



AF 9100:2026

Aerospace Quality Management System

TECHNICAL PROFILE BOOK

Maintenance, Distribution and End-of-Life Services — Technical Application Book

AF-TP-9100-011

FIRST EDITION

30 September 2026 | English master text

Publication identity and application

Control	Publication value
Title	Maintenance, Distribution and End-of-Life Services — Technical Application Book
Document code	AF-TP-9100-011
Edition / language	FIRST EDITION / English master text
Companion edition identity	30 September 2026
Controlling source	AF 9100:2026 — FIRST EDITION — 29 September 2026
Responsible owner function	Service technical authority
Primary source anchors	21, T
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.

Contents and reading route

Publication identity and application	2
Contents and reading route	3
1 Scope, responsibility and source priority	4
2 Technical profile and prospective parameter completion	4
3 Subject-by-subject implementation	4
4 Representative evaluation and adverse evidence	6
5 Interface records, decisions and continuing use	6
Appendix A — Controlling source and evidence	7
Source tables — complete field and decision payloads	9
Appendix B — Local implementation and release	10

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 Scope, responsibility and source priority

Capability, actual work packages, current technical data, life and parts history, repair, stock splitting, logistics, remote support and verified retirement.

Boundary	Required implementation decision
Object and route	Identify ORG, PRD, SVC, PRC, PER, SUB or CAB separately. Combined records do not merge outcomes.
Activity	Apply source technical modules by performed or retained responsibility, including relevant outsourced work.
Authority	Technical release, employer task permission, independent attestation and statutory authorization remain distinct.
Source priority	AF 9100:2026 and all compatible binding obligations control. This companion does not import ASTRA programme rules or external normative schemes.

2 Technical profile and prospective parameter completion

Facility/task/asset; permission; data version; time/cycles/exposure; parts eligibility; independent checks; preservation; receiving responsibility

Parameter record	Content required before evaluating results
Identity and trigger	Stable criterion ID, source anchor, owner, actual object, phase, mode and reason it applies.
Limit or attribute	Value/range with compatible units and boundary convention, or an observable state with every essential step.
Technical basis	Actual environment, duty, consequence, derivation, qualified evidence and relevant approval.
Method and representation	Inspection, analysis, demonstration or test; method version, article/population, configuration and validity limits.
Uncertainty and decision	Corrections, model, covariance, coverage, pre-agreed rule, sample/scoring logic and hold conditions.
Authority and change	Technical and independent approvals, actual effectivity, preserved earlier basis and reopening triggers.

The fields above are completed for the actual application. A blank limit, undefined domain or unvalidated method prevents the dependent claim; the book deliberately does not invent one severity, tolerance or task threshold for unrelated applications.

3 Subject-by-subject implementation

21.1 — Service scope and new-capability approval

Source p. 39; complete conditions reproduced in Appendix A.

Implementation record: Service capability list; new-capability review; applicable authorizations; activity-based scope.

Application check: Record tasks, observations, removed and installed parts, interruptions, temporary devices and unfinished conditions. Later signatures cannot make unobserved steps contemporaneous.

Review boundary: Unverified life, parts eligibility, mandatory inspection or release authority prevents the affected service release. Record each source condition separately in the linked checklist and preserve approved exclusions.

21.2 — Maintenance planning and execution

Source p. 39; complete conditions reproduced in Appendix A.

Implementation record: Maintenance package; current-data verification; handovers; parts traceability; post-maintenance verification.

Application check: Record tasks, observations, removed and installed parts, interruptions, temporary devices and unfinished conditions. Later signatures cannot make unobserved steps contemporaneous.

Review boundary: Unverified life, parts eligibility, mandatory inspection or release authority prevents the affected service release. Record each source condition separately in the linked checklist and preserve approved exclusions.

21.3 — Repair, overhaul and remanufacture

Source p. 39; complete conditions reproduced in Appendix A.

Implementation record: Repair basis; condition assessment; process records; remaining-life decisions; release limitations.

Application check: Record tasks, observations, removed and installed parts, interruptions, temporary devices and unfinished conditions. Later signatures cannot make unobserved steps contemporaneous.

Review boundary: Unverified life, parts eligibility, mandatory inspection or release authority prevents the affected service release. Record each source condition separately in the linked checklist and preserve approved exclusions.

21.4 — Distribution, stock splitting and chain of custody

Source p. 40; complete conditions reproduced in Appendix A.

Implementation record: Source verification; split-lot records; stock status; certificate linkage; customer delivery evidence.

Application check: Record packaging, transport conditions, shelf or out-time, seals where relevant and receiving location. Maintain original-to-split links and account for sample consumption.

Review boundary: Unknown eligibility, incompatible material evidence or suspect authenticity holds affected inputs. Record each source condition separately in the linked checklist and preserve approved exclusions.

21.5 — Logistics, storage and remote support

Source p. 40; complete conditions reproduced in Appendix A.

Implementation record: Logistics plan; custody records; excursion assessments; remote-support authorization and advice records.

Application check: Register received tools, intellectual property, data, access credentials and physical items. Confirm permitted use, condition, custody and reporting obligations.

Review boundary: Unknown damaging exposure or incompatible preservation prevents routine acceptance of affected items. Record each source condition separately in the linked checklist and preserve approved exclusions.

21.6 — Retirement, disposal and record handover

Source p. 40; complete conditions reproduced in Appendix A.

Implementation record: Retirement plan; material and data disposition; record-transfer arrangements; disposal verification.

Application check: Record tasks, observations, removed and installed parts, interruptions, temporary devices and unfinished conditions. Later signatures cannot make unobserved steps contemporaneous.

Review boundary: Unverified life, parts eligibility, mandatory inspection or release authority prevents the affected service release. Record each source condition separately in the linked checklist and preserve approved exclusions.

4 Representative evaluation and adverse evidence

Maintenance, Repair, Distribution and Retirement

Witness or trace: Use an approved repair or overhaul basis and valid detection for hidden damage. A successful bench test cannot reset missing life history or establish an unsupported as-new claim.

Synthetic challenge: A serviceable-looking part is recovered from a stored vehicle with no exposure history. Retain the unknown history and apply the real eligibility and life assessment. Cosmetic condition or a functional check does not establish unrestricted use.

Incoming Verification, Authenticity and Suspect Items

Witness or trace: Segregate suspect, expired, damaged or unverified input. Preserve original records and investigate without treating an allegation as proven misconduct before evidence supports it.

Synthetic challenge: A certificate is genuine but belongs to a different material batch. It cannot support the received batch. Keep receipt and source evidence separate and obtain valid batch-specific verification before acceptance.

Cleanliness, Preservation, Packaging and Property

Witness or trace: Use representative route and exposure evidence where required. Preserve labels, seals, quantities, environmental history and receiving checks through every transfer.

Synthetic challenge: A humidity alarm clears before a stored electronic assembly is dispatched. Identify the exposed assembly and its time and packaging history, assess suitability under the actual technical basis, and document disposition rather than assuming the cleared alarm closes the issue.

5 Interface records, decisions and continuing use

Record	Required implementation purpose
AF-FR-9100-026	Service, Maintenance, Life and Retirement Record
AF-FR-9100-024	Contamination, Preservation and External Property
AF-FR-9100-009	Supplier Flow-Down, Custody and Transfer

Qualification, instance acceptance, current operating capability and independent attestation retain separate evidence and decisions. A new site, material, supplier, digital load, use environment or duty requires a relevant difference and requalification review. No previous result transfers automatically because the name is unchanged.

Appendix A — Controlling source and evidence

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.

21.1 Service scope and new-capability approval

SOURCE p. 39 | Normative when applicable

21.1(a) Service organizations shall define the activities, products, sites and authorizations within their capability. New capability shall be verified against competence, tools, technical data, parts access, inspection, environmental conditions and release authority before work is accepted.

21.1(b) Service scope shall distinguish maintenance, repair, overhaul, modification, inspection, distribution and engineering advice. A distributor performing value-adding work shall apply the relevant production or design controls to that work rather than relying solely on distribution status.

Required evidence: Service capability list; new-capability review; applicable authorizations; activity-based scope.

21.2 Maintenance planning and execution

SOURCE p. 39 | Normative when applicable

21.2(a) Maintenance work shall use current approved data, verified configuration, service history and applicable life limits. Work packages shall identify required tasks, hold points, parts, tools, independent checks and release conditions.

21.2(b) Interrupted work, shift handovers, inaccessible features and off-site conditions shall be controlled. The organization shall verify completion and configuration after maintenance, including restoration of protective features and removal of temporary devices. Parts removed and installed shall remain traceable.

Required evidence: Maintenance package; current-data verification; handovers; parts traceability; post-maintenance verification.

21.3 Repair, overhaul and remanufacture

SOURCE p. 39 | Normative when applicable

21.3(a) Repair and overhaul shall have an approved technical basis and defined acceptance criteria. The organization shall assess hidden damage, prior repairs, service exposure, material degradation and remaining life as relevant.

21.3(b) Remanufactured or overhauled status shall not imply “as new” unless that claim is technically justified and authorized. Replaced or restored characteristics, retained life consumption and operating restrictions shall be disclosed in the release evidence. Design deviations shall follow the appropriate approval route.

Required evidence: Repair basis; condition assessment; process records; remaining-life decisions; release limitations.

21.4 Distribution, stock splitting and chain of custody

SOURCE p. 40 | Normative when applicable

21.4(a) Distributors shall verify source identity, item status, accompanying evidence, storage conditions and customer requirements. Repackaging or splitting shall preserve original lot links, quantity reconciliation and the relationship to certificates and inspection records.

21.4(b) Suspect, expired, damaged, recalled or unapproved items shall be physically or electronically segregated with effective prevention of shipment. A copied certificate shall not be altered to imply a different origin, test scope or approval. Customers shall receive the evidence required for the actual supplied quantity and configuration.

Required evidence: Source verification; split-lot records; stock status; certificate linkage; customer delivery evidence.

21.5 Logistics, storage and remote support

SOURCE p. 40 | Normative when applicable

21.5(a) Logistics providers shall establish preservation and security controls appropriate to the product, route, mode and duration. Transfer points shall have defined custody, inspection and environmental responsibilities. Transport restrictions and hazardous-goods obligations shall be identified by competent personnel.

21.5(b) Remote support shall verify asset identity, configuration, authorization and the reliability of available information before directing an action. Advice affecting safety or configuration shall be controlled and recorded. Loss of communication shall have a defined safe response.

Required evidence: Logistics plan; custody records; excursion assessments; remote-support authorization and advice records.

21.6 Retirement, disposal and record handover

SOURCE p. 40 | Normative when applicable

21.6(a) The organization shall plan retirement so that hazardous inventories, sensitive information, reusable items, waste and required records are appropriately controlled. Responsibilities shall be assigned before organizational closure or supplier exit creates an evidence gap.

21.6(b) Items unsuitable for further use shall be rendered unusable or otherwise positively controlled against re-entry. Records necessary for remaining users or legal obligations shall be transferred or retained under an approved arrangement. Disposal shall be verifiable, not only declared.

Required evidence: Retirement plan; material and data disposition; record-transfer arrangements; disposal verification.

T.1 Service capability record

SOURCE p. 83 | Normative when applicable

T.1(a) The service organization shall define its scope, authorized tasks, facilities, people, tools, current data, required parts and release authority. New capability shall be approved only after the actual resources and methods are demonstrated.

T.1(b) The record shall identify legal or customer authorizations separately from AF conformity. A broad corporate scope shall not imply authorization of every mechanic, location or repair method.

T.2 Unknown history and unauthorized parts

SOURCE p. 83 | Normative when applicable

T.2(a) Unknown service history, missing life data or unclear source shall be recorded and assessed. The organization shall not reset life or infer eligibility solely from appearance, a successful bench test or an unverifiable certificate.

T.2(b) Suspected unapproved or counterfeit parts shall be isolated, investigated and dispositioned under controlled procedures. Removed parts shall retain identity and status so that scrap or restricted items cannot be mistaken for serviceable stock.

T.3 Filled illustrative split-lot trace

SOURCE p. 83 | Definition, explanation or informative example; no new universal limit

T.3(a) Example: incoming lot L-500 contains 500 fasteners under original certificate C-500. It is split into packages L-500-A (200), L-500-B (200) and L-500-C (100). The record preserves the original manufacturer, lot, specification, certificate and storage history for all three child packages.

T.3(b) If an authenticity concern later affects L-500, the trace identifies every shipped customer and remaining package. A copied certificate is linked to the child quantity but is not edited to imply that the distributor performed the original manufacturer's tests.

T.4 Release and continuing support

SOURCE p. 84 | Normative when applicable

T.4(a) Service release shall identify the exact work performed, evidence, limitations, life status and authorized person. A maintenance release shall not imply approval of unrelated systems or a complete vehicle unless that scope was actually assessed and authorized.

T.4(b) After release, newly discovered issues affecting the service action shall be investigated and communicated to affected recipients. Records shall support population identification even when work occurred at temporary or customer locations.

Source tables — complete field and decision payloads

Table T-1 — Maintenance and repair evidence

Source p. 83 | Required structure when applicable

Record	Minimum fields
Receipt and condition	Customer; item identity; configuration; reported defect; physical condition; accompanying history; missing information.
Work scope	Requested tasks; approved technical data; revision; limitations; required approvals; estimate and authorization.
Life status	Time/cycles/exposure; life limits; previous repairs; applicability of service information; uncertainty.
Execution	Task sequence; performer; tools; parts removed/installed; process records; inspections; interruptions and handovers.
Independent checks	Required task; independent competent person; method; actual result; discrepancy resolution.
Nonconformity and repair	Finding; technical basis; approval; affected scope; rework/repair; verification.
Final configuration	As-maintained baseline; installed versions; restored protections; removed temporary devices.
Release	Completed requirements; authorized identity; required release document; limitations; next maintenance/life information.
Customer handover	Returned property; records; operating restrictions; acknowledgement where required.
Retention	Data location; period and basis; access; transfer on closure; secure disposal.

Table T-2 — Distribution and split-lot evidence

Source p. 83 | Required structure when applicable

Stage	Required information and control
Source approval	Actual source, authorized-channel or alternative-source evidence, scope and authenticity risk.
Receipt	Manufacturer/part/lot identity, quantity, condition, certificates, life status and required verification.
Storage	Location, environment, preservation, shelf life, access and segregation of restricted stock.
Split or repack	Original lot, child lot/package identity, quantities, date, performer, certificate linkage and label accuracy.
Order fulfillment	Customer requirements, correct revision/condition, required documents and preservation.
Dispatch	Quantity reconciliation, custody, carrier conditions, package identity and delivery evidence.
Recall or suspect stock	Affected original and split lots, shipped customers, remaining stock, notifications and disposition.

Appendix B — Local implementation and release

Readiness condition	Evidence before consequential use
Authority and responsibility	Actual legal operator, owner, competent technical authority, independent reviewer and permitted result class are recorded.
Scope and criteria	Object, configuration, site, period, trigger, every technical value or observable attribute, units and prospective approval are complete.
Evidence and methods	Original accessible evidence, representative observations, valid methods, uncertainty, adverse cases and limitations support the intended conclusion.
People and independence	Competence is current for each task; genuine conflicts, relevant prior work and needed separation have been checked.
Records and tools	Field meanings, unique IDs, original history, access, retention, recovery and actual deployed workflows have passed local validation.
Decision and public use	All relevant blockers are resolved; required independent decision and written permissions precede the exact public claim.
Continuity and handover	Receiving custody, unresolved duties, corrections and historical decisions survive transfer, retirement or provider closure.

Record the completed local readiness and actual authorization in AF-FR-9100-032 or an equivalent controlled record. Preserve the unchanged source standard and each earlier decision basis. A blocked activity may continue only within a genuinely permitted development boundary, not as a provisional conformity certificate.