AEROSPACE FEDERATION

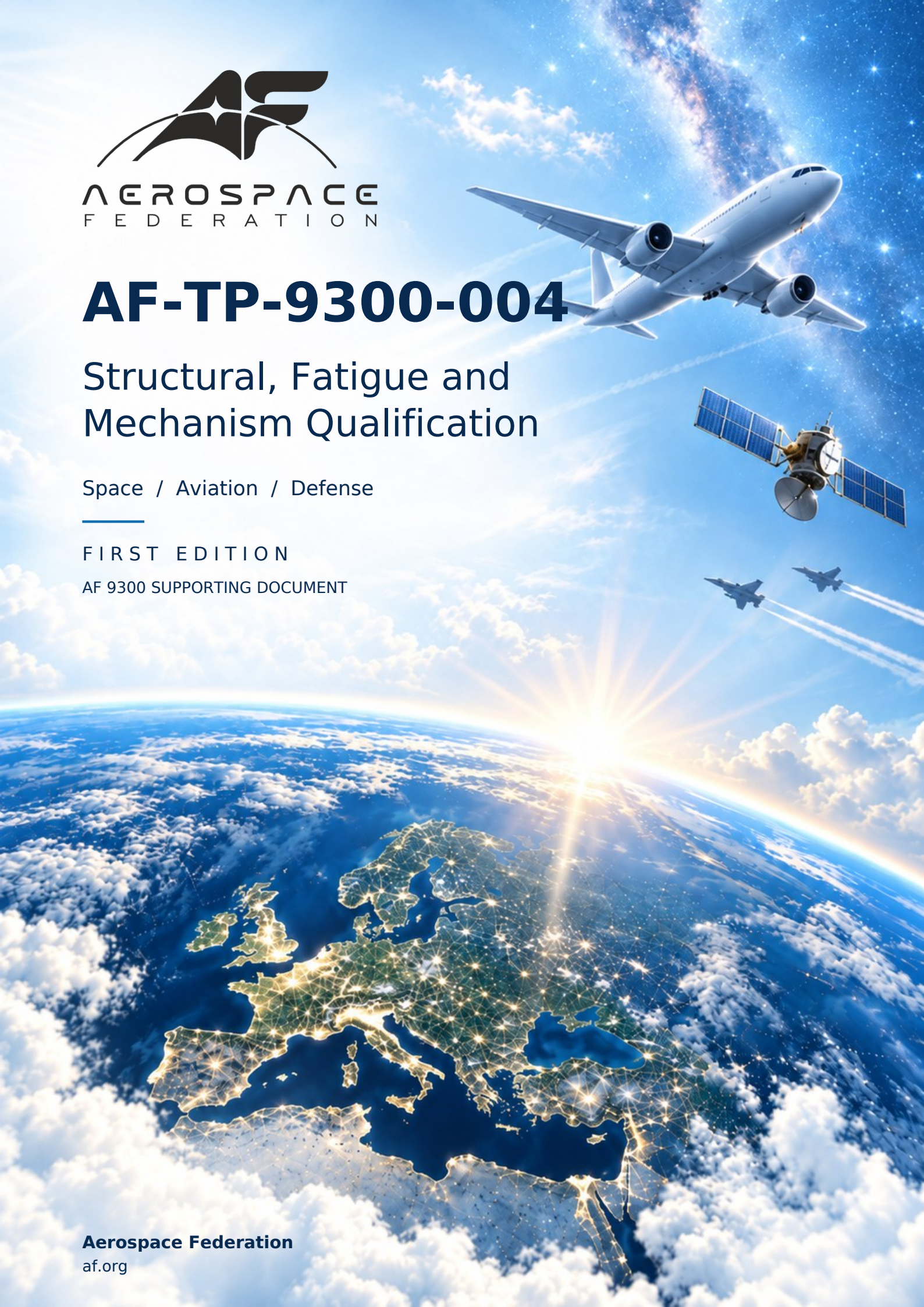
AF-TP-9300-004

Structural, Fatigue and Mechanism Qualification

Space / Aviation / Defense

FIRST EDITION

AF 9300 SUPPORTING DOCUMENT



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Document identity and use

FIRST EDITION MANUSCRIPT - Prepared for Aerospace Federation review

Field	Controlled identity
Document	AF-TP-9300-004 - Structural, Fatigue and Mechanism Qualification
Parent standard	AF 9300 - Aerospace Testing, Verification & Qualification
Edition / language	FIRST EDITION / English master text
Family	Technical Profiles
Primary source anchors	22; Annexes D-F
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 9300 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-9300-001 lists the complete supporting set. AF-CM-9300-001 maps the main clauses and annexes to working documents. AF-TP-9300-001 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 Keep superseded evidence and decisions traceable.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 test level, 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-9300-001 and the complete Annex B parameter baseline. It does not remove shared requirements for governance, metrology, uncertainty, 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 test level or pass criterion.

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

Common P01-P36 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.

Load cases, combinations, boundaries and physical mechanisms

Article pedigree, prior exposure, environment and life basis

Load application, reaction checks, strain/displacement measurement

Static stages, deformation/damage criteria and safe stop rules

Fatigue spectrum, cycles, sequence, scatter and acceleration model

Inspection/detection capability, mechanism function and post-test checks

Consumed life, remaining assumptions and qualification restrictions