

Entry Level Qualification for an EASA Compliant Stores Inspector

Presented by Sofema Aviation (SA) taking a deep dive into the roles, responsibilities and training of a Stores Inspector Competent in the acceptance of EASA & FAA Product & Material.

Introduction

The regulatory guidance and rules for a Stores Inspector will be found within Annex II (Part-145) and Annex I (Part-M) rules.

Incoming Inspection & Component Classification

Stores and logistics personnel act as the primary safety gatekeepers, verifying that all incoming components, materials, and hardware are sound and accompanied by valid certification prior to entering the supply system.

Part-M Section

M.A.608(c): "The organisation shall inspect, classify and appropriately segregate all incoming components, standard parts and materials."

GM1 M.A.501(b): "To ensure that components, standard parts and materials are in satisfactory condition, the persons referred to under M.A.801(b)(1), M.A.801(b)(2) or M.A.801(c) or the approved maintenance organisation should perform an incoming physical inspection.

- The incoming physical inspection should be performed before the component is installed on the aircraft."

Essential Part-145 Domain Section

145.A.42(a) Classification of components: "All components shall be classified into the following categories:

- (i) Components which are in a satisfactory condition, released on an EASA Form 1 or equivalent...
- (ii) Unserviceable components...
- (iii) Components categorised as unsalvageable...
- (iv) Standard parts...
- (v) Material both raw and consumable used in the course of maintenance..."

145.A.42(b)(i): "The organisation shall establish procedures for the acceptance of components, standard parts and materials for installation to ensure that components,

standard parts and materials are in satisfactory condition and meet the applicable requirements of point (a)."

AMC1 145.A.42(b)(i): "The procedures for the acceptance of components, standard parts and materials should have the objective of ensuring that the components, standard parts and materials are in satisfactory condition and meet the organisation's requirements.

These procedures should be based upon incoming inspections which include:

- (1) physical inspection of the components, standard parts and materials;
- (2) review of the accompanying documentation and data, which should be acceptable in accordance with 145.A.42(a)."

Component Segregation & Storage Facility Controls

Both domains enforce the physical separation of inventory to eliminate any possibility of mixed stock or inadvertent installation of unairworthy parts.

M.A.504(a): "Unserviceable and unsalvageable components shall be segregated from serviceable components, standards parts and materials."

M.A.605(c): "Secure storage facilities are provided for components, equipment, tools and material. Storage conditions shall ensure segregation of unserviceable components and material from all other components

- Storage conditions shall be in accordance with the manufacturers' instructions and access shall be restricted to authorised personnel."

145.A.25(d): "Secure storage facilities are provided for components, equipment, tools and material. Storage conditions ensure segregation of serviceable components and material from unserviceable aircraft components, material, equipment and tools.

- The conditions of storage are in accordance with the manufacturer's instructions to prevent deterioration and damage of stored items. Access to storage facilities is restricted to authorised personnel."

AMC 145.A.25(d): "1. Storage facilities for serviceable aircraft components should be clean, well-ventilated and maintained at a constant dry temperature to minimize the effects of condensation.

- Manufacturer's storage recommendations should be followed
- Storage racks should be strong enough to hold aircraft components and provide sufficient support for large aircraft components such that the component is not distorted during storage.

- All aircraft components, wherever practicable, should remain packaged in protective material to minimize damage and corrosion during storage."

Personnel Competence & Qualification

Logistics, warehouse, and goods receiving inspectors are integrated into the technical quality chain, meaning their competence must be continuously tracked, examined, and documented.

M.A.606(e): "The qualification of all personnel involved in maintenance and airworthiness reviews shall be demonstrated and recorded."

AMC M.A.606(e)(1): "Personnel involved in maintenance should be assessed for competence by 'on the job' evaluation and/or by examination relevant to their particular job role within the organisation before unsupervised work is permitted."

145.A.30(e): "The organisation must establish and control the competence of the personnel involved in any maintenance, airworthiness reviews, safety management and compliance monitoring in accordance with a procedure and to a standard agreed with the [competent authority]."

- In addition to the necessary expertise related to the job function, the competence of the personnel must include an understanding of the application of safety management principles..."

AMC1 145.A.30(e) Guidance: This standard explicitly demands that store and warehouse inspectors "are assessed for competency before unsupervised work commences and competency is controlled on a continuous basis."

- Competency should be assessed by the evaluation of : on-the-job performance and/or testing of knowledge by appropriately qualified personnel..."

Stores Inspection Staff Personal Development

Under EASA Part-145 and Part-M - The relevant requirements and regulatory references from the attached document are detailed below:

Safety and Human Factors Training Requirements

Personnel working in the stores department are directly recognized as impacting the basic maintenance service and are mandated to undergo specialized safety and human factors training.

Initial and Recurrent Safety Training: Under AMC4 145.A.30(e) Personnel requirements — SAFETY TRAINING (INCLUDING HUMAN FACTORS), it is specified that:

"Personnel involved in the delivery of the basic maintenance service of the organisation should receive both initial and recurrent safety training, appropriate for their responsibilities. This should include at least the following staff members: [...] Stores department staff, purchasing department staff;"

- **Syllabus and Recency:** This training must address the application of safety management principles, human factors, and human performance issues appropriate to their function (145.A.30(e)).
- Initial safety training must cover the full training syllabus specified in GM1 145.A.30(e) (which covers human error models, material handling, and defect identification), and recurrent safety training must be completed within each 2-year period (AMC4 145.A.30(e)).

Competency Assessment and Professional Records

- **Competency Control:** Pursuant to 145.A.30(e), the organization must establish and control the competency of all personnel involved in any maintenance activities.
 - According to AMC1 145.A.30(e), this requires that staff members *"are assessed for competency before unsupervised work commences and competency is controlled on a continuous basis"*.
- **Domain Recognition:** In GM3 145.A.30(e) under the *Aviation Maintenance personnel experience credential* template used to formally record professional history and qualifications, the "Store department" is explicitly listed as a qualified domain of employment.

Execution of Incoming Physical Inspections and Component Acceptance

Stores inspection staff are responsible for executing the organization's component acceptance procedures to prevent the installation of non-compliant items.

- **Establishing Procedures:** Under 145.A.42(b)(i):

"The organisation shall establish procedures for the acceptance of components, standard parts and materials for installation to ensure that components, standard parts and materials are in satisfactory condition and meet the applicable requirements of point (a)."

Incoming Inspection Elements: According to AMC1 145.A.42(b)(i), these procedures must be carried out by staff based upon incoming inspections that include:

"(1) physical inspection of the components, standard parts and materials; (2) review of the accompanying documentation and data, which should be acceptable in accordance with 145.A.42(a)."

Typical Check Items: Under GM1 145.A.42(b)(i) INCOMING PHYSICAL INSPECTION, the specific items that stores inspection staff must check are itemized:

- (1) verify the general condition of the components and their packaging in relation to damages that could affect their integrity;
- (2) verify that the shelf life of the component has not expired;
- (3) verify that items are received in the appropriate package in respect of the type of the component: e.g. correct ATA 300 or electrostatic sensitive devices packaging, when necessary;
- (4) verify that the component has all plugs and caps appropriately installed to prevent damage or internal contamination."

Part-M Requirements: Under the parallel Part-M standard for smaller maintenance setups (**M.A.608(c)**), the requirement states:

"The organisation shall inspect, classify and appropriately segregate all incoming components, standard parts and materials."

Integration with Exposition and Working Manuals

The precise steps and roles assigned to stores staff must be explicitly mapped inside the organization's approved documentation.

- **Part-145 MOE Content:** Under AMC1 145.A.70(a), the Maintenance Organisation Exposition (MOE) layout must detail how stores staff execute functions within "PART 2 MAINTENANCE PROCEDURES", specifically covering:
 - *2.2 Acceptance/inspection of aircraft components and material, and installation*
 - *2.3 Storage, tagging and delivery of components and material to maintenance*
 - *2.19 Return of defective aircraft components to store*
- **Part-M MOM Content:** Similarly, for Subpart F organizations, Appendix IV to AMC M.A.604 specifies that the Maintenance Organisation Manual (MOM) must contain working procedures under "Part D — Working Procedures" detailing:
 - *Procedures used for incoming inspection and storage of parts, tools and materials*
 - *Procedures for accepting components from stores including eligibility check*
 - *Procedures for returning unserviceable components to stores*

Core Entry-Level Competency Attributes

To effectively operate within an EASA Part 145 stores environment, an inspector must meet several entry-level baseline criteria:

- **Regulatory Awareness:** Candidates must possess a strong foundational knowledge of Part-M, Part-ML, Part-145, and other relevant aviation regulations.
 - They must also understand the applicable parts of the organization's Maintenance Organisation Exposition (MOE) and standard procedures, along with organizational capabilities and limitations.
- **Technical Data Proficiency:** An inspector must be capable of using corporate information systems and reading, interpreting, and applying technical maintenance data, work orders, and work cards.
- **Safety & Airworthiness Knowledge:** Personnel must thoroughly understand the baseline conditions required to ensure the continuing airworthiness of aircraft and components.
 - This includes recognizing safety risks in the immediate work environment and having awareness of Critical Design Configuration Control Limitations (CDCCL) where applicable.
- **Operational & Human Factors Skills:** Basic prerequisites include adequate literacy and communication skills, practical knowledge of logistics processes, and a clear understanding of human performance, human limitations, and professional integrity. Inspectors must also be fully aware of their specific authorizations and limitations.
- **Specialized Technical Knowledge Requirements**
 - Beyond general logistics skills, a compliant Stores Inspector must have an explicit, qualified understanding of specialized areas through formal training and competence management:

Dangerous Goods (DG) Awareness

- **Regulatory Responsibility:** Inspectors must be legally aware of and comply with the International Civil Aviation Organisation (ICAO) Technical Instructions and the International Air Transport Association (IATA) Dangerous Goods Regulations. Recurrent training in this field is strictly mandated every 24.
- **Hazard & Label Recognition:** Entry-level proficiency requires the ability to identify diamond-shaped primary hazard labels across the nine distinct classes of dangerous goods.

- **Segregation Rules:** Staff must understand chemical compatibility and loading segregation tables to prevent dangerous interactions (such as storing Class 8 corrosives alongside Division 4.3 water-reactive solids) in the event of a leakage.

Electrostatic Discharge Sensitive (ESDS) Controls

- **Component Sensitivity:** Because sensitive electronic components can suffer fatal micro-fracture or circuitry damage from static events as low as 5 to 10 volts—well below the 3,000-volt threshold a human can feel—inspectors must treat ESDS items with extreme care.
- **Workstation Protection:** Inspectors must know how to operate ESDS protective packaging and verify the wristband system using dedicated wristband checkers. They must also ensure that the ESD workstation (EPA) surface undergoes periodic resistance verification checks on a monthly basis.

EASA - FAA Certification Standards & Documentation

- **Primary Release Documents:** An entry-level inspector must know that no component can be transferred to a bonded store or installed on an aircraft unless it is in a satisfactory condition and appropriately released on an EASA Form 1 or an officially recognized equivalent.
- **FAA Bilateral Statements:** Under the EASA-FAA Bilateral BASA Maintenance Annex Guidance (MAG), components released via an FAA Form 8130-3 by a US-based repair station must feature a specific, approved bilateral statement in the remarks section to certify EASA Part 145 alignment.
- **Parts Manufacturer Approval (PMA) Verification:** Inspectors must inspect FAA-PMA parts to ensure they are not "critical components" and confirm that mandatory design data or licensing agreement statements are explicitly written into Block 13 of the 8130-3 form.
- **Standard and Consumable Tracking:** Personnel must distinguish components requiring full release tags from standard parts (e.g., fasteners complying with NAS, AN, or SAE metrics) and raw/consumable materials, which do not receive an EASA Form 1 but require accompanying documentation detailing manufacturing/supplier sources and statements of conformity.

Specialized Aviation Storage Conditions

- **Environmental Controls:** Secure storage facilities must be kept clean, well-ventilated, and strictly maintained at a constant dry temperature to minimize condensation. Staff must regularly log atmospheric conditions using a wall-type hygrometer.

- **Stock Management Systems:** Inspectors must enforce a strict First In - First Out (FIFO) stock rotation system to ensure older materials are utilized before new batches.
- **Shelf-Life Management:** Inspectors are responsible for identifying shelf-life restrictions upon receipt and entering the limits into the computerized inventory system. Items exceeding these dates must be pulled from stock immediately and transferred to a physically or procedurally segregated quarantine store.

ATA 300 Packaging Requirements

- **Transit Case Specifications:** Inspectors must evaluate reusable shipping containers against the ATA 300 specification to confirm they are weather-resistant and properly configured to protect materials during transit and storage.
- **Physical Component Integrity:** This requires general knowledge of compliant structural criteria—such as minimum panel thickness, tongue-and-groove valance extrusions, cold-rolled steel hardware, and ANSI/ASTM-tested interior cushioning foam—to verify that packaged aircraft items will not distort or deteriorate during handling.