

<b>EASA Part 145 Certification of Maintenance Audit EASA.145.A.50</b>	
Name Of Auditee	
Date of Audit	
Name of Auditor	
Audit Standard EASA Part 145 IR, AMC & GM	
<b><i>Additional Guidance is shown in Bold Italics – Basic Questions include Management &amp; Oversight –Ownership of Procedures - Competence &amp; Training “as required” Completeness, Compliance &amp; Validity of Procedures. In all cases identify the reference of MOE and Associated Procedure</i></b>	
Audit Criteria	Compliant Y or N – Provide MOE /Associated Procedure Reference for Compliance or detail Corrective Action Request & Reference
<b>145.A.50 Certification of maintenance Regulation (EU) No 1321/2014</b>  (a) A certificate of release to service shall be issued by appropriately authorised certifying staff on behalf of the organisation when it has been verified that all maintenance ordered has been properly carried out by the organisation in accordance with the procedures specified in point 145.A.70, taking into account the availability and use of the maintenance data specified in point 145.A.45 and that there are no non-compliances which are known to endanger flight safety.  <b><i>Review the Procedures for controlling the Issue of a CRS – Management – Procedures – Documentation – Training Approval Issue and Control</i></b>  (b) A certificate of release to service shall be issued before flight at the completion of any maintenance.  (c) New defects or incomplete maintenance work orders identified during the above maintenance shall be brought to the attention of the aircraft operator for the specific purpose of obtaining agreement to rectify such defects or completing the	

missing elements of the maintenance work order.

In the case where the aircraft operator declines to have such maintenance carried out under this point, point (e) is applicable.

(d) A certificate of release to service shall be issued at the completion of any maintenance on a component whilst off the aircraft.

***Review Control & Documented Procedure for Creating an EASA Form One – Management & Records – Archive and Traceability***

The authorised release certificate 'EASA Form 1' referred to in Appendix II of Annex I (Part-M) constitutes the component certificate of release to service except if otherwise specified in point M.A.502(b) or M.A.502(e).

When an organisation maintains a component for its own use, an EASA Form 1 may not be necessary depending upon the organisation's internal release procedures defined in the exposition.

(e) By derogation to point (a), when the organisation is unable to complete all maintenance ordered, it may issue a certificate of release to service within the approved aircraft limitations.

The organisation shall enter such fact in the aircraft certificate of release to service before the issue of such certificate.

***Review the Organisation Procedures for the completion of Form 1 with partial completion of any maintenance if applicable***

(f) By derogation to points (a) and 145.A.42, when an aircraft is grounded at a location other than the main line station or main maintenance base due to the non-

availability of a component with the appropriate release certificate, it is permissible to temporarily fit a component without the appropriate release certificate for a maximum of 30 flight hours.

or

Until the aircraft first returns to the main line station or main maintenance base, whichever is the sooner, subject to the aircraft operator agreement and said component having a suitable release certificate but otherwise in compliance with all applicable maintenance and operational requirements. Such components shall be removed by the above prescribed time limit unless an appropriate release certificate has been obtained in the meantime under points (a) and 145.A.42.

**AMC 145.A.50 Certification of maintenance after embodiment of a Standard Change or Standard Repair (SC/SR)**

*ED Decision 2015/029/R*

AMC M.A.801 of the AMC to Part-M contains acceptable means of compliance for the release to service of a SC/SR by an organisation approved in accordance with Part-145.

**AMC 145.A.50(a) Certification of maintenance**

*ED Decision 2015/029/R*

'Endangers the flight safety' means any instances where safe operation could not be assured or which could lead to an unsafe condition.

It typically includes, but is not limited to, significant cracking, deformation, corrosion or failure of primary structure, any evidence of burning, electrical arcing, significant hydraulic fluid or fuel leakage and any emergency system or total system failure.

<p>An airworthiness directive overdue for compliance is also considered a hazard to flight safety.</p>	
<p><b>AMC 145.A.50(b) Certification of maintenance</b>  <i>ED Decision 2015/029/R</i></p> <p>1. The certificate of release to service should contain the following statement: 'Certifies that the work specified, except as otherwise specified, was carried out in accordance with Part-145 and in respect to that work the aircraft/aircraft component is considered ready for release to service'. Reference should also be made to the EASA Part-145 approval number.</p> <p>2. It is acceptable to use an alternate abbreviated certificate of release to service consisting of the following statement 'Part-145 release to service' instead of the full certification statement specified in paragraph 1. When the alternate abbreviated certificate of release to service is used, the introductory section of the technical log should include an example of the full certification statement from paragraph 1.</p> <p>3. The certificate of release to service should relate to the task specified in the (S)TC holder's or operator's instructions or the aircraft maintenance programme which itself may cross-refer to maintenance data.</p> <p>4. The date such maintenance was carried out should include when the maintenance took place relative to any life or overhaul limitation in terms of date/flying hours/cycles/landings etc., as appropriate.</p> <p>5. When extensive maintenance has been carried out, it is acceptable for the certificate of release to service to summarise the maintenance as long as there is a unique cross-reference to the work package containing full details of maintenance carried out.</p>	

<p>Dimensional information should be retained in the work-pack record.</p>	
<p><b>AMC1 145.A.50(d) Certification of maintenance</b>  <i>ED Decision 2015/029/R</i></p> <p>The purpose of the certificate is to release assemblies/items/components/parts (hereafter referred to as 'item(s)') after maintenance and to release maintenance work carried out on such items under the approval of a competent authority and to allow items removed from one aircraft/aircraft component to be fitted to another aircraft/aircraft component.</p> <p>The certificate is to be used for export/import purposes, as well as for domestic purposes, and serves as an official certificate for items from the manufacturer /maintenance organisation to users. It can only be issued by organisations approved by the particular competent authority within the scope of the approval.</p> <p>The certificate may be used as a rotatable tag by utilising the available space on the reverse side of the certificate for any additional information and dispatching the item with two copies of the certificate so that one copy may be eventually returned with the item to the maintenance organisation.</p> <p>The alternative solution is to use existing rotatable tags and also supply a copy of the certificate.</p> <p>A certificate should not be issued for any item when it is known that the item is unserviceable except in the case of an item undergoing a series of maintenance processes at several maintenance organisations approved under Part-145 and the item needs a certificate for the previous maintenance process carried out for the next maintenance organisation approved under Part-145 to accept the item for subsequent maintenance processes. In</p>	

<p>such a case, a clear statement of limitation should be endorsed in Block 12.</p>	
<p><b>AMC2 145.A.50(d) Certification of maintenance</b>  <i>ED Decision 2015/029/R</i></p> <p>1. A component which has been maintained off the aircraft needs the issuance of a certificate of release to service for such maintenance and another certificate of release to service in regard to being installed properly on the aircraft when such action occurs.</p> <p>When an organisation maintains a component for use by the same organisation, an EASA Form 1 may not be necessary depending upon the organisation's internal release procedures defined in the maintenance organisation exposition.</p> <p>2. In the case of the issue of EASA Form 1 for components in storage before Part-145 and Part-21 became effective and not released on an EASA Form 1 or equivalent in accordance with 145.A.42(a) or removed serviceable from a serviceable aircraft or an aircraft which has been withdrawn from service the following applies:</p> <p>2.1. An EASA Form 1 may be issued for an aircraft component which has been:</p> <ul style="list-style-type: none"> <li>— Maintained before Part-145 became effective or manufactured before Part-21 became effective.</li> <li>— Used on an aircraft and removed in a serviceable condition. Examples include leased and loaned aircraft components.</li> <li>— Removed from aircraft which have been withdrawn from service, or from aircraft which have been involved in abnormal occurrences such as accidents, incidents, heavy landings or lightning strikes.</li> </ul>	

<p>— Maintained by an unapproved organisation.</p>	
<p>2.2. An appropriately rated maintenance organisation approved under Part-145 may issue an EASA Form 1 as detailed in this AMC subparagraph 2.5 to 2.9, as appropriate, in accordance with procedures detailed in the exposition as approved by the competent authority.</p> <p>The appropriately rated organisation is responsible for ensuring that all reasonable measures have been taken to ensure that only approved and serviceable aircraft components are issued an EASA Form 1 under this paragraph.</p> <p>2.3. For the purposes of this AMC No 2 only, appropriately rated means an organisation with an approval class rating for the type of component or for the product in which it may be installed.</p> <p><b>2.4. An EASA Form 1 issued in accordance with this paragraph 2 should be issued by signing in block 14b and stating ‘Inspected/Tested’ in block 11. In addition, block 12 should specify:</b></p> <p>2.4.1. When the last maintenance was carried out and by whom.</p> <p>2.4.2. If the component is unused, when the component was manufactured and by whom with a cross-reference to any original documentation which should be included with the Form.</p> <p>2.4.3. A list of all airworthiness directives, repairs and modifications known to have been incorporated. If no airworthiness directives or repairs or modifications are known to be incorporated, then this should be so stated.</p> <p>2.4.4. Detail of life used for service life-limited parts being any combination of fatigue, overhaul or storage life.</p>	

2.4.5. For any aircraft component having its own maintenance history record, reference to the particular maintenance history record as long as the record contains the details that would otherwise be required in block 12. The maintenance history record and acceptance test report or statement, if applicable, should be attached to the EASA Form 1.

## **2.5. New/unused aircraft components**

2.5.1. Any unused aircraft component in storage without an EASA Form 1 up to the effective date(s) for Part-21 that was manufactured by an organisation acceptable to the competent authority at that time may be issued with an EASA Form 1 by an appropriately rated maintenance organisation approved under Part-145.

The EASA Form 1 should be issued in accordance with the following subparagraphs which should be included in a procedure within the maintenance organisation manual.

Note 1: It should be understood that the release of a stored but unused aircraft component in accordance with this paragraph represents a maintenance release under Part-145 and not a production release under Part-21.

It is not intended to bypass the production release procedure agreed by the Member State for parts and subassemblies intended for fitment on the manufacturers' own production line.

(a) An acceptance test report or statement should be available for all used and unused aircraft components that are subjected to acceptance testing after manufacturing or maintenance as appropriate.

(b) The aircraft component should be inspected for compliance with the manufacturer's instructions and limitations for storage and condition including any



requirement for limited storage life, inhibitors, controlled climate and special storage containers. In addition or in the absence of specific storage instructions the aircraft component should be inspected for damage, corrosion and leakage to ensure good condition.

(c) The storage life used of any storage life-limited parts should be established.

2.5.2. If it is not possible to establish satisfactory compliance with all applicable conditions specified in subparagraph 2.5.1(a) to (c) inclusive, the aircraft component should be disassembled by an appropriately rated organisation and subjected to a check for incorporated airworthiness directives, repairs and modifications and inspected/tested in accordance with the maintenance data to establish satisfactory condition and, if relevant, all seals, lubricants and life-limited parts should be replaced.

Upon satisfactory completion after reassembly, an EASA Form 1 may be issued stating what was carried out and the reference of the maintenance data included.

2.6. Used aircraft components removed from a serviceable aircraft

2.6.1. Serviceable aircraft components removed from a Member State registered aircraft may be issued with an EASA Form 1 by an appropriately rated organisation subject to compliance with this subparagraph.

(a) The organisation should ensure that the component was removed from the aircraft by an appropriately qualified person.

(b) The aircraft component may only be deemed serviceable if the last flight operation with the component fitted revealed no faults on that component/related system.

(c) The aircraft component should be inspected for satisfactory condition including in particular damage, corrosion or leakage and compliance with any additional maintenance data.

***For Component Maintenance Review  
Procedures Related to Initial Inspection –  
Documentation – Management – Control  
– Competence – Records***

(d) The aircraft record should be researched for any unusual events that could affect the serviceability of the aircraft component such as involvement in accidents, incidents, heavy landings or lightning strikes.

Under no circumstances may an EASA Form 1 be issued in accordance with this paragraph 2.6 if it is suspected that the aircraft component has been subjected to extremes of stress, temperatures or immersion which could affect its operation.

(e) A maintenance history record should be available for all used serialised aircraft components.

(f) Compliance with known modifications and repairs should be established.

(g) The flight hours/cycles/landings as applicable of any service life-limited parts including time since overhaul should be established.

(h) Compliance with known applicable airworthiness directives should be established.

(i) Subject to satisfactory compliance with this subparagraph 2.6.1, an EASA Form 1 may be issued and should contain the information as specified in paragraph 2.4 including the aircraft from which the aircraft component was removed.

2.6.2. Serviceable aircraft components removed from a non-Member State registered aircraft may only be issued with an EASA Form 1 if the components are leased or loaned from the maintenance organisation approved under Part-145 who retains control of the airworthiness status of the components.

An EASA Form 1 may be issued and should contain the information as specified in paragraph 2.4 including the aircraft from which the aircraft component was removed.

2.7. Used aircraft components removed from an aircraft withdrawn from service. Serviceable aircraft components removed from a Member State registered aircraft withdrawn from service may be issued with an EASA Form 1 by a maintenance organisation approved under Part-145 subject to compliance with this subparagraph.

(a) Aircraft withdrawn from service are sometimes dismantled for spares. This is considered to be a maintenance activity and should be accomplished under the control of an organisation approved under Part-145, employing procedures approved by the competent authority.

(b) To be eligible for installation, components removed from such aircraft may be issued with an EASA Form 1 by an appropriately rated organisation following a satisfactory assessment.

(c) As a minimum, the assessment will need to satisfy the standards set out in paragraphs 2.5 and 2.6 as appropriate.

This should, where known, include the possible need for the alignment of scheduled maintenance that may be necessary to comply with the maintenance programme applicable to the aircraft on which the component is to be installed.

(d) Irrespective of whether the aircraft holds a certificate of airworthiness or not, the organisation responsible for certifying any removed component should ensure that the manner in which the components were removed and stored are compatible with the standards required by Part-145.

(e) A structured plan should be formulated to control the aircraft disassembly process.

The disassembly is to be carried out by an appropriately rated organisation under the supervision of certifying staff who will ensure that the aircraft components are removed and documented in a structured manner in accordance with the appropriate maintenance data and disassembly plan.

(f) All recorded aircraft defects should be reviewed and the possible effects these may have on both normal and standby functions of removed components are to be considered.

(g) Dedicated control documentation is to be used as detailed by the disassembly plan, to facilitate the recording of all maintenance actions and component removals performed during the disassembly process.

Components found to be unserviceable are to be identified as such and quarantined pending a decision on the actions to be taken. Records of the maintenance accomplished to establish serviceability are to form part of the component maintenance history.

(h) Suitable Part-145 facilities for the removal and storage of removed components are to be used which include suitable environmental conditions, lighting, access equipment, aircraft tooling and storage facilities for the work to be undertaken.

While it may be acceptable for components to be removed, given local environmental conditions, without the benefit of an

enclosed facility, subsequent disassembly (if required) and storage of the components should be in accordance with the manufacturer's recommendations.

2.8. Used aircraft components maintained by organisations not approved in accordance with Part-145.

For used components maintained by a maintenance organisation not approved under Part-145, due care should be taken before acceptance of such components.

In such cases an appropriately rated maintenance organisation approved under Part-145 should establish satisfactory conditions by:

(a) dismantling the component for sufficient inspection in accordance with the appropriate maintenance data;

(b) replacing all service life-limit components when no satisfactory evidence of life used is available and/or the components are in an unsatisfactory condition;

(c) reassembling and testing as necessary the component;

(d) completing all certification requirements as specified in 145.A.50.

2.9. Used aircraft components removed from an aircraft involved in an accident or incident. Such components should only be issued with an EASA Form 1 when processed in accordance with paragraph 2.7 and a specific work order including all additional necessary tests and inspections deemed necessary by the accident or incident.

Such a work order may require input from the TC holder or original manufacturer as appropriate. This work order should be referenced in block 12.

**GM 145.A.50(d) EASA Form 1 Block 12**

**'Remarks'**

*ED Decision 2015/029/R*

Examples of data to be entered in this block as appropriate:

— Maintenance documentation used, including the revision status, for all work performed and not limited to the entry made in block 11.

— A statement such as 'in accordance with the CMM' is not acceptable.

— NDT methods with appropriate documentation used when relevant.

— Compliance with airworthiness directives or service bulletins.

— Repairs carried out.

— Modifications carried out.

— Replacement parts installed.

— Life-limited parts status.

— Shelf life limitations.

— Deviations from the customer work order.

— Release statements to satisfy a foreign Civil Aviation Authority maintenance requirement.

— Information needed to support shipment with shortages or re-assembly after delivery.

— References to aid traceability, such as batch numbers.

**AMC 145.A.50(e) Certification of maintenance**

*ED Decision 2015/029/R*

1. Being unable to establish full compliance with sub-paragraph Part-145.A.50(a) means that the maintenance required by the aircraft operator could not be completed due either to running out of available aircraft maintenance downtime for the scheduled check or by virtue of the condition of the aircraft requiring additional maintenance downtime.

2. The aircraft operator is responsible for ensuring that all required maintenance has been carried out before flight and therefore 145.A.50(e) requires such operator to be informed in the case where full compliance with 145.A.50(a) cannot be achieved within the operator's limitations. If the operator agrees to the deferment of full compliance, then the certificate of release to service may be issued subject to details of the deferment, including the operator's authority, being endorsed on the certificate.

Note: Whether or not the aircraft operator does have the authority to defer maintenance is an issue between the aircraft operator and the competent authority of the State of Registry or State of operator, as appropriate. In case of doubt concerning such a decision of the operator, the approved maintenance organisation should inform its competent authority on such doubt, before issuing the certificate of release to service.

This will allow this competent authority to investigate the matter with the competent authority of the State of Registry or the State of the operator as appropriate.

3. The procedure should draw attention to the fact that 145.A.50(a) does not normally permit the issue of a certificate of release to service in the case of non-compliance and should state what action the mechanic, supervisor and certifying staff should take to

<p>bring the matter to the attention of the relevant department or person responsible for technical co-ordination with the aircraft operator so that the issue may be discussed and resolved with the aircraft operator.</p> <p>In addition, the appropriate person(s) as specified in 145.A.30(b) should be kept informed in writing of such possible non-compliance situations and this should be included in the procedure.</p>	
<p><b>AMC 145.A.50(f) Certification of maintenance</b>  <i>ED Decision 2015/029/R</i></p> <p>1. Suitable release certificate means a certificate which clearly states that the aircraft component is serviceable; that clearly specifies the organisation releasing said component together with details of the authority under whose approval the organisation works including the approval or authorisation reference.</p> <p>2. Compliance with all other Part-145 and operator requirements means making an appropriate entry in the aircraft technical log, checking for compliance with type design standards, modifications, repairs, airworthiness directives, life limitations and condition of the aircraft component plus information on where, when and why the aircraft was grounded.</p>	
<p>All Audit Findings have been transferred to corrective action requests</p>	
<p>Signature</p>	<p>Name</p>
<p>Audit Closed QM Signature</p> <p>Date</p>	