

GAISSF® AEROSPACE SECTOR IMPLEMENTATION GUIDE EXECUTIVE BRIEF

SEC-050 | Version 1.0 | ODA3 Institute

Methodology Note

This brief summarises an informative 59-control sector implementation guide. It does not establish legal compliance, airworthiness, spaceworthiness, certification or regulatory acceptance. External aerospace references are identified for context; no unverified clause-level mapping is asserted.

Why this matters

Aerospace AI failures may propagate through physical platforms, operational decisions, long-lived supply chains and constrained update paths. Governance therefore has to connect models and data to exact configurations, human authority, safety and mission processes, and evidence that remains valid after change.

Board and executive decisions

- Define which executive and engineering authorities may accept AI-related residual risk.
- Require an authoritative inventory spanning embedded, ground, enterprise, supplier and hosted AI.
- Prioritise systems by physical/mission consequence and intervention feasibility, not by AI label.
- Require exact model/data/software baselines and supplier change notification.
- Ensure cyber containment and rollback decisions are coordinated with safety and mission authority.
- Fund evidence, monitoring and independent assurance for high-consequence systems.

Operating model

SEC-050 separates embedded aviation ML, aviation enterprise and ground AI, onboard space autonomy, ground-segment AI and physical AI. Each class receives different applicability, testing, monitoring and incident expectations.

Material limitations

- No direct conversion to DAL, SIL or other formal assurance level.
- No generalised aerospace-AI financial loss estimate; credible public actuarial data is insufficient.
- No approval of the example architectures or use cases.
- Military, classified and export-controlled applications require separate legal and assurance scoping.
- Control implementation does not eliminate residual risk.

Publication status

The SEC-050 content package is complete as an informative publication candidate. One normative document-control action remains: the inconsistent NOR-004 catalogue artefact must be corrected or formally withdrawn before an unqualified Publication Ready declaration.