AEROSPACE FEDERATION

AF-CL-9500-017

Machine-Learning Model Assurance

Space / Aviation / Defense

FIRST EDITION

AF 9500 SUPPORTING DOCUMENT

Aerospace Federation
af.org

Document identity and use

FIRST EDITION MANUSCRIPT - Prepared for Aerospace Federation review

Field	Controlled identity
Document	AF-CL-9500-017 - Machine-Learning Model Assurance
Parent standard	AF 9500 - Aerospace Digital Systems, Software & Cybersecurity
Edition / language	FIRST EDITION / English master text
Family	Checklists
Primary source anchors	27; Annex K
Suggested local owner	Competent examiner / eligible reviewer
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 9500 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-9500-001 lists the complete supporting set. AF-CM-9500-001 maps the main clauses and annexes to working documents. AF-TP-9500-001 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 Keep superseded evidence and decisions traceable.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 technical limit, numerical limit, interval or acceptance value is assigned by a blank template.

Interactive record: Complete the fields in a PDF reader that supports AcroForms. Save a working copy and verify that entries remain visible after reopening. Link controlled continuation sheets when space is insufficient; every row requires its own evidence and disposition. Typed names identify people but are not self-authenticating signatures.

1 Examination basis and criteria

This checklist is an examination aid, not a substitute for the complete source requirements. Examine actual evidence and record each criterion separately on the following page.

Examination ID, object/baseline, activity, site, date and examiner

Criterion	Question to resolve with evidence
C01 / Domain	Intended/prohibited uses, consequences and boundaries are explicit.
C02 / Provenance	Model, data, preprocessing and thresholds are traceable.
C03 / Independence	Evaluation splits and labels avoid invalidating leakage.
C04 / Performance	Critical populations, uncertainty and shift are examined.
C05 / Safeguards	Fallback and human intervention work under actual conditions.
C06 / Change	Drift, adaptation and retraining have controlled authority.

2 Criterion-level results and disposition

Use one row for each C01-C06 criterion. Record PASS, FAIL, HOLD or approved N/A with the technical rationale. A blank entry is unexamined. Attach further rows where one criterion contains multiple conditions.

Criterion / condition	Evidence ID / finding	State / rationale	Gap / owner / action	Reviewer / authority

Overall bounded conclusion, blocked scope and escalation references

Review, authentication reference and follow-up conditions