



AF 9100:2026

Aerospace Quality Management System

CHECKLIST

Product and Integrated-System Conformity — PRD Checklist

AF-CL-9100-014

FIRST EDITION

30 September 2026 | English master text

Publication identity and application

Control	Publication value
Title	Product and Integrated-System Conformity — PRD Checklist
Document code	AF-CL-9100-014
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	Independent route evaluator
Primary source anchors	23
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.

Contents and reading route

Publication identity and application	2
Contents and reading route	3
1 Checklist use and state definitions	4
2 Complete source-condition evaluation	5
4 Compound-condition continuation and final reconciliation	9

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

23.1 — Product identity, families and intended application

23.1(a) | Source p. 42

The organization shall define the product identity, configuration, intended application, operational domain and boundaries of its responsibility. Hardware, software, model weights, supplied data and operating instructions shall be included when they affect the claim. A family shall have a documented grouping rationale and identifiable differences between variants.

Product definition; configuration baseline; family matrix; variant-difference and representativeness analyses.

STATE

EVIDENCE / APPROVED N/A BASIS

REVIEWER / ACTUAL EVENT

Gap / required action / continuation record:

23.1(b) | Source p. 42

A result from a representative variant may support another variant only where a technical review establishes that the evaluated conditions cover the relevant differences and failure mechanisms. The worst case shall be justified for each characteristic; one variant need not be worst case for every test.

Product definition; configuration baseline; family matrix; variant-difference and representativeness analyses.

STATE

EVIDENCE / APPROVED N/A BASIS

REVIEWER / ACTUAL EVENT

Gap / required action / continuation record:

23.2 — Product application profile and acceptance plan

23.2(a) | Source p. 42

The profile shall translate intended functions and obligations into verifiable characteristics, numerical limits or controlled attribute criteria. It shall identify essential safety functions, interfaces, environmental and service-life assumptions, test conditions, sampling and decision rules. Criteria shall be approved before the evaluators examine acceptance results.

Approved product profile; characteristic-to-method matrix; qualification and acceptance distinction; unresolved-input decisions.

STATE

EVIDENCE / APPROVED N/A BASIS

REVIEWER / ACTUAL EVENT

Gap / required action / continuation record:

23.2(b) | Source p. 42

The product plan shall distinguish design qualification, production-route qualification, routine acceptance, installation verification and field monitoring. Passing one of these activities shall not be used as evidence that the others were completed. Data or assumptions supplied by the customer shall be checked for applicability and unresolved deficiencies escalated.

Approved product profile; characteristic-to-method matrix; qualification and acceptance distinction; unresolved-input decisions.

STATE

EVIDENCE / APPROVED N/A BASIS

REVIEWER / ACTUAL EVENT

Gap / required action / continuation record:

23.3 — Design qualification and integration evidence

23.3(a) | Source p. 42

Qualification shall demonstrate the relevant design requirements for an identified configuration and defined conditions. Test articles, analysis models, equipment, procedures, uncertainty and differences from production shall be recorded. Failed, interrupted and repeated trials shall remain visible with their technical disposition.

Qualification dossier; test-article differences; system-interface verification; validated support assumptions.

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

Gap / required action / continuation record:

23.3(b) | Source p. 42

Integration evidence shall address interactions, common resources and emergent behavior that cannot be established through independent component tests. Where safety depends on a supporting service, operator action or maintenance interval, the dependency shall be validated and controlled as part of the product basis.

Qualification dossier; test-article differences; system-interface verification; validated support assumptions.

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

Gap / required action / continuation record:

23.4 — Production, unit and lot acceptance

23.4(a) | Source p. 42

Each released unit or lot shall be linked to the applicable configuration, material and component origin, approved process route, required inspections and authorized disposition. Critical-characteristic evidence shall not be replaced by a generic certificate of conformity. Any permitted sampling shall meet the application profile and Annex AD.

Unit or lot dossier; critical characteristics; sampling decision; controlled departures; final release record.

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

Gap / required action / continuation record:

23.4(b) | Source p. 42

A known nonconforming sampled unit shall be controlled even when a statistical lot rule permits lot acceptance. Repair, rework and concessions shall preserve identity, life consumption and the distinction between original conformity and an authorized departure. Product acceptance shall follow Clause 8.6 independently of an organization's certificate status.

Unit or lot dossier; critical characteristics; sampling decision; controlled departures; final release record.

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

Gap / required action / continuation record:

23.5 — Changes, family extensions and digital updates

23.5(a) | Source p. 42

The organization shall assess changes to materials, components, dimensions, firmware, algorithms, model parameters, energy architecture, production site and intended use for their cumulative effect. Approval shall identify which prior evidence remains valid and which evaluation must be repeated.

Change-impact record; evidence reuse rationale; repeated qualification; instance effectivity; updated scope.

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

Gap / required action / continuation record:

23.5(b) | Source p. 42

A product-family extension or digital update affecting the attested scope shall be evaluated before the extended claim is used. Fielded instances shall be traceable to the actual installed configuration. A new software version shall not inherit approval solely because its commercial product name is unchanged.

Change-impact record; evidence reuse rationale; repeated qualification; instance effectivity; updated scope.

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

Gap / required action / continuation record:

23.6 — Product statements, labeling and user information

23.6(a) | Source p. 43

Statements shall identify exactly which characteristics or requirement set were evaluated and which configurations, sites or lots are covered. Restrictions, safety information, life limits and installation dependencies shall accompany the product where needed for correct use. A label shall not imply whole-system approval from a component evaluation.

Approved claim and label master; mark authorization; traceable labeling records; user-information delivery.

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

Gap / required action / continuation record:

23.6(b) | Source p. 43

The organization shall control label content, serial linkage and mark authorization, including labels printed by subcontractors. Misleading, obsolete or counterfeit labels shall trigger containment and correction. Claims of space suitability, mission readiness or equivalent performance shall require application-specific evidence, not an unqualified grade label.

Approved claim and label master; mark authorization; traceable labeling records; user-information delivery.

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

Gap / required action / continuation record:

23.7 — In-service evidence, corrective campaigns and retirement

23.7(a) | Source p. 43

Field information shall be analyzed with configuration, exposure and failure-definition context. The organization shall identify whether a new issue invalidates product qualification, acceptance methods, life limits or other products using a shared element. Required notifications and protective actions shall not await a scheduled surveillance audit.

Field data and exposure; affected-population analysis; campaign records; verified completion; retirement and reuse decisions.

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

Gap / required action / continuation record:

23.7(b) | Source p. 43

A corrective campaign shall define the affected population, interim restrictions, approved correction, verification, completion tracking and residual users. Retirement and reuse decisions shall preserve life and condition history. A repaired or transferred product shall not receive an unsupported new-life status.

Field data and exposure; affected-population analysis; campaign records; verified completion; retirement and reuse decisions.

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.