

Annex I to ED Decision 2019/009/R

Acceptable Means of Compliance (AMC) and Guidance Material (GM) to Annex I (Part-M) to Commission Regulation (EU) No 1321/2014

Issue 2 — Amendment 2

The text of the amendment is arranged to show deleted text, new or amended text as shown below:

- deleted text is ~~struck through~~;
- new or amended text is highlighted in grey;
- an ellipsis '[...]' indicates that the remaining text is unchanged.

Annex I to ED Decision 2015/029/R is amended as follows:

- 1) AMC M.A.501(a) 'Installation' is deleted.
- 2) AMC M.A.501(b) 'Installation' is deleted.
- 3) AMC M.A.501(c) 'Installation' is deleted.
- 4) AMC M.A.501(d) 'Installation' is deleted.
- 5) The following AMC1 M.A.501(a)(1) is added:

AMC1 M.A.501(a)(1) Classification and installation

EASA FORM 1 OR EQUIVALENT

(a) A document equivalent to an EASA Form 1 may be:

- (1) a release document issued by an organisation under the terms of a bilateral agreement signed by the European Union;
- (2) a release document issued by an organisation approved under the terms of a JAA bilateral agreement until superseded by the corresponding agreement signed by the European Union;
- (3) a JAA Form One issued prior to 28 November 2004 by a JAR 145 organisation approved by a JAA Full Member State;
- (4) in the case of new aircraft components that were released from manufacturing prior to the Part 21 compliance date, the component should be accompanied by a JAA Form One issued by a JAR 21 organisation and approved by a JAA Full Member State within the JAA mutual recognition system;
- (5) a JAA Form One issued prior to 28 September 2005 by a production organisation approved by a competent authority in accordance with its national regulations;

- (6) a JAA Form One issued prior to 28 September 2008 by a maintenance organisation approved by a competent authority in accordance with its national regulations;
 - (7) a release document acceptable to a competent authority according to the provisions of a bilateral agreement between the competent authority and a third country until superseded by the corresponding agreement signed by the European Union. This provision is valid provided the above agreements between the competent authority and a third country are notified to the European Commission and to the other competent authorities in accordance with Article 9 of Regulation (EC) No 1592/2002;
 - (8) a release document issued under the conditions described in Article 4(4) of Regulation (EC) No 2042/2003;
- (b) Any item in storage without an EASA Form 1 or equivalent cannot be installed on aircraft registered in a Member State unless an EASA Form 1 is issued for such item by an appropriately approved maintenance organisation in accordance with AMC M.A.613(a).
- 6) The following GM1 M.A.501(a)(2) is added:

GM1 M.A.501(a)(2) Classification and installation

UNSERVICEABLE COMPONENTS

- (a) The person or organisation that performs maintenance should ensure the proper identification of any unserviceable components. The unserviceable status of the component should be clearly declared on a tag together with the component identification data and any information that is useful to define actions that are necessary to be taken. Such information should state, as applicable, in-service times, maintenance status, preservation status, failures, defects or malfunctions reported or detected, exposure to adverse environmental conditions, and whether the component is installed on an aircraft that was involved in an accident or incident. Means should be provided to prevent unintentional separation of this tag from the component.
- (b) Unserviceable components should typically undergo maintenance due to:
- (1) expiry of the service life limit as defined in the aircraft maintenance programme;
 - (2) non-compliance with the applicable airworthiness directives and other continuing airworthiness requirements mandated by the Agency;
 - (3) absence of the necessary information to determine the airworthiness status or eligibility for installation;
 - (4) evidence of defects or malfunctions;
 - (5) being installed on an aircraft that was involved in an incident or accident likely to affect the component's serviceability.

7) The following AMC1 M.A.501(a)(3) is added:

AMC1 M.A.501(a)(3) Classification and installation

UNSALVAGEABLE COMPONENTS

The following types of components should typically be classified as unsalvageable:

- (a) components with non-repairable defects, whether visible or not to the naked eye;
- (b) components that do not meet design specifications, and cannot be brought into conformity with such specifications;
- (c) components subjected to unacceptable modification or rework that is irreversible;
- (d) certified life-limited parts that have reached or exceeded their certified life limits, or have missing or incomplete records;
- (e) components whose airworthy condition cannot be restored due to exposure to extreme forces, heat or adverse environmental conditions;
- (f) components for which conformity with an applicable airworthiness directive cannot be accomplished;
- (g) components for which maintenance records and/or traceability to the manufacturer cannot be retrieved.

8) The following AMC1 M.A.501(a)(4) is added:

AMC1 M.A.501(a)(4) Classification and installation

STANDARD PARTS

- (a) Standard parts are parts that are manufactured in complete compliance with an established industry, Agency, competent authority or other government specification which include design, manufacturing, test and acceptance criteria, and uniform identification requirements. The specification should include all the information that is necessary to produce and verify conformity of the part. It should be published so that any party may manufacture the part. Examples of such specifications are National Aerospace Standards (NAS), Army-Navy Aeronautical Standard (AN), Society of Automotive Engineers (SAE), SAE Sematec, Joint Electron Device Engineering Council, Joint Electron Tube Engineering Council, and American National Standards Institute (ANSI), EN Specifications, etc.
- (b) To designate a part as a standard part, the TC holder may issue a standard parts manual accepted by the competent authority of the original TC holder or may make reference in the parts catalogue to the specification to be met by the standard part. Documentation that accompanies standard parts should clearly relate to the particular parts and contain a conformity statement plus both the manufacturing and supplier source. Some materials are subject to special conditions, such as storage conditions or life limitation, etc., and this should be included in the documentation and/or the material's packaging.
- (c) An EASA Form 1 or equivalent is not normally issued and, therefore, none should be expected.

- 9) The following AMC2 M.A.501(a)(4) is added:

AMC2 M.A.501(a)(4) Classification and installation

STANDARD PARTS

For sailplanes and powered sailplanes, non-required instruments and/or equipment that are certified under the provision of CS 22.1301(b), if those instruments or equipment, when installed, functioning, functioning improperly or not functioning at all, do not in themselves, or by their effect upon the sailplane and its operation, constitute a safety hazard.

'Required' in the term 'non-required', as used above, means required by the applicable airworthiness code (CS 22.1303, 22.1305 and 22.1307) or required by the relevant regulations for air operations and the applicable Rules of the Air or as required by air traffic management (e.g. a transponder in certain controlled airspace). Examples of non-required equipment which can be considered to be standard parts may be electrical variometers, bank/slip indicators ball-type, total energy probes, capacity bottles (for variometers), final glide calculators, navigation computers, data logger/barograph/turnpoint camera, bug-wipers and anti-collision systems. Equipment which must be approved in accordance with the airworthiness code shall comply with the applicable ETSO or equivalent and it is not considered to be a standard part (e.g. oxygen equipment).

- 10) The following AMC M.A.501(a)(5) is added:

AMC M.A.501(a)(5) Classification and installation

MATERIAL

- (a) Consumable material is any material which is only used once, such as lubricants, cements, compounds, paints, chemical dyes and sealants, etc.
- (b) Raw material is any material that requires further work to make it into a component part of the aircraft, such as metals, plastics, wood, fabric, etc.
- (c) Material both raw and consumable should only be accepted when satisfied that it is to the required specification. To be satisfied, the material and/or its packaging should be marked with the applicable specification and, where appropriate, the batch number.
- (d) Documentation that accompanies all materials should clearly relate to the particular material and contain a conformity statement plus both the manufacturing and supplier source. Some materials are subject to special conditions, such as storage conditions or life limitation, etc., and this should be included in the documentation and/or the material's packaging.
- (e) An EASA Form 1 or equivalent should not be issued for such materials and, therefore, none should be expected. The material specification is normally identified in the (S)TC holder's data except in the case where the Agency or the competent authority has agreed otherwise.

11) The following GM1 M.A.501(b) is added:

GM1 M.A.501(b) Classification and installation

- (a) To ensure that components, standard parts and materials are in satisfactory condition, the persons referred to under M.A.801(b)(2), M.A.801(b)(3), M.A.801(c) or M.A.801(d), or the approved maintenance organisation should perform an incoming physical inspection.
- (b) The incoming physical inspection should be performed before the component is installed on the aircraft.
- (c) The following list, although not exhaustive, contains typical checks to be performed:
 - (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. Care should be taken when tape is used to cover electrical connections or fluid fittings/openings because adhesive residues can insulate electrical connections and contaminate hydraulic or fuel units.
- (d) Items (e.g. fasteners) purchased in batches should be supplied in a package. The packaging should state the applicable specification/standard, P/N, batch number, and the quantity of the items. The documentation that accompanies the material should contain the applicable specification/standard, P/N, batch number, supplied quantity, and the manufacturing sources. If the material is acquired from different batches, acceptance documentation for each batch should be provided.

12) The following GM2 M.A.501(b) is added:

GM2 M.A.501(b) Classification and installation

INSTALLATION OF COMPONENTS

Components, standard parts and materials should only be installed when they are specified in the applicable maintenance data. This could include parts catalogue (IPC), service bulletins (SBs), aircraft maintenance manual (AMM), component maintenance manual (CMM), etc. So, a component, standard part and material can only be installed after having checked the applicable maintenance data. This check should ensure that the part number, modification status, limitations, etc., of the component, standard part or material are the ones specified in the applicable maintenance data of the particular aircraft or component (i.e. IPC, SB, AMM, CMM, etc.) where the component, standard part or material is going to be installed. When the installation is performed outside a maintenance organisation, that is by the persons referred to in M.A.801(b)(2), M.A.801(b)(3), M.A.801(c) or M.A.801(d), then these persons are responsible to perform this check before installation. When the installation is performed by a Part-M Subpart F organisation, then the organisation has to establish procedures to ensure that this check is performed before installation.

- 13) The following AMC M.A.502(d) is added:

AMC M.A.502(d) Component maintenance

Independent certifying staff may issue (as established in M.A.801(b)(2)) a release to service for maintenance that is performed outside an approved maintenance organisation. This is limited to the maintenance of aircraft that are not required by regulation to be maintained by a Part-145 or Part-M-Subpart-F organisation. For ELA1 aircraft maintenance, this may include complex tasks.

- 14) AMC M.A.504(a) 'Control of unserviceable components' is deleted.
- 15) AMC M.A.504(b) 'Control of unserviceable components' is deleted.
- 16) AMC M.A.504(c) 'Control of unserviceable components — unsalvageable components' is deleted.
- 17) AMC M.A.504(d)2 'Control of unserviceable components' is deleted.
- 18) AMC M.A.504(e) 'Control of unserviceable components' is deleted.
- 19) The following AMC1 M.A.504 is added:

AMC1 M.A.504 Segregation of components

- (a) Unserviceable components should be identified and stored in a separate secure location that is managed by the maintenance organisation until a decision is made on the future status of such components. Certifying staff outside maintenance organisations (M.A.801(b)(2), M.A.801(c) or M.A.801(d)) that release aircraft maintenance should send, with the agreement of the aircraft owner/lessee, any unserviceable component to a maintenance organisation for controlled storage. Nevertheless, the person or organisation that declared the component unserviceable may transfer its custody, after identifying it as unserviceable, to the aircraft owner/lessee provided that such transfer is reflected in the aircraft logbook, or engine logbook, or component logbook.
- (b) 'Secure location under the control of an approved maintenance organisation' refers to a location that is managed by the approved maintenance organisation that prevents the component from being reused or tampered with. This may include facilities that are established by the organisation at locations different from the main maintenance facilities. These locations should be identified in the relevant procedures of the organisation.
- (c) In the case of unsalvageable components, the person or organisation should:
- (1) retain such components in the secure location referred to in paragraph (b);
 - (2) arrange for the component to be mutilated in a manner that ensures that it is cannot be restored for use, before disposing it; or
 - (3) mark the component indicating that it is unsalvageable, when, in agreement with the component owner, the component is disposed of for legitimate non-flight uses (such as training and education aids, research and development), or for non-aviation applications, mutilation is often not appropriate. Alternatively to marking, the original part number or data

plate information can be removed, or a record kept of the disposal of the component for legitimate non-flight uses.

20) The following GM1 M.A.504 is added:

GM1 M.A.504 Segregation of components

MUTILATION OF COMPONENTS

- (a) Mutilation should be accomplished in such a manner that the components become permanently unusable for their originally intended use. Mutilated components should not be able to be reworked or camouflaged to provide the appearance of being serviceable, such as by replating, shortening and rethreading long bolts, welding, straightening, machining, cleaning, polishing, or repainting.
- (b) Mutilation may be accomplished by one or a combination of the following procedures:
- (1) grinding;
 - (2) burning;
 - (3) removal of a major lug or other integral feature;
 - (4) permanent distortion of parts;
 - (5) cutting a hole with cutting torch or saw;
 - (6) melting;
 - (7) sawing into many small pieces; and
 - (8) any other method accepted by the competent authority.
- (c) The following procedures are examples of mutilation that are often less successful because they may not be consistently effective:
- (1) stamping or vibro-etching;
 - (2) spraying with paint;
 - (3) small distortions, incisions, or hammer marks;
 - (4) identification by tags or markings;
 - (5) drilling small holes; and
 - (6) sawing in two pieces only.

21) AMC M.A.707(a)4 is amended as follows:

AMC M.A.707(a) Airworthiness review staff

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[...]

4. An appropriate licence in compliance with Annex III (Part-66) is any one of the following:
- a category B1 licence in the subcategory of the aircraft reviewed, or

- a category B2 or C licence, or
- in the case of piston-engine non-pressurised aeroplanes of 2 000 kg MTOM and below, a category B3 licence,
- in the case of sailplanes, powered sailplanes, ELA1 aeroplanes, balloons and airships, a category L licence in the appropriate subcategory.

It is not necessary to satisfy the experience requirements of Annex III (Part-66) at the time of the review.

[...]

22) AMC M.A.802 is amended as follows:

AMC M.A.802 Component certificate of release to service

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The purpose of the EASA Form 1 (see also Appendix II to Part-M) is to release components after manufacture and to release maintenance work carried out on such components under the approval of a competent authority, and to allow components that are removed from one aircraft/component to be fitted to another aircraft/component.

When an approved organisation maintains an aircraft component for use by the organisation, an EASA Form 1 may not be necessary depending upon the organisation's internal release procedures, however, all the information normally required for the EASA Form 1 should be adequately detailed in the certificate of release to service.

23) GM to Appendix II to Part-M is amended as follows:

GM to Appendix II to Part-M — Use of the EASA Form 1 for maintenance

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EASA Form 1 Block 12 'Remarks'

EASA FORM 1 BLOCK 12 'REMARKS'

The EASA Form 1 identifies the airworthiness status of an aircraft component in relation to the work being certified. Block 12 'Remarks' of the EASA Form 1 in some cases contains vital airworthiness-related information (see also Appendix II to Part-M) which may need appropriate and necessary actions.

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

[...]

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

[...]