



AF-HB-9700-001

Circular Aerospace and Final-Fate Assurance Handbook

Space / Aviation / Defense

FIRST EDITION

AF 9700 SUPPORTING DOCUMENT

Document identity and use

FIRST EDITION MANUSCRIPT - Prepared for Aerospace Federation review

Field	Controlled identity
Document	AF-HB-9700-001 - Circular Aerospace and Final-Fate Assurance Handbook
Parent standard	AF 9700 - Sustainable Aerospace & Lifecycle Management
Edition / language	FIRST EDITION / English master text
Family	Manuals
Primary source anchors	19-23, 28-31, 39; Annexes G-H, J, M
Suggested local owner	Circular lifecycle 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 9700 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-9700-001 lists the complete supporting set. AF-CM-9700-001 maps the main clauses and annexes to working documents. AF-TP-9700-001 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 Keep superseded evidence and decisions traceable.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.

Implementation model: Translate the stated responsibilities and controls into the actual organization. Informative examples remain explanatory; use approved programme-specific values for operational decisions.

1 Choose a feasible circular route

1.1 Identify the actual object

Start with item identity, configuration, material composition, ownership, history and condition. Distinguish a serviceable product, a repair candidate, a secondary material and waste according to the applicable basis. Economic value and a sustainability label do not establish technical eligibility or legal status.

1.2 Evaluate equivalent future service

Use AF-PR-9700-024 and the model logic in Annex O.7. Compare repair, continued use and replacement over the same future function. Include unsuccessful candidates, restoration, transport, degradation, maintenance and replacement. Do not use the most optimistic life for one option and a conservative life for the other without a justified scenario explanation.

2 Preserve engineering controls

2.1 Repair and remanufacture

An authorized process defines inspection, cleaning, restoration, replacement, testing and acceptance. The design and release authorities retain their roles. Parts with unknown provenance or exhausted life limits remain restricted regardless of apparent environmental benefit. Use AF-FR-9700-024 and AF-RG-9700-011 to preserve the complete route.

2.2 Receiving use

The receiving owner confirms exact use, performance, remaining limits, support and eventual treatment. A second-life application needs its own suitability and safety basis. Environmental allocation shall identify which lifecycle carries refurbishment burdens and any benefit; the same avoided virgin production shall not be claimed repeatedly by every participant.

3 Prepare retirement and treatment

3.1 Safe-state and custody gate

Apply AF-PR-9700-025. Identify stored energy, pressure, contamination, hazardous contents and protected data. Only authorized competent personnel determine safe state and treatment eligibility. Segregate materials to preserve traceability and prevent unapproved return to service. Retain permissions and receiving-facility capability evidence.

3.2 Movement and downstream checks

A movement record links origin, quantity, composition, classification, carrier, recipient and intended process. Verify actual acceptance and processing, including intermediaries and cross-border interfaces. A receipt proves only the event it records. Do not treat a collection note as proof of material recovery or disposal compliance.

4 Reconcile outcomes and close responsibly

4.1 Quantities and quality

Use AF-WI-9700-012 to reconcile reused items, recovered material, residues, energy recovery, disposal, losses and stocks. Record actual usable output and quality. Recyclability and collection rates describe different quantities from achieved recycling. Keep denominators and moisture bases consistent.

4.2 Continuing obligations

Unknown final fate, remediation and monitoring remain assigned in AF-RG-9700-015. Transfers preserve evidence access and responsible contacts. Final claims use AF-PR-9700-029 and identify the verified fraction only. Administrative closure does not erase physical or disclosure duties.

Required evidence: Candidate condition; equivalent-service comparison; authorized restoration/release; safe-state record; complete custody and final-fate reconciliation.

Decision control: Sending an asset away is a handoff event, not proof that the lifecycle responsibility has ended.