-Based Test and Evaluation*, 20 Mar 2009. This supplement describes HQ AFGSC's procedures for use in conjunction with the basic AFI. Additional bomber testing guidance is contained in Air Combat Command Instruction (ACCI) 99-101, *ACC Test and Evaluation, Memorandum of Agreement for Operational Test Support Between ACC/A8 and AFGSC/A3/5/8 for B-2 and B-52 Nuclear and AFGSC-Assigned Conventional Weapons Systems* and AFGSC/CC Plan 001. Additional Intercontinental Ballistic Missile (ICBM) testing guidance is contained in AFGSCI 99-102, *Intercontinental Ballistic Missile (ICBM) Force Development Evaluation (FDE) Procedures*. This instruction applies to HQ AFGSC, subordinate units and all organizations receiving support from AFGSC assets. This supplement does not apply to Air National Guard units or the Air Force Reserve. Users of this instruction must notify ICBM Operations Division (HQ AFGSC/A3I) of conflicts between this instruction and other directives, instructions or technical orders. Forward unit supplements to HQ AFGSC/A3IT, 245 Davis Avenue East, Suite 345, Barksdale AFB, LA 71110. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using AF Form 847, *Recommendation for Change of Publication*. Route AF Form 847s from the field through appropriate functional manager's chain of command.

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1.1. The two cornerstone concepts for “Capabilities Based Test and Evaluation (T&E)” are collaboration and early tester involvement. Testers must determine the level and types of testing required and document these decisions in T&E Strategies (TES), T&E Master Plans (TEMPs), and other program documents. Additionally, testers must be knowledgeable of capability gaps and requirements. This necessitates close work between HQ AFGSC/A5/8 and HQ AFGSC/A3 from program inception through fielding, Initial Operating Capability (IOC) and Full Operating Capability (FOC).

1.5.2. Early tester involvement in defining requirements ensures program specifications are testable and measurable in an operational environment and allows for meaningful test measures and criteria development. Early tester collaboration facilitates the development of a single integrated test strategy that incorporates the requirements and objectives of Developmental Test and Evaluation (DT&E), Operational Test and Evaluation (OT&E) and all other kinds of T&E requirements for the program. Tester collaboration and the creation of an integrated strategy serves to: increase the linkage between DT&E and OT&E measures; “operationalize” DT&E by introducing operationally realistic scenarios and conditions; increases the likelihood that test events and data collected during development can be used to provide early insight to system effectiveness and suitability; and potentially shorten dedicated OT&E.

2.10. (Added) T&E Supporting DoD-level Programs:

2.10.1. **(Added)** MAJCOM personnel tasked to participate in High Performance Teams (HPTs) developing ICDs and CDDs, and those HPTs following Requirements Strategy Reviews (RSR) will consult with developmental and operational testers to ensure T&E concerns are addressed. As a minimum, MAJCOM testers will coordinate on all MAJCOM-sponsored ICDs and CDDs. Testers will provide test and evaluation expertise to the development of ICDs to ensure smooth transition to development of follow-on measures of effectiveness, suitability and performance.

2.10.2. **(Added)** MAJCOM Support to OSD OT&E Oversight Programs. MAJCOM test organizations may be required to support testing of OSD OT&E Oversight Programs if AFOTEC is not the operational test agency (OTA) according to AFI 99-103, paragraph 4.6.

2.11. **(Added) T&E Supporting Modification Programs:**

2.11.1. **(Added)** Command-Level Modifications. The process for modifying existing systems (i.e. 1067 Programs) is defined in AFI 63-101 and AFI 63-131. For those modifications defined as command-level, Integrated Test Team (ITT) representatives will participate as a voting member in Configuration Review Boards. The wings will develop procedures for the Configuration Review Boards and required membership. Specifically, they will provide the board with advice as to the level and type of testing required or if Installation and Checkout (I&C) will suffice and more formal OT&E is not required. For all modifications, the Configuration Review Board will specify and document the type of testing required.

2.11.2. **(Added)** Wing-Level Modifications. The process for modifying existing systems is defined in AFI 63-101 and 63-131. For those modifications, such as form, fit, function replacements, the Wing/CC will provide guidance for documenting and conducting I&C as required. If the modification requires MAJCOM attention, HQ AFGSC/A3 will assess the type and level of test required with inputs from the ITT and affected NAF. For all modifications the ITT will specify and document the type of testing required.

2.12. **(Added) External Test Requests.** Operational test requests from external agencies must be submitted to HQ AFGSC/A3 at the earliest opportunity. These requests will be submitted using the Test Request guidelines provided in **Attachment 3**. HQ AFGSC/A3/A5/8 will coordinate to validate these requests. Validated Test Requests will be submitted to HQ AFGSC/A3/A5/8 for approval.

3.17. **(Added) Headquarters, Air Force Global Strike Command (AFGSC).** HQ AFGSC will:

3.17.1. **(Added)** Develop HQ AFGSC T&E policies, procedures, guidance, and MOAs for AFGSC programs to supplement this AFI. Forward draft copies for HQ USAF/TEP and SAF/AQXA review prior to publication.

3.17.2. **(Added)** Ensure Research, Development, Test and Evaluation (RDT&E) representation to pre-Concept Decision activities to assist in early requirements and CONOPS development, early T&E strategy development, and early acquisition planning. Participate in HPTs according to AFI 10-601.

3.17.3. **(Added)** Participate in ITTs as necessary to help ensure program success.

3.17.4. **(Added)** Advocate for and procure T&E infrastructure, resources, and requirements.

3.17.5. **(Added)** Review and coordinate on test plans, test reports, and test-related correspondence for programs on OSD OT&E Oversight.

3.17.6. **(Added)** Maintain operational testing expertise.

3.17.7. **(Added)** Ensure T&E training is provided for AFGSC personnel involved in T&E.

3.17.8. **(Added) HQ AFGSC/A3 will:**

3.17.8.1. **(Added)** Act as command focal point with responsibility for MAJCOM-conducted OT&E, including policy and guidance.

3.17.8.2. **(Added)** Release test reports and associated documents resulting from dedicated, MAJCOM operational testing.

3.17.8.3. **(Added)** Advocate for and/or fund T&E to include sustainment and infrastructure requirements.

3.17.8.4. **(Added)** Participate in ITTs as required.

3.17.8.5. **(Added)** Ensure MAJCOM test representation on modification review boards.

3.17.8.6. **(Added)** Review ITT Charters, TESs, and TEMPs.

3.17.8.7. **(Added)** Coordinate AFOTEC non-involvement determinations.

3.17.8.8. **(Added)** Serve as final decision authority for conflict resolution.

3.17.8.9. **(Added)** When AFOTEC is the lead OTA, HQ AFGSC/A3IT, A3IH or A3TW, as applicable, provides personnel to serve as standing ITT members to assist in the transition of responsibility from AFOTEC to AFGSC.

3.17.8.10. **(Added)** Prioritize resources and task subordinate units to provide support to programs. The HQ AFGSC/A3 will also appoint the AFGSC OT&E organization that will conduct OT&E in those instances where AFOTEC is not conducting Initial Operational Test & Evaluation (IOT&E).

3.17.8.11. **(Added)** Chair Test Readiness Review Boards (TRRBs) for all AFGSC-led OT&E.

3.17.8.12. **(Added)** Receive OT&E readiness certification from SPO for non-AFOTEC tests and provide acceptance/exception memo.

3.17.8.13. **(Added)** Support Configuration Review Boards to determine OT requirements.

3.17.8.14. **(Added)** Coordinate with HQ AFGSC Program Element Monitors to authorize release of resources to test agencies as applicable.

3.17.8.15. **(Added)** Participate in certification and accreditation process.

3.17.8.16. **(Added)** Coordinate with Product Centers, Logistics Centers and NAF/CCs to integrate and de-conflict test activities.

3.17.8.17. **(Added)** Ensure HQ AFGSC/A3TW participates in Air Launched Munition Analysis Groups (ALMAG) to investigate air launched guided munition and missile mishaps and incidents that occur during FDE as required by AFI 99-151, *Air Launched Munition Analysis Group (ALMAG)*.

3.17.9. **(Added) HQ AFGSC/A4/7 will:**

- 3.17.9.1. **(Added)** Ensure the Modification Management Process is adhered to in accordance with (IAW) AFI 63-131, *Modification Program Management*. Provide guidance on the execution of the USAF Deficiency Reporting Process (Technical Order (T.O.) 00-35D-54, *USAF Deficiency Reporting And Investigating System*).
- 3.17.9.2. **(Added)** Provide inputs to the system acquisition, system modifications and operational acceptance processes.
- 3.17.9.3. **(Added)** Participate in ITTs.
- 3.17.10. **(Added) HQ AFGSC/A5/8 will:**
- 3.17.10.1. **(Added)** Act as command focal point for test infrastructure planning and funding. Consolidate requirements for OT&E infrastructure, resource and capabilities and advocate for funding.
- 3.17.10.2. **(Added)** Identify and provide personnel and funding for early test planning activities including Analysis of Alternatives (AoA), HPTs, and strategic planning meetings.
- 3.17.10.3. **(Added)** Ensure operational system test criteria are given to the operational test agency.
- 3.17.10.4. **(Added)** Advocate for and fund T&E and infrastructure requirements.
- 3.17.10.5. **(Added)** Review ITT Charters, TESs, and TEMPs.
- 3.17.10.6. **(Added)** Provide guidance to HQ AFGSC/A3 regarding the releasability of test-related information to outside agencies and foreign nationals.
- 3.17.10.7. **(Added)** Oversee treaty compliance and international affairs issues according to AFPD 16-6, *Intercontinental Arms Control and Nonproliferation Agreements*.
- 3.17.10.8. **(Added)** Provide modeling and simulation (M&S) policy and guidance on the accreditation process, review accreditation plans and reports, and provide recommendations.
- 3.17.10.9. **(Added)** Participate in ITTs and HPTs.
- 3.17.10.10. **(Added)** Participate in the information assurance certification and accreditation process in accordance with AFI 33-210, *Air Force Certification and Accreditation (C&A) Program (AFCAP)*.
- 3.17.10.11. **(Added)** Provide HQ AFGSC/A3 information concerning upcoming ICDs, CDD, AoAs, etc., in which MAJCOM testers may need to be involved.
- 3.17.11. **(Added) HQ AFGSC/A6 will:**
- 3.17.11.1. **(Added)** Review and coordinate on test documentation to ensure information assurance, security test and evaluation and system accreditation issues have been adequately addressed.
- 3.17.11.2. **(Added)** Participate in certification and accreditation process to support information assurance and operational acceptance.
- 3.17.11.3. **(Added)** Participate in ITTs.

3.17.12. **(Added) HQ AFGSC/A9 will:**

3.17.12.1. **(Added)** Coordinate on M&S related products.

3.17.13. **(Added) HQ AFGSC/JA will:**

3.17.13.1. **(Added)** Coordinate on Programmatic Environmental, Safety, and Health Evaluation for test activities as requested.

3.17.13.2. **(Added)** Coordinate on safety and liability issues related to test activities, including contractor liability relationships.

3.17.13.3. **(Added)** Review all joint/multiple command/agency agreements.

3.17.13. 4 **(Added)** Review test program documentation for adherence to AFPD 16-6.

3.17.14. **(Added) HQ AFGSC/SE will:**

3.17.14.1. **(Added)** Establish AFGSC test safety policy, including test safety planning, risk management training, and mishap response/investigation.

3.17.14.2. **(Added)** Advocate for OT&E test safety requirements and OT&E mishap prevention funding.

3.17.14.3. **(Added)** Participate in ITTs.

3.17.14.4. **(Added)** Maintain situational awareness of testing impacts on operational systems and test waivers.

3.17.14.5. **(Added)** Review test organization safety policies and procedures.

3.17.15. **(Added) 576th Flight Test Squadron (FLTS) will:**

3.17.15.1. **(Added)** Be the command focal point for executing ICBM operational testing.

3.17.15.2. **(Added)** Establish local procedures for implementing the T&E process consistent with the DoD 5000-series regulations, AFGSCI 99-102, and this supplement.

3.17.15.3. **(Added)** Identify and provide personnel for early test planning activities including AoAs, HPTs, and strategic planning meetings as required.

3.17.15.3.1. **(Added)** Participate in ITTs for ICBM OT&E programs where AFOTEC is the lead OTA.

3.17.15.3.2. **(Added)** Participate in ITTs for joint ICBM OT&E programs where the AF is not the lead operational test organization.

3.17.15.4. **(Added)** Provide OT&E training to command personnel including TMs, Test Support Managers (TSM) and other project leads for OT&E activities.

3.17.15.5. **(Added)** Develop T&E policies, procedures, guidance and MOAs to supplement this instruction. Submit to HQ AFGSC/A3 for review prior to publication.

3.17.15.6. **(Added)** Identify test capabilities, resources, and infrastructure necessary to execute testing.

3.17.15.7. **(Added)** 576 FLTS/CDS will maintain safety oversight of test programs, including support for test planning meetings, and serving as a voting member on squadron-level test readiness reviews.

3.17.15.8. **(Added)** Participate in the information assurance certification and accreditation process in accordance with AFI 33-210, *Air Force Certification and Accreditation (C&A) Program (AFCAP)*.

3.17.16. (Added) NAF will:

3.17.16.1. **(Added)** Approve the use of AFGSC operational assets for testing. This applies to Developmental Testing, Operational Testing and integrated test efforts where testing procedures are not covered by a system TO, but are covered in whole or in part by approved test procedures.

3.17.16.2. **(Added)** Task units to appoint a TSM and direct unit support of testing.

3.17.16.3. **(Added)** Coordinate with the appropriate office to de-conflict test activities.

3.17.16.4. **(Added)** Approve waivers for operational weapon system components/hardware TO procedures.

3.17.16.5. **(Added)** Coordinate on or approve applicable test-related special requests, to include waivers.

3.17.16.6. **(Added)** Participate in certification and accreditation process as required.

3.17.16.7. **(Added)** Coordinate or review test documentation including the ITT Charter, TES, TEMP and DTP as applicable.

3.17.17. (Added) Operational Wings will:

3.17.17.1. **(Added)** Maintain situational awareness of testing impacts on operational systems and ensure testing does not impact operational systems and overall mission accomplishment.

3.17.17.2. **(Added)** Assign a unit TSM to support the TM in executing the test, as applicable.

3.17.17.3. **(Added)** Identify test capabilities, resources, and infrastructure necessary to support testing.

3.17.17.4. **(Added)** Participate in certification and accreditation process as required.

3.17.17.5. **(Added)** Ensure compliance with applicable treaties, federal, state, and local environmental laws and Security Classification Guides (SCGs).

3.17.17.6. **(Added)** Wing Safety Offices will maintain safety oversight of all T&E related activities of the wing. In addition to traditional DT&E and OT&E activities, wing safety offices will have safety oversight of I&C, Verification and Validation (V&V) and Initial Operational Checkouts.

3.17.18. (Added) Units will:

3.17.18.1. **(Added)** Provide Test Support Managers (TSM) and other test support as directed.

3.17.18.2. **(Added)** Operate equipment IAW specific TOs and/or associated waivers and/or detailed test procedures.

3.17.18.3. **(Added)** Comply with ORM/Safety guidance included in all test related documentation.

3.17.19. (Added) Lead Test Organization:

3.17.19.1. **(Added)** Test organization with the responsibility for coordinating actions leading to planning, executing and reporting on test activities during OT&E involving multiple test organizations. The Lead Test Organization (LTO) may be lead for a team consisting of more than one service, command or testing discipline.

3.17.19.2. (Added) LTOs will:

3.17.19.2.1. **(Added)** Act as single point of contact for a test event described in approved test procedures.

3.17.19.2.2. **(Added)** Prescribe processes associated with planning, executing and reporting specific integrated test efforts consistent with appropriate guidance. Arbitrate differences among PTOs consistent with direction from the ITT.

3.17.19.2.3. **(Added)** Coordinate for the use of required test assets, to include operational assets, from the appropriate agencies.

3.17.19.2.4. **(Added)** Transmit appropriate messages (e.g., Test Start/Test Stop, Test Complete/Test Stop, Test Not Complete) associated with specific test events.

3.17.19.2.5. **(Added)** Provide Test Resource Plan (TRP) to agency responsible for funding the test effort.

3.17.20. (Added) Test Support Manager:

3.17.20.1. **(Added)** The person identified at the wing or unit level that supports the test organization and/or LTO in planning and conducting the test. The TSM is assigned from operational units supporting the test activity and serves as a liaison between the operational unit and the test organization/LTO. The TSM will support the testing process from test planning through reporting.

3.17.20.2. (Added) TSMs will:

3.17.20.2.1. **(Added)** Typically be provided by unit operating the system under test.

3.17.20.2.2. **(Added)** Assist the test team in developing the test plan and detailed test procedures when applicable.

3.17.20.2.3. **(Added)** Assist in developing test criteria and measures when applicable.

3.17.20.2.4. **(Added)** Oversee the system during test execution.

3.17.20.2.5. **(Added)** Assist in data collection as required.

3.17.20.2.6. **(Added)** Participate in data scoring boards as required.

3.17.20.2.7. **(Added)** Assist in mission-specific analysis as required.

4.6.2. B-2 and B-52 OT&E roles and responsibilities are outlined in the *Memorandum of Agreement for Operational Test Support Between ACC/A8 and AFGSC/A3/5/8 for B-2 and B-52 Nuclear and AFGSC-Assigned Conventional Weapons Systems*. B-2 and B-52 FDE is accomplished IAW AFI 99-103, *Capabilities-Based Test and Evaluation*, ACCI 99-101, *ACC Test and Evaluation* and this supplement. ICBM FDE is accomplished IAW AFI 99-103, AFGSCI 99-102, *Intercontinental Ballistic Missile Force Development Evaluation Procedures* and this supplement. UH-1 FDE is conducted by 20th Air Force under the direction of HQ AFGSC IAW AFI 99-103 and this supplement.

4.11. TESs for non-ACAT I, II or OSD OT&E Oversight list programs will normally be co-signed by HQ AFGSC A3 and A5/8.

4.13. **(Added) Test Support Tasking.** Test support can be broken into two broad categories: test asset support and operational asset support. Test asset support requires the use of an AFGSC test unit or dedicated test asset. Test asset support is tasked to NAF commanders as described below. Test asset support requirements are detailed in test plans. Operational asset support is the use of an AFGSC system or unit whose primary mission is not test and evaluation. NAF/CCs or their designee approve the use for testing of AFGSC operational assets not assigned to USSTRATCOM IAW paragraph **4.13.2.1**

4.13.1. **(Added) Test Asset Support.** NAF Commanders are responsible for identifying and tasking appropriate units and resources to support command priorities. Test team approval to begin test execution activities will be based on an approved test procedures, TRRB approval and governing local procedures. NAF will direct their respective wings to appoint TSMs as required and TSMs will coordinate with ITTs and LTOs for scheduling operational resources. The NAF will publish a support list informing requesters of their intent to support testing along with any deviations and requirements. Examples are deadlines for funding transfer to support test-planning efforts or necessary schedule changes. Test procedure approval (if required) will be based on LTO processes. For the purpose of this supplement, AFGSC-sponsored JCTDs, ACTDs and ATDs will be considered external agencies.

4.13.2. **(Added) Operational Asset Support.** NAF and wing representatives will coordinate the use of their respective assets to maximize the use of test resources. During coordination, wing representatives ensure the amount and duration of testing do not adversely impact overall mission accomplishment while maximizing support to AFGSC test initiatives.

4.13.2.1. **(Added) Requesting AFGSC Operational Assets.** Use of AFGSC operational assets requires NAF approval. The LTO is responsible for coordinating with the appropriate TSM and generating each request. The request must include a detailed list of impacted systems, test schedule and test points of contact. For AFGSC test units, this instruction provides test plan approval guidance. For other agencies, test/demonstration plan approval will be IAW the appropriate guidance (e.g., AFOTEC instructions, etc). The NAF will approve based on impact to overall mission accomplishment and willingness to accept residual risk following mitigation efforts. Conflicting requests for use of assets will be adjudicated by the NAF/CC or designated alternate. The NAF will establish a process for requesting and approving the use of operational assets that include a test safety review. Test plan approval,

ORM procedures and TRRB approval will be in accordance with LTO procedures and specific directions from the NAF/CC. The final authority to begin testing lies with the unit commander. Unit commanders should ensure that testing does not adversely impact overall mission success or safety. Operational asset support for test events will be documented on maintenance schedules or other documents as required. This process does not preclude the need to request MRTFB assets through the Universal Documentation System process.

4.13.2.2. **(Added) Use of AFGSC Operational Assets in Test Activities.** For example: tester observation of scheduled crew training would not constitute use of the asset, but requesting additional down time to run specific scenarios would constitute use and require approval.

5.8.1. **(Added)** Organizations developing M&S capabilities must work with product end-users, developmental and operational testers and other relevant organizations to develop and implement an M&S strategy (documented in an M&S Support Plan) that supports the entire acquisition lifecycle. The M&S developer is responsible for documenting and executing an appropriate V&V approach. Organizations will develop local procedures to define staffing requirements for V&V plans and reports, however all M&S related products developed by, or in support of, AFGSC organizations must be coordinated through AFGSC/A9 prior to approval.

5.8.2. **(Added) Accreditation.** Upon successful completion of V&V activities, model proponents shall request formal accreditation of M&S capabilities for their intended use. The accreditation report will address the intended use of the capability, the impact of non-accreditation and any known limitations or risks based on supporting V&V results and the scope of intended use. All accreditation requests must be coordinated through the affected functional stakeholders, prior to submission for approval by the appropriate Accreditation Authority(ies). If accreditation is requested for multiple uses, a consolidated accreditation request may be submitted for approval. The Accreditation Authority is HQ AFGSC/A3.

5.14.2.4. **(Added)** TEMPs for non-ACAT I, II or OSD Oversight list programs will normally be co-signed by HQ AFGSC A3 and A5/8.

6.6. To certify systems are ready to enter dedicated OT&E, the SPO should coordinate a letter from the certifying official to HQ AFGSC/A3 NLT 30 days prior to TRRB.

6.6.4. **(Added) Pre-test Activities using Operational Assets.** Pre-test activities are those efforts intended as precursors to formal operational testing. Pre-test activities which will change the status of an operational site will have approved test procedures and be listed as an individual test event. If testers wish to include pre-test activities in approved test procedures, the procedures must include contingency procedures for reacting to unexpected outcomes from pre-test activity execution. All pre-test activities which will change the status of an operational site will be preceded by a TRRB approved at the appropriate level based on risk assessment. A chair may elect to combine TRRBs for related test events occurring close to each other such as pre-test activities immediately followed by formal testing.

6.10. For AFGSC Systems, HQ AFMC may grant waivers on a case-by-case basis. Waiver requests should be coordinated through HQ AFGSC/A4/7 who will make recommendations for waiver approval/disapproval. Testers will ensure Deficiency Reports (DR) validated during testing are entered into DRIS and the appropriate command lead notified of DRIS tracking and resolution responsibilities. Joint systems under test, operated and/or maintained by AFGSC will use these procedures to ensure commonality of reporting and resolution. The individual program office or lead service may establish specific reporting and resolution requirements over and above these requirements as long as those requirements are transparent to AFGSC users.

6.10.5. **(Added) Reporting Requirements.** The test team will ensure all DRs are reported to the appropriate SPO and HQ AFGSC/A3/A5/8/9 leads. As a minimum, all CAT I 1A through CAT II 2B deficiencies will be included in final test reports. The appropriate HQ AFGSC/A3/A5/8/9 lead is responsible for tracking the resolution of DRs after the final test Deficiency Review Board (DRB). For ICBM testing, the Launch Analysis Group, Anomaly Analysis Team, or Operations Control Board (instead of a DRB) analyzes and resolves deficiencies found during ICBM test. More information on deficiency reporting can be found in T.O. 00-35D-54.

6.14. **(Added) Test Readiness Review Boards.** Test Readiness Review Boards (TRRB) are required for all AFGSC OT&E. The TRRB chair for testing involving AFGSC operational assets is HQ AFGSC/A3. For TRRBs held prior to dedicated OT&E leading to a FRP or fielding decision, as a minimum, the LTO, PTOs, system developer, operating unit, MAJCOM program lead and supporting units should be present. When applicable, the test range controller will also be invited. TRRBs for dedicated OT&E will be held no later than five days prior to test execution and after receipt of a certification letter per AFMAN63-119. For all other TRRBs, lead-time and board composition is at the discretion of the approval authority. A HQ AFGSC/SE representative is a mandatory member of all TRRBs.

6.15. **(Added) Test Start/Pause/Stop Procedures:**

6.15.1. **(Added)** The purpose of these procedures is to inform the operational community of certain test activities and provide the test schedule, contact points, and guidance for interacting with the unit/system under test (SUT).

6.15.2. **(Added) Test Start.** The LTO will transmit a Test Start message no later than 24 hours prior to the start of execution of tests that are impacting operational units and/or assets. The message will be distributed to all units at or above wing level that may be impacted by test activities, to include inadvertent release of data outside the SUT. The distribution list for the Test Start message will be used for the following test messages:

6.15.2.1. **(Added) Test Pause.** There may be occasions that require some form of intervention short of a formal “stop test.” In these instances, the LTO may pause test. The decision to pause test must be coordinated with the TM, PM and test plan approval authority. In the event of a test pause, the TM will notify HQ AFGSC/A3 within 24 hours.

6.15.2.1.1. **(Added) Safety/Security Test Pause.** The LTO will ensure that all procedures and criteria for pausing a test event for safety or security concerns are briefed at the TRRB and included in Test Team training and all site in-briefs. For

all safety and security test pauses, the TM will submit an incident report per paragraph 7.13. A follow-up incident report will be issued in the event of a test restart and will explain the corrective actions taken.

6.15.2.2. **(Added) Test Restart Message.** Following the decision to pause testing, the test plan approval authority will establish restart criteria after consulting with the PM. A formal TRRB is not required prior to restarting test after pausing, unless the test plan approval authority requests one.

6.15.2.3. **(Added) Test Stop Message.** The primary purpose of a Test Stop message is to inform the operational community that on-site test activities have ceased. The Test Stop message is released under one of two conditions, either the test is complete or the test is not complete based on preliminary status of test objectives. Refer to the following sections for details on the circumstances and requirements for each condition.

6.15.2.3.1. **(Added) Test Stop, Test Complete Message.** When testing activities have ceased and test objectives have been met, the TM will transmit a Test Stop, Test Complete message no later than 24 hours after all on-site test activities have ceased. This message serves to inform the operational community that the units and personnel involved in supporting the test may resume normal operations. The message will summarize test execution success or failure, initial deficiency listing (if available) and date of the last dedicated test event. This message will also indicate the dates of the initial post-test DRB and reporting timelines. This message will not include test results, analysis, conclusions or recommendations and will not be used to support fielding decisions.

6.15.2.3.2. **(Added) Test Stop, Test Not Complete Message.** When testing activities are halted because of significant system performance or safety issues and the test cannot be restarted within a reasonable amount of time following a test pause, the Test Manager will transmit a Test Stop, Test Not Complete message. This message serves to inform the operational community the on-site test has ceased prematurely and the units and personnel involved in supporting the test may resume normal operations. For dedicated operational tests, the Test Stop, Test Not Complete message will be accompanied by, or followed up with, a letter decertifying the system for dedicated operational test. Operational test organizations are responsible for documenting a process for decertifying systems for dedicated operational test.

7.5.2. The approval authority for the test plan also approves the final report unless otherwise specified. HQ AFGSC/A3 will release test reports resulting from dedicated MAJCOM OT. Reports must include production, acceptance or fielding recommendations. For time constraints, a final report briefing may substitute for an interim summary report supporting a fielding or FRP decision as long as the briefing contains the same information as is required in a final report. If a final briefing is selected, it will be approved no later than 60 days from the last dedicated test event. Additionally, a written final report shall still be approved no later than 90 days from the last dedicated test event defined in the test plan.

7.6. Distribution lists will include, as applicable: members of the ITT, HQ AFGSC/A3/A5/8/A4/7/ A6/A9/HO, HQ USAF Weapons School, applicable product center, applicable NAF and operating wing.

7.13. **(Added) Incident Reports.** The LTO's TM will transmit an incident report whenever a test is halted due to safety, security or other event where immediate notification of higher authority is warranted. If operational reporting per AFI 10-206, Operational Reporting, is required, the TM need not send a separate incident report, but must ensure all applicable organizations are addressed. As a minimum, for safety and security related issues, HQ AFGSC/A3/A5/8/SE, SPO/CC, and applicable Wing/CC/SE will be addressed.

7.14. **(Added) Briefing Requirements.** Briefing requirements will be specified in the test plan and are at the discretion of the ITT and test report approval authority. As the release authority for OT&E test reports, the HQ AFGSC/A3 will be briefed on the results of all dedicated MAJCOM OT&E. In all cases, reporting must include adequate details of test scenarios, processes, anomalies encountered and deviations from planned test procedures.

TIMOTHY M.RAY
Brigadier General, USAF
Director of Operations

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFI 10-206, *Operational Reporting*

AFI 99-151, *Air Launched Munition Analysis Group (ALMAG)*

AFMAN 63-119, *Certification of System Readiness for Dedicated Operational Test and Evaluation*

AFPD 16-6, *Intercontinental Arms Control and Nonproliferation Agreements*

AFGSCI 99-102, *Intercontinental Ballistic Missile Force Development Evaluation Procedures Memorandum of Agreement for Operational Test Support Between ACC/A8 and AFGSC/A3/5/8 for B-2 and B-52 Nuclear and AFGSC-Assigned Conventional Weapons Systems*

AFGSC/CC Plan 001

ACCI 99-101, *ACC Test and Evaluation*

Abbreviations and Acronyms

ACCI—Air Combat Command Instruction

AFGSC—Air Force Global Strike Command

AFGSCI—Air Force Global Strike Command Instruction

ALMAG—Air Launched Munition Analysis Group

COMSEC—Communications Security

DRB—Deficiency Review Board

DRIS—Deficiency Reporting and Investigating System

FLTS—Flight Test Squadron

FOC—Full Operational Capability

I&C—Installation and Checkout

IAW—In Accordance With

INFOSEC—Information Security

IOC—Initial Operational Capability

LTO—Lead Test Organization

MOA—Memorandum of Agreement

MW—Missile Wing

M&S—Modeling and Simulation

NAF—Numbered Air Force

OPR—Office of Primary Responsibility

OPSEC—Operational Security

RSR—Requirements Strategy Review

SCG—Security Classification Guide

SUT—System Under Test

TES—Test and Evaluation Strategy

TM—Test Manager

TRRB—Test Readiness Review Board

TSM—Test Support Manager

V&V—Verification and Validation

Terms

Fit—The “mating” characteristics of an item that allow it to physically interface or interconnect with or become an integral part of another item. **NOTE**: limited to hardware items.

Form—The defined configuration, including the geometrically measured configuration, density, and weight or other visual shape/size parameter that uniquely characterize the physical characteristics of an item. **NOTE**: limited to hardware items.

Function—The action or actions that an item is designed to perform and must be capable of doing for a defined set of conditions. **NOTE**: may apply to hardware and/or software items.

Installation & Checkout (I&C)— Test units conduct I&C to support the acceptance of operational unit/depot-supplied test assets and processing equipment swaps covered by operational and test-specific technical manuals and checklists. I&C activities are also appropriate for routine updates to operational databases which do not directly affect or have the potential to affect mission accomplishment and following maintenance of software that does not add new capabilities to the system (e.g., maintenance releases, database changes, COTS updates, etc). Additionally, I&C activities may be used to support acceptance of SPO modifications being installed at multiple sites after the initial site passes a successful OT&E.

Lead Test Organization (LTO)—Test organization with the responsibility for coordinating actions leading to planning, executing and reporting on test activities involving multiple test organizations. The LTO may be lead for a team consisting of more than one service or command.

Test Manager (TM)—The person identified by the commander of the test organization to act as the focal point for overall test planning, test conduct and reporting on the test program. The commander of the test organization will appoint the TM and ensure the rank is commensurate with the risk associated with the testing. The TM has overall responsibility for the safe conduct of the test.

Test Readiness Review Board (TRRB)—The TRRB is a meeting to determine the readiness to begin executing test activities. While the format and structure of the TRRB is at the discretion of the approval authority, TRRBs should, as applicable, confirm the following: approved test procedures, test team, operators and maintainers are ready to support to include test specific and system operations training; all safety aspects have been addressed and residual

risks have been accepted at the appropriate level; test halt procedures with associated criteria are established and trained; configuration management processes are in place; and significant DRs have been resolved.

Test Support Manager (TSM)—The person identified at the wing or unit level that supports the test organization and/or LTO in planning and conducting the test. The TSM is assigned from operational units supporting the test activity and serves as a liaison between the operational unit and the test organization/ LTO. The TSM will support the testing process from test planning through reporting.

Attachment 3 (Added)**TEST REQUEST FORMAT**

A3.1. Test Request Format. The Test Request is intended for use by external agencies that operate outside existing ITTs. The Test Request is used to obtain sufficient information from a requesting agency for planned test activities. This information will be used for determining the scope of a requested effort and the proper allocation of testing resources. Incomplete information may result in extended planning time and unnecessarily create additional workload on test organizations. In addition to the items listed below, requesters should attach pertinent system documents such as the ICD, CDD and operational and enabling concepts. The request should be submitted as an official memorandum to HQ AFGSC/A3 with a courtesy copy to HQ AFGSC/A5R and signed at the HQ division, wing, or group level. Paragraphs should include the following:

1. A description of the SUT as well as a listing of systems that must interact with the SUT.
 - 1.a. Describe how the system will be employed including intended operators and maintainers.
 - 1.b. Provide security classification guidance or attach appropriate documents.
 - 1.c. Provide applicable Information Assurance documentation to include certifications to operate.
2. Provide a general statement of the overall purpose of this test. State why the test is required, the critical questions the test is to answer and how the results will be used.
3. Summarize the support required including documents supported.
4. Provide a list of points of contact to include other agencies that may be required to support testing.
5. Provide as comprehensive list of program milestones as possible in achieving decision points, estimated fielding dates, contract expiration dates, etc.
6. AF Precedent Rating (if applicable): See AFI 16-301, US Air Force Priority System for Resources Management.
7. Identify if the T&E effort entails a system acquisition, sustainment effort, support to technology transfer or tactics development and evaluation.
 - 7.a. For acquisition programs list any associated Acquisition Category and/or OSD oversight requirements. If requesting support for a specific test event rather than support to an overall program, list what specific decision(s) are being supported (e.g., milestone, fielding, ops acceptance, etc).
 - 7.b. For support to technology transfers, identify if project is an Experiment Support, JCTD/ATD. Describe the level of maturity for the technology supporting the project including the Technology Readiness Level, if available. For TD&Es, provide command level rankings from associated tactics boards including command(s) and relative position on list(s). AFGSC A3TW review is needed for TD&E.
 - 7.c. For tests of systems in sustainment, describe the frequency the system is employed in terms of almost never, rarely, sporadically, routinely, daily, constantly.
8. Characterize how urgent the request is by defining the ramifications of not doing the test as

envisioned as it relates to mission impact, funding perishability and impact to other program elements.

8.a. For mission impact statements, please describe if the SUT constitutes an existing mission or an acquisition of a new mission. Also describe if the system directly executes an AFGSC or Air Force mission or serves in a supporting role. Additionally, explain if the test supports restoring a mission critical function, correcting a previous degrade, or enhancing an existing capability.

8.b. In describing funding allocated for T&E activities, please indicate budgeted amount, the type of funds, when funds will be available, and when they will expire.

8.c. Please describe the programmatic impact in schedule and resource terms if the requested test support is not provided in a timely manner. Examples could include increased contractor costs, delay of fielding subsequent systems, or increased sustainment costs associated with maintaining legacy systems. Additionally, please indicate if delaying the requested testing will impact other programs or associated decisions.

9. Provide any additional information that may be of use for test organization planning efforts or assist in correctly prioritizing the request.