



AF-TM-9300-001

Test Facility Operations Manual

Space / Aviation / Defense

FIRST EDITION

AF 9300 SUPPORTING DOCUMENT

Document identity and use

FIRST EDITION MANUSCRIPT - Prepared for Aerospace Federation review

Field	Controlled identity
Document	AF-TM-9300-001 - Test Facility Operations Manual
Parent standard	AF 9300 - Aerospace Testing, Verification & Qualification
Edition / language	FIRST EDITION / English master text
Family	Manuals
Primary source anchors	4-15, 20-29
Suggested local owner	Facility manager
Authority	Publisher approval and effective date are not assigned. Local use requires authorized adoption and completed parameters.

Use with the main standard

This document implements the identified AF 9300 clauses and annexes. Read the complete applicable requirements in the main standard. The source anchors are navigation references; a template does not replace technical judgement, evidence, permission or eligible approval.

AF-ML-9300-001 lists the complete supporting set. AF-CM-9300-001 maps the main clauses and annexes to working documents. AF-TP-9300-001 establishes the common local parameter baseline; add the relevant discipline profiles.

Record control

Identify the object, configuration, record owner and dates. Reference attachments by stable identifier and version. Keep superseded evidence and decisions traceable. Use the approved local retention, access and authentication arrangements. No test level, numerical limit, interval or acceptance value is assigned by a blank template.

Implementation model: Translate the stated responsibilities and controls into the actual organization. Informative examples remain explanatory; use approved programme-specific values for operational decisions.

1 Operating model and assignment

This manual organizes a facility from request intake to closeout. Adopt the procedure codes in this set to the actual facility, hazards and methods. The facility manager owns resources and capability; the test director owns the authorized execution; the technical authority owns technical adequacy; the data owner controls evidence; the eligible reviewer accepts results for their stated purpose.

1.1 Intake and technical commitment

Use AF-PR-9300-001 and AF-FR-9300-001 before accepting work. Identify the intended conclusion, article population, requirement source, ranges, uncertainty needs and reporting restrictions. Compare the request with demonstrated combined facility capability, not a nameplate maximum considered alone. Resolve ownership of article safety, witnesses, permits, incident notification and report approval.

1.2 Campaign and dependency planning

Build the requirement matrix and campaign schedule using AF-PR-9300-002/003, AF-RG-9300-001 and AF-SC-9300-001. Separate development, qualification and acceptance runs. Define article selection, sequencing, conditioning, inspection and functional checks. Identify tests that can damage an article or change a later measurement. Reserve review time, recovery capacity and replacement resources without silently changing the sampling plan.

2 Facility, method and people readiness

2.1 Capability baseline

The facility owner records usable ranges, combined constraints, fixture identity, utilities, environment, measurement chains and protective functions. Use AF-PR-9300-005/006 and AF-RG-9300-004. Characterize boundary conditions that affect the article. A fixture transfer or altered restraint requires an impact review even when the main equipment is unchanged. Mark restrictions where combined loads, concurrent work or article size reduce usable capability.

2.2 Metrology and continuing checks

Maintain AF-RG-9300-002 and AF-SC-9300-002. Verify that calibration scope, corrections and uncertainty cover actual use. Intermediate checks address relevant drift and damage modes. Due dates alone do not demonstrate suitability. When a check fails, restrict the equipment, preserve use history, bound the affected interval and use AF-FR-9300-006 to assess prior results and issued decisions.

2.3 Personnel and authorization

Use AF-FR-9300-023 and AF-RG-9300-005 to authorize operators and reviewers for specified equipment, methods and decisions. Observe practical competence including abnormal conditions, safe actions, record quality and escalation. Reassess after significant absence, method changes or adverse performance. A person unfamiliar with a hazardous intervention does not gain authority from being on the test team.

3 Article and setup control

3.1 Receipt and preparation

Use AF-WI-9300-001 and AF-FR-9300-004. Verify identity, received condition, provenance and prior exposure. Assign custody and prevent mixing with similar articles. Record instrumentation installation, repair, disassembly, firmware, parameter changes and conditioning. Compare the tested configuration with the claimed configuration and approve material differences before reliance.

3.2 Complete the technical profile

Always complete AF-TP-9300-001 and its full Annex B parameter baseline, then add applicable discipline profiles. Enter actual ranges, criteria, units, tolerances, exposure accounting, protective thresholds and review authorities from approved engineering needs. Keep a requirement acceptance limit distinct from a facility safety trip and from a control tolerance.

3.3 Validate the evidence route

Use AF-PR-9300-009, AF-FR-9300-008 and AF-WI-9300-002. Verify channel identities, signs, units, ranges, bandwidth, timing and end-to-end response. Challenge over-range, missing channel and interrupted recording behavior. Confirm storage and recovery. Record software, scripts, parameters and channel-map versions. A correctly wired control channel does not validate every response channel.

4 Release and controlled execution

4.1 Readiness review

Use AF-CL-9300-008 and AF-FR-9300-009. Review article, procedure, method, facility, metrology, uncertainty, data, personnel, hazards and open items against the actual run. Record permitted scope, constraints, no-go conditions, witness points and validity triggers. The review authorizes only the stated activity. Reconfirm the actual basis at start.

4.2 Run command and contemporaneous records

The test director establishes one command route and clear stop signals. Use AF-FR-9300-010 and AF-WI-9300-004 to record timestamps, achieved conditions, observations, interventions and deviations while they occur. Preserve raw signals and event context. Determine qualifying exposure from actual valid conditions, not only programmed duration. Do not overwrite failed runs with later repeats.

4.3 Pause, abort and restart

Use AF-WI-9300-005. Protect people and equipment using the approved local method. Capture the reason, actual state, article exposure and potential effects on data. Preserve evidence before changing the setup when safe. Identify which prerequisites must be repeated and obtain the eligible restart release. Record whether prior exposure can contribute under the approved criterion.

5 Anomaly, analysis and technical review

5.1 Classify before retest

Use AF-FR-9300-011/012 and AF-PR-9300-012. Distinguish an article failure, an invalid measurement, a facility event and an unresolved cause. The classification must be supported by evidence. Define the retest question, configuration, accumulated exposure and comparison basis. A passing repeat alone neither invalidates a prior failure nor proves that the initial measurement was wrong.

5.2 Reproduce and review

Use AF-PR-9300-013 and AF-FR-9300-013. Preserve processing inputs and scripts. Review validity before applying the approved uncertainty and decision rule. Challenge units, timing, corrections, exclusions and boundary cases. Reconcile all requirements and mandatory conditions, including adverse observations. State PASS, FAIL, HOLD or approved N/A at the appropriate requirement level.

5.3 Handoff for qualification or acceptance

Provide the accepted evidence package, configuration, conditions, uncertainty, limitations and unresolved items to the designated decision authority. The laboratory report may inform a qualification or acceptance dossier; it does not silently perform those separate functions. Use AF-HB-9300-001 for the receiving review.

6 Closeout and continuing capability

6.1 Report, records and article disposition

Use AF-PR-9300-020/024. Issue an identifiable report, retain the complete evidence package and update AF-RG-9300-012. Record the article's final condition, consumed life and permitted disposition. Reconcile customer property, restricted information and retention needs. Demonstrate that another eligible reviewer can trace the conclusion back to native evidence.

6.2 Adverse knowledge and improvement

Use AF-PR-9300-021/022 when a method defect, calibration failure or complaint affects prior reliance. Identify the report population, claims and recipients. Restrict unsupported use and issue controlled corrections where needed. Verify corrective action effectiveness with suitable adverse challenges. Update training, profiles and schedules only after their technical basis is reviewed.

Required evidence: A closed campaign links request, programme, requirements, article, method, facility, measurement chain, readiness, native data, anomalies, review, report and final disposition by stable identifiers.