



AF 9100:2026

Aerospace Quality Management System

FORM

Knowledge, Development and Observed Practice

AF-FR-9100-031

FIRST EDITION

30 September 2026 | English master text

Publication identity and application

Control	Publication value
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Delivery status	Prepared implementation companion. Actual approval, adoption, effectivity and operational decisions are recorded separately.

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 Purpose, source identity and completion rules

This additional implementation form organizes the detailed record needs of the identified AF 9100 provisions. It supplements the twelve source form modules without renumbering them or creating a new assessment route.

Complete the applicable fields with authentic information. Record unknown, unavailable and not-yet-demonstrated conditions explicitly. An exclusion needs an approved applicability rationale. Use linked continuation records for multiple items, sources, tests, people or decisions. Keep source attachments under controlled custody; do not rely on this PDF alone where raw evidence is required.

2 Common identity and record control

Record ID and continuation link

Template/code and controlled version

Case/applicant/asset identity

Route, scope and application profile

Object configuration and relevant period

Actual creation/event time and time zone

Author and role

Reviewer and approval responsibility

Current state and original history

Original evidence and source location

Access classification and permitted recipients

Retention basis, duration and preservation hold**Correction: original value, reason, author and approval****Authenticated approval/workflow reference (typed name is not a signature)**

3 Form-specific evidence and decisions

Person/role/technical domain

Actual task or learning event

Hours and substantive contribution

Knowledge/skill objective

Observed performance and reviewer

Essential-step evidence

Relevant practice assignments

Inactivity and restrictions

Current authorization links

Knowledge asset and custodian

Original conditions and lesson

Transfer and retrieval demonstration

Effectiveness after application

4 Detailed continuation record

Use this section for each additional independently testable condition or actual event. A form-level summary cannot remove a required field, earlier failed result or unresolved item.

Parent form and continuation/item ID

Exact object / configuration / performer / event time

Source requirement / approved profile / condition

Numeric criterion with units or observable attribute

Method / validity / uncertainty / essential step

Original evidence and actual result

Conclusion and limitations / rejected or contrary evidence

Required protection / action / responsible owner / actual due event

Reviewer / approval reference / receiving acknowledgement

5 Completeness and receiving review

Check	Required review
Identity and scope	Every record belongs to the actual object, evaluated configuration and relevant period.
Evidence and validity	Required original data, method, actual results and limitations are traceable.
Decision separation	Technical disposition, independent attestation, employer task authority and public permission are not merged.
History and time	Earlier failed states and original notification clocks are preserved; no manufactured observations.
Approval and custody	Actual competent authority and receiving responsibility are established; typed names are not authenticated signatures.

Actual reviewer / conclusion / unresolved items

Authenticated approval instrument or workflow reference

Receiving custodian / access / retention / accepted residual duties

Appendix A — Source requirements and complete field payload

Source: AF 9100:2026, Aerospace Quality Management System, FIRST EDITION, 29 September 2026; supplied 131-page PDF. Source page references below locate the original publication. These excerpts are read with the complete applicable standard; local implementation sequences do not replace it.

7.8 Organizational knowledge and technical continuity

SOURCE p. 19 | Normative when applicable

7.8(a) The organization shall identify knowledge necessary for current and future obligations, including tacit process knowledge, field experience, design rationale and failure mechanisms. It shall preserve critical knowledge when personnel retire, suppliers exit or technology changes.

7.8(b) Lessons learned shall be indexed so that relevant programs can retrieve and evaluate them. Reuse of a lesson or legacy design shall include an applicability check; similarities in name or appearance shall not establish equivalence of mission, materials or environment.

Required evidence: Knowledge map; succession and transfer records; lessons database; reuse applicability reviews.

10.4 Learning across the lifecycle and network

SOURCE p. 27 | Normative when applicable

10.4(a) The organization shall make relevant lessons available to affected functions and suppliers through controlled channels. Significant lessons shall be considered at new-program initiation, design review, supplier approval and process change.

10.4(b) Lessons shall identify conditions of applicability and evidence, rather than only a slogan or narrative. The organization shall periodically test whether the lessons are being used and whether repeated events indicate ineffective knowledge transfer.

Required evidence: Indexed lessons; applicability reviews; supplier communication; recurrence and uptake assessment.

AB.6 Continuing authorization and observed performance

SOURCE p. 107 | Normative when applicable

AB.6(a) All authorized assessment-role personnel shall complete at least 16 hours of relevant continuing professional development in each 12-month period. Independent auditors shall additionally perform at least four auditor-days across at least two assignments in that period. A lead auditor shall lead at least two complete assignments in each 24-month period.

AB.6(b) Reviewers and decision makers shall complete at least three substantive file reviews or decisions in each 12-month period. Technical experts shall demonstrate current relevant practice and review changes affecting their technical scope. Providers shall assess performance using witnessed work, report quality, decisions, complaints and recurrence of errors.

AB.6(c) An independent auditor shall undergo a witnessed performance review at least once every 24 months. More frequent observation shall be required for a new sector, C2/C3 expansion, significant adverse evidence or deficient performance. Training hours shall not substitute for the required observed competence.

Required evidence: Development and activity logs; witnessed reviews; report-quality checks; ongoing role authorizations.

AE.8 Continued practice, inactivity and renewal

SOURCE p. 116 | Normative when applicable

AE.8(a) The credential holder shall complete at least 16 hours of relevant continuing development in each 12-month period and maintain evidence of relevant practice. The profile shall define the minimum practical frequency or supervised demonstration necessary for that role. The operator shall assess actual competence, not training hours alone.

AE.8(b) For C2/C3 tasks, more than six months without relevant practice shall require an observed competence demonstration before independent task authorization resumes. For C0/C1 tasks, the corresponding trigger is more than 12 months. Earlier reassessment shall follow significant change or adverse evidence. Auditor activity rules in Annex AB also apply; the stricter triggered requirement controls.

AE.8(c) Renewal shall review current scope, practice, development, conduct, complaints, changes and performance. It shall include a practical demonstration of essential skills within the preceding six months and a knowledge update covering material changes. New or expanded scope shall receive the necessary initial assessment rather than automatic renewal.

AE.8(d) The operator shall complete PER continuing-scope surveillance at the interval in Annex AG applicable to the assessed role criticality. Surveillance may use verified practice, development and observed performance as specified in the profile; renewal still requires the practical and knowledge evidence stated above.

Required evidence: Practice and development log; inactivity decision; observed essential-skill demonstration; knowledge update; renewal decision.