UK Civil Aviation Authority

Part 145 Guidance for developing a receiving & inspection system for aircraft parts and materials

CAP 3037

Published by the Civil Aviation Authority, 2024

Civil Aviation Authority
Aviation House
Beehive Ring Road
Crawley
West Sussex
RH6 0YR

First published: October 2024

Enquiries regarding the content of this publication should be addressed to: airworthiness@caa.co.uk

The latest version of this document is available in electronic format at: www.caa.co.uk/CAP3037

Contents

Abbreviations

AD	Airworthiness Directive
AltMoC	Alternative Means of Compliance
AMC	Acceptable Means of Compliance
BASA	Bi-lateral Aviation Safety Agreement
CAA	Civil Aviation Authority
CAP	Civil Aviation Publication
CoC	Certificate of Conformance
DfT	Department of Transport
DG	Dangergous Goods (UK descriptor)
EASA	European Aviation Safety Agency
ELA	European Light Aircraft
FAA	Federal Avaition Administration
GM	Guidance Material
HAZMAT	Hazardous Materials (FAA descriptor) - See DG above
ICAO	International Civil Aviation Organisation
ILAC	International Laboratory Accrediation Co-operation
IPA	Implementation Procedure for Airworthiness
IPC	Illustrated Parts Catalogue
JAA	Joint Aviation Authority
MOE	Maintenance Organistion Exposition
NPH	Nominated Post Holder
PAH	Production Approval Holder
PDA	Parts design Approval
PMA	Parts Manufactuer Approval
POA	Production Organisation Approval
SB	Service Bulletin
SL	Service Letter
SRM	Structural Repair Manual
SUP	Suspect Un-approved Parts
TCDS	Type Certificate Data Sheet
TCH	Type Certificate Holder
UKAS	United Kingdom Acredditation Service
UKPA	United Kingdom Parts Approval
UKTSO	UK Technical Standards Order

General

Regulation, policy and guidance to support Part 145 approval holders in developing a parts receiving system.

Part 145 Maintenance Organisation Approval holders provide maintenance services in accordance with Assimilated Regulation (EU) No 1321/2014

The CAA has identified a concern that unairworthy parts & components, as well as materials, are being installed on type-certificated products. Therefore, the CAA is recommending that parts installers, maintainers, manufacturers, and suppliers establish an enhanced receiving inspection system to help eliminate the safety risk posed by such unairworthy components, parts, or materials.This provides guidance and information for developing a receiving inspection system to help prevent the introduction of unairworthy parts/components into stores systems. It includes details and links to regulation, policy and guidance and will provide approval holders resources to ensure they remain compliant with not only the regulations but also UK Civil Aviation Authority (CAA) policy.

Alerts and notifications

Tailored news, notifications, and alerts from the CAA, including alerts issue in the last 12 months are available through SkyWise.

Overview of definitions

Subject	Source
Parts and appliances.	UK Regulation (EU) 2018/1139, Art. 3(4)
Product	UK Regulation (EU) 2018/1139, Art. 3(3)
Complex motor-powered aircraft.	UK Regulation (EU) 2018/1139,Chapter VI Final Provisions, Art 140(2)(b)
United Kingdom Technical Standard Order (UKTSO).	UK Regulation (EU) 748/2012, Art. 1(2)(g).
United Kingdom Parts Approval (UKPA).	UK Regulation (EU) 748/2012, Art. 1(2)(h).
European Light Aircraft (ELA 1 and ELA 2).	UK Regulation (EU) 748/2012, Art. 1(2)(i&j).
Components.	UK Regulation (EU) 1321/2014, Art. 2(c).
Standard parts.	M.A.501(d), AMC1 M.A.501(a)(4), AMC2 M.A.501(a)(4)
Materials (raw and consumables).	AMC M.A.501(a)(5), items b and c.

Policy

Maintenance Organisation Exposition (MOE) should be constructed using the Part 145 MOE Guidance (CAP 2375) and the associated UK Part 145 Maintenance Organisation Approval Compliance Checklist (SRG1775) (where required).

Part 145 Applicability of AMC2 145.A.50(d) and Certification of Used Aircraft Components clarifies the use of AMC2 145.A.50(d) so that the CAA, installers and operators have confidence that used aircraft components have been satisfactorily removed from the aircraft, inspected, assessed and tested, as necessary, before being certified and made eligible for installation on an aircraft registered in the UK.

This policy provides guidance and information for developing a receiving inspection system and for incorporation into an organisations existing receiving inspection system to help prevent the introduction of unairworthy parts / components into stores.

Regulation

Assimilated Regulation (EU) No. 1321/2014 , provides guidance in the following areas:

Part 145.A.42 – Components
Part 145.A.50(d) – Certification of maintenance
Part 145.A.60(a) – Occurrence reporting.

Developing the receiving inspection system (145.A.42)

The receiving inspection system should be accurately defined in Section 2.2.3 of the Maintenance Organisations Exposition (MOE) and is intended to help prevent the entry of unairworthy or suspect unapproved parts into stores and therefore preclude their subsequent installation. The procedure describing a receiving inspection system should be detailed to the extent that it meets all its objectives and expectations to ensure identification and traceability. The appropriate post holder should consider the scope of their organisations operations and complexity for developing and enhancing their receiving inspection system. The system should reflect the privileges and limitations of the organisation and as per Part 145.A.85, must notify the Civil Aviation Authority (CAA) of any proposal to make changes to the organisation. The receiving inspection areas should be secure from unauthorised access and controlled with access only by essential staff. The area should hold secure cages, different segregated areas, good in area, as well as quarantine (serviceable / unserviceable) etc. Supplier evaluation processes & procedures should be as detailed in GM3 145.A.42(b)(i). Section 2.1.2 must detail the supplier evaluation process and action taken bt the Part 145 to ensure correct parts and materials are being used. Use of Suppliers holding EN/AS9120, ASA-100, EASO 2012 and FAA AC 00-56 does not exclude organisations from their obligations under 145.A.42.

The maintenance organsition exposition Section 2.1.2 – 2.3.2 requires the organisation to detail in the specific sections how it achieves this.

The receiving inspection system should have defined physical inspection/verification process as detailed in GM1 M.A.501(b).

Nominated Persons (145.A.30)

The responsible post holders should be identified in the maintenance organisation exposition (MOE), along with the scope of their approval for ensuring that all functions of the receiving and inspection written procedures and established standards & practices are implemented and updated to remain compliant and follow best practice. These will typically be declared in the organisations approved MOE (Section 1.3).

Internal Compliance Auditing (145.A.61, 145.A.65 & 145.A.200)

Persons performing the compliance audit as part of the oversight program must be detailed in the organisation MOE (section 1.4.2.1 & 3.12). The objective of the internal compliance audit is to evaluate the effectiveness of the receiving inspection system by ensuring that it continues to follow the organisation's process & procedures and meets the regulatory requirements as per 145.A.42. Auditing should also take into account regular review of the suppliers, sub-contracted or contracted organisations to verify ongoing compliance.

Training (145.A.61, 145.A.65 & 145.A.200)

Training of all receiving inspection personnel must ensure that personnel have a thorough understanding of the receiving inspection system. The training syllabus should include, as a minimum, recognition in component identification, determining the current status of the component, conformance determination of the component, regulatory requirements, inspection procedures, handling, storage, ordering procedures, bench or functional testing, and recordkeeping requirements. All training must be documented, and the personnel training records maintained as per Part 145.A.55. For complex items, like engines APUs etc stores personnel may seek assistance from specialists from the CAMO organisation to assist with this. Recurrent training as required by Part 145.A.35(c) should be implemented for familiarisation of practices and any changes to procedures, regulations, or policies. (This information should be detailed in section 3.9 of the MOE).

Maintenance Data (145.A.45)

The organisation must ensure the latest, applicable, and adequate maintenance data is available for making proper determinations. A procedure should be established in the MOE (section 2.8) to ensure that maintenance data is current in accordance with the regulations or manufacturer's recommendations. This includes, but is not limited to, data such as:

- Type Certificate Data Sheets (TCDS).
- Airworthiness Directives (AD).
- Industry specifications.
- Illustrated parts lists or catalogs.
- Maintenance and/or overhaul manuals.
- Structural Repair Manuals (SRM).
- Service Bulletins (SB)/Service Letters (SL), or additional appropriate manufacturer's technical information.
- Parts markings.
- Engineering drawings.
- Maintenance records/return to service.
- Other applicable data for making an airworthiness determination, etc.
- UK aviation regulations.
- CAA guidance.

Approved design and approved design changes

Almost all components need a UK design approval. This approval needs to be issued through certification in accordance with UK Part-21 requirements or through validation under the terms of a bilateral agreement signed by the UK CAA (BASA). In these agreements the principle of 'reciprocal acceptance' applies. The principle of ‘mutual recognition’ does not apply. It means that the parties of the signed agreement may continue to issue their own approvals on the basis of the approval issued by the other party. This principle does not apply to minor modifications, designs of non-critical replacement parts and repair designs. In these cases a design approval from one party is automatically valid for the other party.

Engines and propellers must have a type-certificate. The design approval for associated parts and appliances can be obtained in several ways, being:

a. by means of the type-certificate of the product (aircraft, engine or propeller) in which the component is installed (used as 'parts').

b. by an approval of a major or minor change to the type-certificate, applied for by the type-certificate holder (used as 'parts').

c. by an approval of a major change to the type-certificate, applied for by an organisation or a person, other than the type-certificate holder. The change is approved by means of a Supplemental Type Certificate (STC) (used as 'UKPA'- and 'PMA parts').

d. by an approval of a minor change to the type-certificate, applied for by an organisation or a person, other than the type-certificate holder (used as 'UKPA'- and 'PMA parts').

e. by an UKTSO authorisation (used as 'appliances').

Identification specifications of UK approved minor and major changes to a type-certificate, applied for by others than the holder of the type-certificate (c. and d.), shall contain the letters UKPA (United Kingdom Parts Approval) (ref. 21.A.109 and 21.A.118A). Current TC's, STC's and UKTSO authorisations can be found on the UK Technical Standard Order Authorisations | Civil Aviation Authority (caa.co.uk) website. The airworthiness of each approved design must be maintained by the holder of the approved design (design approval holder).

New components

The use of new components is permitted when they are produced in compliance with the drawings and design specifications of the approved design by:

- an organisation complying to the requirements of UK Part-21, Subpart F or Subpart G, or,
- an organisation under the terms of bilateral agreement (BASA) signed by the UK CAA (particularly with the EU (production only) USA, Canada and Brazil) and complying to the applicable requirements in the country of residence of that organisation.
- guidance for new/unused parts can be found in AMC2 145.A.50(d)(2.5)

Used components

The use of used components is permitted when they are maintained in accordance with the continued airworthiness instructions applicable to the approved design and with UK Part-M requirements by:

- a UK Part-145 approved organisation for components installed in complex motor-powered aircraft or aircraft used for commercial air transport (ref. Art. 4 UK Regulation (EU) 1321/2014), or,
- a UK Part-145 or an UK Part CAO approved organisation for components installed in other aircraft (ref. M.A.502).
- guidance for parts removed from serviceable aircraft can be found in AMC2 145.A.50(d)(2.6)
- guidance for parts removed from aircraft withdrawn from service can be found in AMC2 145.A.50(d)(2.7)
- guidance for parts removed from aircraft by organisations without appropriate Part 145 approval can be found in AMC2 145.A.50(d)(2.8)
- guidance for parts removed from aircraft involved in an accident or incident can be found in AMC2 145.A.50(d)(2.9)

Further guidance can be found here: Guidance on acceptance of components | Civil Aviation Authority (caa.co.uk).

Note: (Extensive 'breaking' of aircraft (parts removal) is considered a base maintenance activity by the UK CAA and any organisation must hold the appropriate Part 145 approval with supporting processes and procedures agreed with the CAA).

Replacement (PMA) parts

Provided it is to be applied for a UK approved design, the use of:

FAA PMA (Parts Manufacturer Approval)-parts is permitted in accordance with the technical implementation procedures for airworthiness and environmental certification between the UK and FAA (CAP1780IPA: Implementation Procedures for Airworthiness (IPA) between the Government of the United States of America and the Government of the United Kingdom of Great Britain and Northern Ireland for the promotion of aviation safety | Civil Aviation Authority). The required statement does not need to be exactly the same as prescribed in the IPA. It is sufficient when the statement makes clear that one of the three conditions in the IPA applies. Use of FAA PMA parts is also acceptable when defined in instructions from the design approval holder, such as the IPC or a specific statement. PMA parts, to which the aforementioned conditions do not apply, need explicit UK authorisation by means of an STC, prior to their use (ref. section 7.6 of CAP1780IPA: Implementation Procedures for Airworthiness (IPA) between the Government of the United States of America and the Government of the United Kingdom of Great Britain and Northern Ireland for the promotion of aviation safety | Civil Aviation Authority).

TCCA PDA (Parts Design Approval) – See section 2.9.1 CAP1783TIP: Technical Implementation Procedures for Airworthiness and Environmental Certification under the Working Arrangement (Canada-UK) | Civil Aviation Authority (caa.co.uk).

ANAC Reciprocal acceptance – See C.5.1 CAP2082TIP: Technical Implementation Procedure (TIP) for Airworthiness and Environmental Certification Between the Agência Nacional de Aviação Civil of the Federative Republic of Brazil and the Civil Aviation Authority of the United Kingdom of Great Britain and Northern Ireland | Civil Aviation Authority (caa.co.uk).

Use of UKPA-parts is always permitted, when properly identified and only for the intended use as part of the approved modification for which it is designed.

Standard parts and materials

Standard parts are defined in AMC1 M.A.501(a)(4) and materials are defined in AMC M.A.501(a)(5) and may be used in accordance with UK Part-M requirements. Application is permitted in accordance with instructions, appertaining to the applicable approved design data of an aircraft or a component (ref. M.A.501 (d and e).

UK CAA Form 1 (and equivalent certificates)

In order to demonstrate that a component has been produced or maintained in accordance with the approved design, it needs to be provided with the required release certificate, issued by an entity that has the applicable privilege. For UK aircraft this is the Authorised Release Certificate (UK CAA Form 1) or an equivalent release certificate under the terms of any bilateral agreement signed by the UK CAA.

The UK CAA Form 1 (CAA Form 1-21 Part 21 and CAA Form 1-MF/CAO/145 Part MF/CAO/145) shall contain the information as indicated in Appendix I of UK Part-21 for new components and in Appendix II of UK Part-M for used components. The certificate must reference the approval number of the organisation for the production or the maintenance of the component. The equivalent foreign release certificates shall contain the same information. In the case of used parts these certificates shall additionally contain in Block 12, a statement that the maintenance has been performed in accordance with applicable UK regulations by an UK Part-145 approved maintenance organisation with reference to the UK approval number. Typically, a dual release applies, where in Block 14a the box "other regulation" must be ticked, see CAP1780MAG: Maintenance Agreement Guidance (USA / UK) | Civil Aviation Authority (caa.co.uk)).

Also, the formerly used JAA Form One is equivalent to the UK Form 1 in accordance with AMC1 M.A.501(a), or AMC1 145.A.42(a)(i), provided not being issued later than:

- September 28, 2005, for new components.
- November 28, 2004, for used components in complex motor-powered aircraft or in aircraft used for commercial air transport.
- September 28, 2008, for used components in other aircraft.

Further guidance can be found here: UK component acceptability tables

Certificate of Conformity (CoC) or equivalent document

When an approved organisation subcontracts tasks to another organisation under its own control and within the scope of its approval, the subcontracted organisation may release the work with a Certificate of Conformity (CoC). As the subcontracted organisation is working under the responsibility, the approval and the quality system of the approved organisation, the subcontracted organisation has to be considered as an extension of the approved organisation. Consequently, a CoC has to be perceived as an internal document, limited for use between both organisations only.

Also, standard parts and materials must be delivered with a CoC or an equivalent document, as evidence that they have been produced in accordance with the applicable design specifications. The document shall clearly refer to the applicable design specification. It shall also contain details about the origin (manufacturer, supplier and if present, batch number) and if relevant, information on storing conditions, shelf lives and life limitations (ref. AMC1 M.A.501(a)(4) and AMC M.A.501(a)(5)).

Additional documentation

For used components that are service- or life limited the UK CAA Form 1 or equivalent certificate shall be accompanied by an updated maintenance status with reference in Block 12 of the certificate. Except for configuration data (modifications, repairs, AD's and SB's) the status shall contain information on the utilisation, particularly accumulated service life in relation to life limits (ref. Appendix II of UK Part-M, item 5).

Exemption European Light Aircraft (ELA 1 and ELA 2)

For these categories of UK aircraft certain parts and appliances do not need to be accompanied by an Authorised Release Certificate in accordance with Part-21 (ref. 21.A.307).

Components without a release document

In certain conditions components, not being accompanied by an Authorised Release Certificate, may be issued with an UK CAA Form 1 by an appropriately rated maintenance organisation in accordance with UK Part M/Subpart F or UK Part 145 (ref. M.A.613(a), AMC M.A.613(a), 145.A.50(d) and AMC2 145.A.50(d)).

Aircraft-on-Ground

If an aircraft is in an AOG situation due to the non-availability of a component with the appropriate release certificate, it is allowed to temporarily install a component without the appropriate document, but with an alternative suitable release document, in accordance with conditions specified in UK Part 145 (ref. 145.A.50(f)).

Note: A CoC is not a suitable alternative.

Identification

Each component shall be marked in accordance with UK Part-21 Subpart Q or in accordance with the terms of bilateral agreements signed by the European Community. FAA-PMA parts shall be provided with the following markings:

- Use of the letters FAA-PMA.
- Name or trademark of the PMA holder.
- Part number (shall be different from the specific TC holder's part number. Where it is the same, it is sufficient when a prefix or suffix is added to the PMA part number to distinguish it from the TC holder's part number).

Measurement/Test Equipment (145.A.40)

Precision measurement devices, test equipment, and gauges used to verify conformance to the applicable regulations of Part 145.A.40, industry standards, and specifications must be calibrated in accordance with UK recognised standard. In the UK this is UKAS - The UK Accreditation Body. UKAS are a member of ILAC International Laboratory Accreditation.

Calibration records should be maintained, showing established intervals for calibration for each precision measuring device and procedures for taking actions on deficiencies. This should include having a recall system to prevent inadvertent use of uncalibrated equipment. (Section 2.4 and 2.5 of the MOE).

Written Receiving Inspection Procedures (145.A.65 & 145.A.200).

Developing a comprehensive receiving inspection system can be a difficult task, given the numerous forms and the complexities of the various manufacturers', repair facilities', and parts suppliers' (distributors') paperwork involved, along with the end user/customer requirements. Written procedures for the receiving and inspection of incoming articles should be developed in the MOE, according to the individual organisation's complexity.

As an example, the written procedures could include the following items:

- Establish the minimum training requirements for any receiving inspection personnel. The training syllabus should be based on the complexity of the organisation's needs.
- The purchasing department should ensure its documents to their approved supply chain are kept up to date and any instructions clear, so as to create a smoother flow of parts/components into the stores system.
- A checklist (or electronic tracking system) should be created for receiving inspectors that would clearly identify the origin and/or traceability "path" of the parts/components. This would help reduce confusion and aid accountability within the receiving inspection department.
- A procedure to identify whether the parts/components are obtained from an approved supplier.
- A goods inward procedure should be developed with detailed instructions explaining how to perform comprehensive visual inspections of received items, including checks for obvious physical damage, defects, and any state of preservation, and that appropriate quantities have been received. This should include identification of any critical parts and how they are managed. If an organisation uses a 3rd party or logistics company for this then the Part 145 retains overall responsibility

- A means to verify that all part no, model no, serial numbers, etc.(including those that do not have a physical marking), as appropriate, match the accompanying documentation, such as packing slips, invoices, certificates of conformance, work orders, maintenance release tags, or purchase orders. Where parts do not have a physical marking then the organisation must have a procedure for incoming acceptance.
- To ensure items are remain free from contamination or damage, and verification that all appropriate plugs, caps, or safety devices are installed as required by the manufacturer and that the shipping container or packing is appropriate for items received or to be shipped
- If applicable, a method should be created to identify dangerous goods that are flammable, toxic, or volatile materials received to ensure that they are packaged and stored in a safe manner, either per manufacturer's recommendations or as specified by regulatory requirements. Segregation procedures for parts & components should be established for these types of materials and for any other items for which segregation is appropriate.
- Where applicable, a method should be included to examine materials subject to any damage from electrostatic discharge (ESD). Materials should be packaged, handled, and protected in accordance with requirements for handling ESDs. Training for ESD recognition, handling, and processing should be accomplished and records maintained in the receiving inspection training file or the individual employee's training file. In addition, procedures should be defined, prescribing periodic checks/inspections on ESD mats and wrist straps in accordance with the manufacturer's recommendations.
- Procedures explaining how to segregate and identify serviceable parts from unserviceable parts and maintaining documentation for traceability. The storage area for serviceable aircraft parts should be periodically checked (audited) for overall effectiveness of storage and identification methods of parts in inventory. The serviceable parts area should be controlled to prevent unintentional or unauthorised stocking of parts, materials, or components that have not been received through the system. Identified unserviceable (questionable) parts should be properly secured in a segregated area (quarantine unserviceable), pending proper disposal of the part 145.A.42(c).
- Develop a procedure to control bulk shipments of identical parts to ensure traceability to the producer of the item(s) (i.e., Production Approval Holder (PAH), standard parts, or raw material(s), etc.). Whenever possible, original packaging should remain with the parts or materials for identification purposes. This would be used for identifying the producer and lot or batch number as applicable, until installed or sold.
- Develop a procedure to identify and properly store materials with a specified shelf life, life-limited articles, and environmentally sensitive/temperature-sensitive

materials such as epoxy resins, prepreg composite materials, or sealants as an example. This procedure should ensure that any outdated or life-expired parts or materials are not inadvertently installed. Procedures should be in place to track the expiration date of and to explain how to segregate or dispose of them once their shelf life has expired. Equipment such as fridges/freezers are not expected to be calibrated however, organisations may wish to perform or keep a register of regular temp recording to ensure that the storage temperature is within the acceptable parameters for the products being stored.

- Establish a means to verify whether any AD's are applicable to any of the components or parts received.
- When inspection stamps are used, a control system should be established to control their issuance and use.
- PMA Parts - organisation should define the criteria for the use and acceptance of PMA Parts in line with the particular OEM / TCH recommendations.

Dangerous Goods Program (DG)

Known as Hazardous Materials (HAZMAT) in the U.S.

Dangerous goods can be found in many aircraft parts and in substances used within the aviation industry. Because there have been instances in the past when companies have shipped DG's in violation of the regulations, the regulations require DG training for certain employees. A company's DG / HAZMAT program should address the company's needs for training, as well as its internal procedures for handling and transporting DG. The principal applicable regulations are found in ICAO Doc 9284-AN/905, which prescribe requirements applicable to aircraft operators, maintenance providers, distributors, and anyone else who may ship DG. These regulations address a wide range of topics, such as developing a training program, properly identifying DG, packaging DG, shipping DG, and air carrier acceptance of DG. At a minimum, any DG employer should have a program that covers proper packaging, marking, labeling, classification, description, and documentation of shipments of DG, as well as compliance with the appropriate regulations that apply to the DG related functions undertaken at the company. If a third-party organisation is used this must be detailed in the procedure and the organisations must be evaluated on the supplier list.

Component / Material Documentation & Identification

An organisations procedure should clearly state and/or illustrate the documentation or other means of identification that would be acceptable for receiving articles from different types of vendors. The following are possible sources, but not the only sources, for determining airworthiness:

- Appropriate release documentation, from the POA or the original manufacturer.
- Parts markings such as Parts Manufacturer Approval (PMA) in accordance with 21.A.307. This may include examples such as: UK Technical Standard Order (TSO), data plates, serial numbers, part numbers, manufacturing production numbers, etc.

Maintenance release document(s) that meet 145.A.50, (see Guidance on acceptance of components | Civil Aviation Authority (caa.co.uk)), signed by an appropriately certificated person, qualified for the relevant function, that signifies the item was approved for return to service after maintenance, preventative maintenance, rebuilding, or alteration. Records could also reflect the removal of articles from a type-certificated product.

CAA Form 1-21 (Part 21) Authorised Release Certificate, Airworthiness Approval Tag, is used for export approval, conformity determination from the POA & CAA Form 1-MF/CAO/145 (Part 145/ML) Authorised Release Certificate is used for approval of return to service after maintenance or alteration by an appropriately rated Part 145 organisation. Other part or material certification that confirms that the standard parts conform to established industry or U.K guidance (section 2.2.2 of the MOE).

Part Evaluation

The evaluation of parts should include a review of any usage history supplied with the part at the time of purchase, which may include accumulated time/cycles, remaining time/cycles, modifications, and/or repairs. (This information should be provided by the appropriate CAMO). Part verification could also include part number, serial number, symbols, manufacturing marks, identification stamps, etchings, casting codes, barcodes, dates, or lot numbers (see 21.A.307). Any item indicators such as manufacturing numbers unique to a particular manufacturer could assist in providing traceability to a POA. The manufacturer’s system for identification during the manufacturing process is not always available to the end user. However, such information is often obtained by contacting the manufacturer.

Unsalvageable Components/Parts

Organisations must establish written procedures for disposing of scrap products and materials. When appropriate, the proper and thorough mutilation of products and articles will ensure they are unusable for their original application and render them incapable of being reworked or camouflaged to provide the appearance of being serviceable. See 145.A.42; GM1 145.A.42(c)(i) and M.A.501 (including associated AMC &GM). (MOE section 2.4 for scrapping of parts and 2.34 for scrapping of critical parts).

Unserviceable Parts

Parts that may have exceeded approved repair limits, time, cycle limits, etc. If unserviceable parts are to be retained for possible future use, procedures should specify that they are to be quarantined from serviceable parts. It is recommended that all documentation remain with these parts for possible later return to service, which could be because new approved repair procedures were later developed, or the manufacturer extended time life extensions.

Quarantine Procedures

At times, items received may lack appropriate documentation or other supporting data necessary to show that the regulatory requirements were met. These requirements would include findings to show that the part was produced and/or maintained properly. Quarantining the parts of questionable nature from serviceable parts, until a confirmation can be made of their status (providence) and prevent them from subsequently being installed incorrectly.

Note:. Users may choose to modify the checklists (Appendix A) and associated guidance is provided to assist organisations in their specific needs.

SUSPECTED UNAPPROVED PARTS (SUP)

To prevent the use of unapproved / bogus parts and SUP's, approved maintenance organisations are advised to include the ideas of FAA AC 21-29C CHG 1 in their maintenance organisation exposition (MOE) and to check the UK CAA Website Safety directives weekly.

Reporting

Discovery of unapproved parts and SUP's needs to be reported in accordance with Part-21, Part-M, Part-145 requirements, whichever apply. Organisations should use their own reporting tools (ensuring ECCAIRS 5x compliance), except in cases when regulations require a certain format. Important details for reporting are:

- name, part number and serial number of the concerning component.
- name, part number and serial number of the next higher assy.
- name and specifications of concerning standard parts or materials.
- aircraft type and model, in which the component was found.
- name of manufacturer and/or supplier.
- description of the observation.

Maintenance organisations, also approved in accordance with 14 CFR Part 145 as a FAA Repair Station, shall also inform the FAA in accordance with the CAP1780MAG: Maintenance Agreement Guidance (USA / UK) | Civil Aviation Authority (caa.co.uk). Organisations must have developed a procedure in their FAA supplement of their MOE. See 145.A.60 for further guidance.

UK fabrication of parts guidance can be found here: Fabrication of parts (145.A.42)

NOTE: fabricated parts cannot be issued a CAA Form 1

SUP Procedures

Organisations should incorporate SUPs identification, reporting, and disposal into procedures in their receiving inspection system. Procedures should also include a system for reviewing inventory and suppliers when SUP reports have been issued by the CAA.

SUP Training

Organisations should develop and provide training to employees, relevant to their job role/duties, on the detection of SUPs and on the organisation’s approved procedures for identifying, reporting, and disposing of a SUP. This could form part of continuation training as defined in AMC1 145.A.35(d)

Appendix A. Receiving Inspection Checklist

RECEIVING INSPECTION SYSTEM CHECKLIST

RESPONSIBLE PERSON:

(Choose option from dropdown)

1. Choose an item. Receiving inspection personnel listed on company roster by position and name?
2. Choose an item. Inspection functions authorized for named individual identified?
3. Choose an item. Individual trained to perform authorized functions, by name?
4. Choose an item. Individual issued a letter or stamp for functions authorised to perform?

TRAINING

(Choose option from dropdown)

1. Choose an item. Individuals training records documented?
2. Choose an item. Training records on file and subject(s) covered?
3. Choose an item. Part/material identification procedures?
4. Choose an item. Procedures for identifying current status of part/material?
5. Choose an item. Procedures for making a quality determination of the part/material?
6. Choose an item. Understand regulatory compliance requirements?
7. Choose an item. Inspection procedures for individual’s intended function?
8. Choose an item. Proper handling procedures?
9. Choose an item. Proper storage procedures?
10. Choose an item. Ordering procedures?
11. Choose an item. Functional testing procedures?
12. Choose an item. Inspection procedures (i.e., visual, bench check, etc.) for airworthiness compliance?
13. Choose an item. Recordkeeping requirements?
14. Choose an item. Use of inspection stamps and control procedures?
15. Choose an item. Dangerous Goods (HAZMAT) procedures?

TECHNICAL DATA

(Choose option from dropdown)

1. Choose an item. Is the technical data current?
2. Choose an item. Is the technical data applicable?
3. Choose an item. Is the technical data adequate?
4. Choose an item. Production Approval Holder (PAH) design data?
5. Choose an item. Type Certificate Data Sheets (TCDS)?
6. Choose an item. Airworthiness Directives (AD)?
7. Choose an item. Illustrated parts lists or catalogues?
8. Choose an item. Maintenance manuals?
9. Choose an item. Structural Repair Manuals (SRM)?
10. Choose an item. Overhaul manuals?
11. Choose an item. Service Bulletins (SB)/Service Letters (SL)?
12. Choose an item. TCH (CAA)-approved maintenance program/requirements?
13. Choose an item. Manufacturer's specifications?
14. Choose an item. UK Regulations (CFR)?

MEASUREMENT/TEST EQUIPMENT

(Choose option from dropdown)

1. Choose an item. Calibration to National Standards 145.A.40(b)
2. Choose an item. Current calibrations specifications for equipment to be calibrated?
3. Choose an item. Proper storage?
4. Choose an item. Procedures to prevent expired measuring/test equipment from being used?

RECEIVING INSPECTION SYSTEM

(Choose option from dropdown)

1. Choose an item. Written procedures?
2. Choose an item. Internal quality audit procedures?
3. Choose an item. Electronic signature procedures?
4. Choose an item. Procedures for checking for physical damage and incoming defects?
5. Choose an item. Preservation procedures?
6. Choose an item. Procedures for quantities received controls?
7. Choose an item. Verification procedures for part/model/serial numbers?
8. Choose an item. Documentation matches part(s)/material(s) received?
9. Choose an item. Appropriate storage area/conditions for serviceable parts/materials?
10. Choose an item. Is batch segregation maintained to assure traceability to the part/material producer?
11. Choose an item. Procedures for keeping parts/materials with original packaging?
12. Choose an item. Storage area for unserviceable parts/materials?
13. Choose an item. Procedures to identify serviceable parts from unserviceable parts?
14. Choose an item. Serviceable parts area secured to prevent unauthorized cannibalising of components?
15. Choose an item. System to assure proper control of shelf life-limited parts/materials?
16. Choose an item. Reference system for determining status of ADs?
17. Choose an item. System to control inspection stamps, if used?
18. Choose an item. Segregation maintained for requiring additional testing (i.e., flammability)?
19. Choose an item. Flammable, toxic, or volatile material procedures for storage, receiving, and appropriate packaging?
20. Choose an item. Procedures for verifying all required blanking plugs and dust caps, etc., are installed?
21. Choose an item. Shipping container and packaging appropriate for items received?

ORDERING PROCEDURES

(Choose option from dropdown)

1. Choose an item. Approved vendor/alternate vendor list as revised?
2. Choose an item. Special requirements communicated to vendors, such as documents required?
3. Choose an item. Procurement system for ordering FAA-approved parts/materials?

HAZARDOUS MATERIAL

(Choose option from dropdown)

1. Choose an item. Dangerous Goods (HAZMAT) advisory publications?
2. Choose an item. Applicability of Dangerous Goods (HAZMAT)-related regulations?

DOCUMENTATION IDENTIFICATION

(Choose option from dropdown)

1. Choose an item. Procedures for determining what types of documentation/identification are acceptable?
2. Choose an item. Shipping ticket, invoice, or other PAH documents?
3. Choose an item. Parts marking, such as Parts Manufacturer Approval (PMA), Technical Standard Order (TSO), data plates, serial numbers, or manufacturer’s markings?
4. Choose an item. Maintenance release documents?
5. Choose an item. Airworthiness approval forms (i.e., CAA Form 1-21)?
6. Choose an item. Part or material certification?
7. Choose an item. Retention procedures for original documentation?

SEGREGATION

(Choose option from dropdown)

1. Choose an item. Area for airworthy parts/materials?
2. Choose an item. Area for non-aircraft parts/materials?
3. Choose an item. Area for ‘questionable’ parts where further investigation required (segregation)?

BULK QUANTITIES

(Choose option from dropdown)

1. Choose an item. Traceability procedures for same type parts received in large quantities?
2. Choose an item. Procedures for duplicating certificate received with bulk shipment of the same part type?

PART EVALUATION

(Choose option from dropdown)

1. Choose an item. Review known history?
2. Choose an item. Accumulated time in service?
3. Choose an item. Accumulated cycles?
4. Choose an item. Calendar time?
5. Choose an item. Major alterations with supporting documentation?
6. Choose an item. Major repairs with supporting documentation?
7. Choose an item. Part markings could include part number, serial number, casting codes, etc.?

UNSERVICEABLE PARTS/MATERIALS

(Choose option from dropdown)

1. Choose an item. Mutilating (scrapping) procedures?
2. Choose an item. Retention/segregation procedures for unserviceable parts?
3. Choose an item. Procedures for donating to entities, such as schools, to be used for training?
4. Choose an item. Procedures for turning parts over to non-aviation-related uses?

REPORTING SUSPECTED UNAPPROVED PARTS (SUP)

(Choose option from dropdown)

1. Choose an item. Procedures outlined for detecting SUPs?
2. Choose an item. Procedures outlined for reporting SUPs?

Associated Guidance

Please refer to the UK CAA website for the following guidance:

- New Components
- Used Components
- Part 145 holders - Certification of used aircraft components | Civil Aviation Authority (caa.co.uk)
- Application for design approval of aircraft, engines, propellers, and equipment | Civil Aviation Authority (caa.co.uk)

Further guidance is also available for our current bilateral agreements with our international partner agencies

- International Co-operation | Civil Aviation Authority (caa.co.uk)

Useful guidance

- FAA AC 00-56B - Voluntary Industry Distributor Accreditation Program with Change 1
- FAA AC 20-154A - Guide for Developing a Receiving Inspection System for Aircraft Parts and Materials
- EASA NPA 2012-03 - Control of suppliers of components and material used in maintenance