

Logistics and Stores Procedures

Sofema Online (SOL) Takes a look at the contents of the MOE Part 2 Procedures related to Logistics and Stores Procedures

Introduction

Here we consider a generic review of the logistics-related procedures as typically defined under Section 2 of an EASA Part 145-compliant Maintenance Organisation Exposition (MOE). The focus is on logistics functions, including the storage, control, acceptance, and distribution of aircraft components, materials, tools, and equipment.

Roles and Responsibilities

Logistics Manager

- Oversees the complete material supply chain including purchasing, stores management, and material distribution.
- Ensures compliance with storage, segregation, and environmental protection requirements.
- Maintains procedures for tagging, labelling, and release of items to the maintenance process.
- Coordinates with Technical and Planning Departments for timely provisioning of required materials.

Stores Personnel

- Conduct receipt inspections for conformity, condition, and certification documentation.
- Manage quarantine areas and ensure unserviceable or suspect parts are clearly segregated.
- Maintain accurate inventory records and support traceability of all components.
- Monitor shelf life items and control environmental conditions (temperature, humidity, etc.).

Key Procedures Overview

Supplier Evaluation (2.1)

- Approved suppliers must be evaluated for reliability and compliance.
- Certification and traceability standards (e.g. EASA Form 1) must be met.

- Monitoring includes quality audits and service-level assessments.
- Before any supplier is approved, a formal assessment must be conducted. This includes a review of the supplier's certifications (e.g. EASA Part 145, 21G, FAA, or equivalent approvals), quality system documentation, and their ability to provide traceable and compliant products.
- Emphasis is placed on the supplier's capability to issue authorised release certificates, such as the EASA Form 1 or FAA Form 8130-3, which are essential for establishing airworthiness traceability.
- Following initial approval, suppliers are subject to ongoing monitoring through scheduled quality audits, performance reviews, and service-level evaluations. Quality audits assess the supplier's adherence to regulatory and contractual standards, effectiveness of their quality system, and proper handling of parts or materials. Service-level reviews include metrics such as delivery performance, accuracy of documentation, incidence of non-conformities, and responsiveness to corrective actions.
- Each supplier is assigned a unique identifier and is listed in an internal Approved Supplier List (ASL). Any significant issues identified during audits or operational experience may trigger a re-evaluation, temporary suspension, or removal from the ASL. All evaluation and monitoring activities are documented and retained as part of the compliance monitoring system.
- Ultimately, this procedure ensures that the organisation maintains a controlled and compliant supply chain, thereby safeguarding the integrity of the maintenance process and supporting the continued airworthiness of aircraft and components.

Component Acceptance and Receiving Inspection (2.2)

- Verification of accompanying documentation including certificates of conformity.
- Physical inspection for packaging, damage, and part number matching.
- Entry into inventory system with issuance of Goods Received Number (GRN).
- Upon delivery, all items must be accompanied by the appropriate airworthiness release documentation, such as EASA Form 1, FAA Form 8130-3, or a Certificate of Conformity (CoC) as applicable to the source and regulatory framework.

- The receiving personnel must verify that the documentation matches the delivered item, ensuring accuracy in terms of part number, serial number (if applicable), description, and quantity.
 - The documentation must also be checked for authenticity, completeness, and validity—any discrepancies must be reported and resolved before acceptance.
 - Simultaneously, a detailed physical inspection is performed. This includes checking the packaging for integrity, ensuring there is no visible damage to the item, and confirming that the identification markings on the component match the details provided on the release documentation. Special care is taken for sensitive items, such as Electrostatic Discharge Sensitive Devices (ESDS), shelf-life controlled materials, or components with storage requirements like tyres and oxygen cylinders.
- If the component passes both documentary and physical checks, it is logged into the organisation's inventory system. At this point, a unique Goods Received Number (GRN) is issued and linked to the item to ensure full traceability.
- This GRN also allows the item to be tracked throughout its lifecycle within the maintenance system.
- This procedure safeguards the maintenance process by preventing the use of unapproved or non-compliant parts and reinforces the organisation's responsibility for ensuring that all components installed on aircraft meet the highest standards of airworthiness.

Storage and Tagging (2.3)

- Controlled storage environments must prevent deterioration (including for tyres, oils, and ESDS components).
- Items must be properly tagged:
 - **Serviceable parts** with traceable release documentation.
 - **Unserviceable parts** marked and placed in quarantine.
- Stock registers must record all transactions in and out of stores.
- All components and materials must be stored in a controlled environment designed to prevent deterioration due to environmental conditions. This includes maintaining appropriate temperature and humidity levels, especially for sensitive items such as tyres, nitrogen bottles, lubricants, paints, and Electrostatic

Discharge Sensitive (ESDS) components. Dedicated areas with anti-static protection, secure containment, and adequate shelving must be used to preserve product condition and comply with manufacturer storage guidelines.

- Each item entering the store must be tagged to clearly indicate its status.
 - **Serviceable parts** must be accompanied by valid and traceable release documentation (e.g. EASA Form 1, FAA 8130-3) and are tagged accordingly using a standardised label system.
 - **Unserviceable components**, including those removed from aircraft or failed inspection, must be clearly marked and segregated in a designated quarantine area. These parts are tagged with “unserviceable” labels and logged for repair, scrapping, or return to vendor as appropriate.
- All movements of materials in and out of the stores are recorded in a stock register or electronic inventory control system. The register maintains real-time visibility of part status, quantity, storage location, and traceability links such as GRN and certification references. This systematic control provides full accountability and supports compliance with traceability requirements under EASA Part 145.
- By maintaining strict storage and tagging protocols, the organisation ensures that only airworthy parts are released to maintenance while unserviceable or suspect items remain properly contained, thus preserving safety and regulatory compliance.

Release to Maintenance (2.3.3)

- Only authorised personnel may issue components for use.
- All issued materials must be accompanied by appropriate release documentation.
- Issuance is logged in the system to maintain traceability.
- Only authorised stores personnel, who have been trained and formally designated, are permitted to issue components or materials for maintenance use. These individuals must verify that the items being released meet all applicable documentation and traceability requirements before any handover to maintenance teams.
- Each issued item must be accompanied by the correct release documentation, typically an EASA Form 1, FAA Form 8130-3, or Certificate of Conformity, depending on the source and regulatory domain.

- This documentation is checked against the physical component to confirm part number, serial number (if applicable), and serviceable status. Items without valid certification must not be issued under any circumstances.
- Once verified and approved, the issuance is recorded in the organisation's inventory management system. This entry includes key data such as the Goods Received Number (GRN), item details, recipient, date and time of issue, and work order or task reference. The system ensures complete traceability of all components from receipt to installation or return, forming part of the overall maintenance record.
- This procedure reinforces component control throughout the maintenance process and ensures that only airworthy, traceable parts enter service. It is a key safeguard within the logistics function, protecting both the integrity of aircraft maintenance and the organisation's compliance with EASA Part 145 requirements.

Return of Defective Parts (2.19)

- Defective or removed parts must be returned to store for quarantine.
- Tagging and documentation must clearly state the condition and reason for removal.
- Returned components are assessed for repair, scrapping, or vendor return.
- When a component is removed from an aircraft or maintenance process due to failure, wear, expiry, or other reason, it must be immediately returned to the store by the maintenance personnel. The component must not be left unattended in the hangar or work area, as this could compromise traceability or result in the use of an unverified part.
- Each returned item must be tagged and documented using the organisation's standard procedures.
 - The tag must clearly identify the part as unserviceable, with accurate details of the part number, serial number (if applicable), date of removal, and the specific reason for withdrawal.
 - This includes referencing relevant findings such as fault codes, damage reports, or maintenance log entries. Supporting documentation, such as removal sheets or non-conformance reports, must accompany the tag to facilitate further evaluation.
- Once received by the store, the part is placed into the quarantine area, which is clearly segregated and secured to prevent accidental use.
 - The logistics team will then coordinate with the relevant departments to determine the appropriate disposition of the component—either routing it for

repair, vendor return, or scrapping in accordance with contractual, technical, and regulatory criteria.

- This procedure supports the traceability of unserviceable parts, safeguards against material misuse, and ensures the integrity of the maintenance supply chain. It also contributes to accurate stock records and forms part of the organisation's continuing airworthiness and quality assurance systems.

Additional Procedures - Tool Acceptance and Calibration (2.4 & 2.5)

- All tools and equipment undergo acceptance checks before use.
- Calibration must be controlled and traceable; expired or damaged tools are quarantined.
- Scrapping procedures ensure proper disposal and record-keeping.

Upon delivery or acquisition, **all tools and equipment must undergo acceptance checks** prior to being authorised for use. This includes visual inspections to verify physical condition and completeness, as well as documentation reviews to confirm conformity with specifications and suitability for aviation maintenance tasks. Special attention is given to precision tools, measuring devices, and test equipment which require calibration.

- All applicable tools must be entered into the **calibration control system**. This system tracks each tool by unique identification number, calibration interval, and next due date. Calibration must be conducted by approved internal or external laboratories that comply with recognised standards (e.g. ISO 17025). Calibration records must be complete, traceable, and readily accessible during audits or inspections.
- If a tool is found to be **damaged, out of calibration, or expired**, it must be clearly labelled and immediately withdrawn from service. These tools are transferred to a **quarantine area** until a final decision is made regarding recalibration, repair, or disposal. Under no circumstances may unserviceable tools be used for aircraft maintenance or certification tasks.
- Where tools are deemed beyond economical repair, the organisation follows formal **scrapping procedures**, which include physical destruction or deactivation, logging the item in the tool register, and retaining records for audit trail purposes.
- Together, these procedures ensure that only approved, serviceable, and calibrated tools are used in maintenance operations, supporting the airworthiness and regulatory compliance requirements of EASA Part 145

Control of Electrostatic Sensitive Devices (2.24.10)

- Designated ESDS areas must be maintained.
- Personnel must be trained in ESD handling and use proper protective equipment.
- the organisation must establish and maintain clearly identified ESDS-controlled areas within its storage and maintenance facilities.
 - These areas are equipped with grounded work surfaces, anti-static flooring, wrist straps, and other electrostatic protective devices as per applicable standards.
 - ESDS zones must be marked with appropriate signage and restricted to authorised personnel trained in ESD control measures.
- Personnel handling ESDS components must receive specific training in ESD awareness, prevention techniques, and correct use of protective equipment.
- This includes the use of grounding devices, handling materials only by approved methods (e.g. using anti-static bags or containers), and ensuring that tools and clothing do not introduce electrostatic risks into the work area.
- Components identified as ESDS must be stored in specialised packaging and clearly labelled to prevent inadvertent mishandling. Storage conditions must protect items from humidity, dust, and mechanical damage in addition to electrostatic threats.
- Compliance with the ESDS procedure is monitored through routine audits, inspections, and ongoing training assessments. Any non-compliance, such as unprotected handling or improper storage, is reported and addressed immediately.

5. Compliance and Traceability

- Every component and material must be traceable to its source.
- All processes are subject to internal audits and compliance monitoring.
- Logistics records form part of the technical records retained for each maintenance event.

Next Steps

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