



AF 9100:2026

Aerospace Quality Management System

CHECKLIST

Defense, Maritime and Mission Mobility Assurance — Checklist

AF-CL-9100-007

FIRST EDITION

30 September 2026 | English master text

Publication identity and application

Control	Publication value
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Use and document-control boundary

This companion implements the supplied AF 9100 requirement basis without changing the original standard. Its process allocation, examples, checklists and record design are authored implementation material. Actual mission or product limits, specialist procedures, permissions and genuine observations must be completed before consequential use. Applicable source minima and independent decision conditions cannot be reduced by this companion.

The printed edition date identifies the companion series; it is not evidence that later preparation, review or operational decisions occurred on that date. New support codes in this set are proposed allocations for controlled registration. Established AF-IG-9100-001, AF-FAQ-9100-001 and AF-TR-9100-001 identities are retained; earlier files, the corporate master list and ASTRA codes are not overwritten.

Equivalent combined or digital records are permitted when all required fields, relationships, authority and history remain intact. A completed PDF field or typed name is not evidence of an authenticated approval. Blank records in this delivery contain no invented applicant, signature, event or result.

Interactive fields are blank by default. Save a working copy, use continuation records where necessary and preserve raw supporting evidence outside the PDF through controlled references. Separate issued PDFs are the authoritative interactive copies; the combined reading edition is flattened.

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Select actual scope → complete application criteria → use the applicable procedure and technical book → capture authentic evidence → evaluate every applicable condition → obtain the required independent decision. Document availability does not establish implementation or conformity.

1 Checklist use and state definitions

Evaluate the whole source condition, including every joined sub-condition. Where different parts have different evidence, add separate continuation rows linked to the original identifier. Do not compress a compound requirement into a favorable summary.

Field state	Meaning
PASS	Conforming: valid evidence meets the approved applicable condition.
FAIL	Nonconforming: valid evidence demonstrates failure of the applicable requirement.
HOLD	Not yet demonstrated: applicability, criteria, evidence, validity, interpretation or authority remains unresolved.
N/A	Not applicable only with an approved absence-of-activity-and-responsibility rationale. Missing resources or access are not exclusions.

States in this companion map to the source’s requirement-status dictionary; operational record status and evidence validity remain separate. No prefilled state is supplied. A metric counts progress only and cannot override a mandatory failure.

Assessment / case / object / profile / evaluated version

Assessor / actual dates / route / sites / configuration / selected scope

Approved applicability and exclusions / continuation record location

2 Complete source-condition evaluation

16.1 — Defense program assurance and contractual obligations

16.1(a) | Source p. 34

The organization shall define the defense program's quality, safety, security, configuration, verification and support obligations across all assigned domains. Contractual acceptance, mission performance and lawful authorization shall be treated as distinct requirements.

Defense assurance plan; contractual obligation matrix; access arrangements; approval responsibilities.

STATE	EVIDENCE / APPROVED N/A BASIS	REVIEWER / ACTUAL EVENT

Gap / required action / continuation record:

16.1(b) | Source p. 34

The assurance plan shall identify government or customer quality-assurance access, classified or controlled evidence, delegated authority and required approvals where applicable. Restricted access shall be resolved through authorized procedures while preserving the credibility of evidence.

Defense assurance plan; contractual obligation matrix; access arrangements; approval responsibilities.

STATE	EVIDENCE / APPROVED N/A BASIS	REVIEWER / ACTUAL EVENT

Gap / required action / continuation record:

16.2 — Multi-domain platforms and interfaces

16.2(a) | Source p. 34

Air, land, maritime, space and cyber-connected systems shall be assessed for interface compatibility, environmental exposure, common dependencies and safe degraded behavior. Integration shall address the complete system rather than only separately accepted equipment.

Cross-domain interface baseline; integration tests; safe-state definition; authorized test controls.

STATE	EVIDENCE / APPROVED N/A BASIS	REVIEWER / ACTUAL EVENT

Gap / required action / continuation record:

16.2(b) | Source p. 34

The organization shall define safe states for training, transport, maintenance, storage and non-operational use. Test activities involving hazardous functions shall be separately authorized and controlled. This standard does not specify weapon effects, targeting methods or tactical employment.

Cross-domain interface baseline; integration tests; safe-state definition; authorized test controls.

STATE	EVIDENCE / APPROVED N/A BASIS	REVIEWER / ACTUAL EVENT

Gap / required action / continuation record:

16.3 — Defense-purpose road and off-road vehicles

16.3(a) | Source p. 34

Defense-purpose automotive systems shall include chassis, propulsion, braking, steering, energy storage, communications, payload interfaces and support equipment within the assigned scope. Duty cycles, loads, terrain, climate, transport and recovery conditions shall be specified.

Vehicle duty profile; integration impact assessment; configuration-specific qualification; maintenance and transport limits.

STATE

EVIDENCE / APPROVED N/A BASIS

REVIEWER / ACTUAL EVENT

Gap / required action / continuation record:

16.3(b) | Source p. 34

Mission equipment integration shall assess effects on stability, structural integrity, electrical capacity, thermal behavior, occupant safety, visibility and maintainability. A commercial chassis approval shall not establish suitability of the modified mission configuration. Civil-road requirements and mission-specific requirements shall both be addressed when applicable.

Vehicle duty profile; integration impact assessment; configuration-specific qualification; maintenance and transport limits.

STATE

EVIDENCE / APPROVED N/A BASIS

REVIEWER / ACTUAL EVENT

Gap / required action / continuation record:

16.4 — Maritime platforms and underwater systems

16.4(a) | Source p. 34

Maritime assurance shall identify relevant structural, corrosion, pressure, electrical, propulsion, environmental and human-system requirements. Surface, submerged, unmanned and support-system interfaces shall be addressed according to the actual operating domain.

Maritime requirement basis; critical-boundary records; process and inspection evidence; deterioration- management plan.

STATE

EVIDENCE / APPROVED N/A BASIS

REVIEWER / ACTUAL EVENT

Gap / required action / continuation record:

16.4(b) | Source p. 34

Welding, coatings, pressure boundaries, watertight integrity and critical machinery shall have appropriate process qualification and inspection evidence. Applicable marine, customer and authority approvals shall be identified independently of AF conformity. Inspection access and through-life deterioration shall be considered during design.

Maritime requirement basis; critical-boundary records; process and inspection evidence; deterioration- management plan.

STATE

EVIDENCE / APPROVED N/A BASIS

REVIEWER / ACTUAL EVENT

Gap / required action / continuation record:

16.5 — Autonomy, remote systems and human authority

16.5(a) | Source p. 35

Autonomous or remotely operated defense platforms shall have a bounded operational domain, defined human authority, safe response to lost communications and controls against unauthorized commands. The organization shall validate the ability to intervene within the required response time and information limits.

Authority model; domain constraints; intervention validation; simulation limits; change and release records.

STATE

EVIDENCE / APPROVED N/A BASIS

REVIEWER / ACTUAL EVENT

Gap / required action / continuation record:

16.5(b) | Source p. 35

Changes to autonomy logic, mission data or sensor interpretation shall undergo configuration and safety review. Performance in simulation shall not be assumed to cover the complete operational environment. Assurance of lawful and authorized use shall remain an explicit program responsibility.

Authority model; domain constraints; intervention validation; simulation limits; change and release records.

STATE

EVIDENCE / APPROVED N/A BASIS

REVIEWER / ACTUAL EVENT

Gap / required action / continuation record:

16.6 — Controlled technology, ethics and supply integrity

16.6(a) | Source p. 35

The organization shall establish a process to identify applicable export, transfer, end-use, security and information-handling obligations. Access, collaboration, publication and technical-support arrangements shall be reviewed by competent authorized personnel.

Controlled-technology review; authorized access; due diligence; ethical escalation and disposition.

STATE

EVIDENCE / APPROVED N/A BASIS

REVIEWER / ACTUAL EVENT

Gap / required action / continuation record:

16.6(b) | Source p. 35

Due diligence shall address source authenticity, unauthorized substitutions, bribery, conflicts of interest and misuse concerns relevant to the activity. Neither an AF document nor membership shall be treated as permission to transfer controlled information or conduct restricted work.

Controlled-technology review; authorized access; due diligence; ethical escalation and disposition.

STATE

EVIDENCE / APPROVED N/A BASIS

REVIEWER / ACTUAL EVENT

Gap / required action / continuation record:

16.7 — Long-life support and obsolescence

16.7(a) | Source p. 35

Defense systems shall have a support plan addressing long service life, configuration diversity, spares, repair data, training, software support and diminishing sources. Replacement parts and substitutions shall undergo engineering assessment and appropriate requalification.

Support and obsolescence plan; substitution approvals; field configuration; life and refurbishment records.

STATE	EVIDENCE / APPROVED N/A BASIS	REVIEWER / ACTUAL EVENT
Gap / required action / continuation record: 		

16.7(b) | Source p. 35

The organization shall preserve the technical ability to identify and support the actual field configuration. Cannibalization, refurbishment and remanufacture shall retain source, life status and inspection evidence. Unknown life or origin shall be treated as a controlled uncertainty, not reset to zero.

Support and obsolescence plan; substitution approvals; field configuration; life and refurbishment records.

STATE	EVIDENCE / APPROVED N/A BASIS	REVIEWER / ACTUAL EVENT
Gap / required action / continuation record: 		

4 Compound-condition continuation and final reconciliation

Duplicate these controlled continuation fields as needed. Each additional predicate retains its parent source identifier, object, criterion, evidence, actual result, gap and independent approval. The number of printed fields is not a limit on the required evidence.

Parent requirement / compound condition / applicable object

Separate criterion and approved technical basis

Method, actual configuration and original evidence

Result, uncertainty/rubric and PASS/FAIL/HOLD/N/A reason

Failed/held condition, owner, original due event and action

Approved exclusion and independent review reference

Final requirement population and unresolved conditions

Independent reviewer / decision authority / genuine approval reference

Initial grant, renewal and extension require closure of all in-scope nonconformities and the source's complete decision conditions. A separate authorized technical concession does not make a failed original criterion conforming. Preserve independent review, actual authority and precise scope.