AEROSPACE FEDERATION

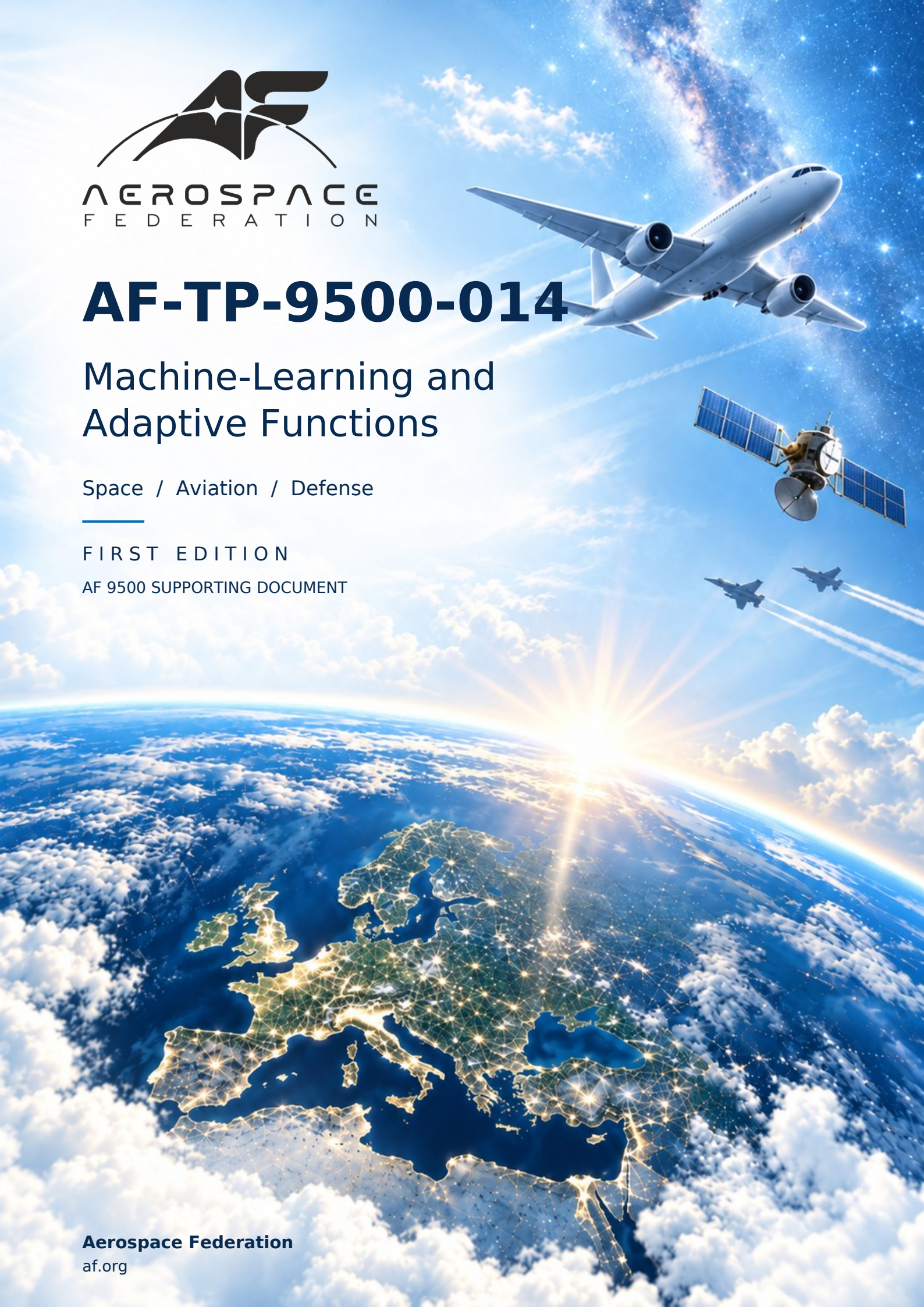
AF-TP-9500-014

Machine-Learning and Adaptive Functions

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-TP-9500-014 - Machine-Learning and Adaptive Functions
Parent standard	AF 9500 - Aerospace Digital Systems, Software & Cybersecurity
Edition / language	FIRST EDITION / English master text
Family	Technical Profiles
Primary source anchors	27; Annex K
Suggested local owner	Programme technical authority
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 Keep superseded evidence and decisions traceable.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 Profile completion and authority

Use this discipline profile together with AF-TP-9500-001 and the complete Annex B parameter baseline. It does not remove shared requirements for governance, identity, integrity, data, readiness or decision authority.

Enter approved values, units, tolerances, sources and affected configurations. Separate specification limits, control tolerances, protective thresholds and decision rules. Identify unresolved values as blocked dependencies. No field has a preassigned security level or pass criterion.

Profile ID, owner, object/configuration, intended use and sites

Common P01-P44 baseline ID; source requirements; applicable modules; approved N/A reasons

Approval, authentication reference, effective conditions and change triggers

2 Technical parameters and source evidence

For each entry, identify the approved value or linked controlled specification, its unit/range, source, authority and validation evidence. Use a continuation sheet where needed.

Intended decisions, domain, critical populations and prohibited uses

Model/weights/preprocessing/threshold/dependency configuration

Data origin, rights, labeling, splits and leakage controls

Independent evaluation, uncertainty, shift and consequential cases

Safeguards, fallback and realistic human intervention

Drift, retraining, online adaptation limits and change authority

Deployed identity, evidence boundaries and release restrictions