

UK Civil Aviation Authority launches consultation on proposed changes to CAP 553 (BCAR Section A, A8-21, A8-23 and A8-24)



Published by the Civil Aviation Authority, 2021

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First published July 1989
Revised June 1990
Revised September 1991
Revised November 1995
Revised November 1999
Revised February 2001
Issue 6, 31 January 2003
Issue 6 incorporating amendment 1, 21 November 2003
Issue 6 incorporating amendment 2, 25 February 2008
Issue 6 incorporating amendment 3, 8 August 2008
Issue 6 incorporating amendment 4, 6 November 2009
Issue 7, 5 October 2011
Issue 7 incorporating amendment 1, 30 January 2013
Issue 8, 29 November 2013
Issue 8 incorporating amendment 1, 15 December 2017

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Chapter A8-21. Approval of Organisations Responsible for Design or Production

Background

The changes in Chapter A8-21 Supplement 1 (UK CAA Approved Certificate) updated instructions for completing the form.

The Supplement 1 appears in full below, except for deletions.

We are inviting comments on the proposed changes which have been highlighted as red underlined text.

Please email ga@caa.co.uk stating the paragraph reference and suggested change/comment.

Supplement 1 to A8-21

1 United Kingdom Civil Aviation Authority		UK CAA APPROVED CERTIFICATE			3 Form Tracking No.	
4 Approved Organisation Name and Address					5 Work Order / Contract / Invoice	
6 Item	7 Description	8 Part No.	9 Qty	10 Serial No.		11 Status/Work
12 Remarks						
13a Certifies that the items identified above were manufactured in conformity to: <input type="checkbox"/> approved design data and are in a condition for safe operation <input type="checkbox"/> non-approved design data specified in block 12			14a Certifies that the work specified, except as otherwise specified in block 12, was carried out in accordance with the Air Navigation Order for the time being in force and in respect to that work the aircraft/aircraft component is considered ready for release to service			
13b Authorised Signature		13c Approval No.	14b Authorised Signature		14c Approval No.	
13d Name		13e Date (dd/mmm/yyyy)	14d Name		14e Date (dd/mmm/yyyy)	

Issue2

USER/INSTALLER RESPONSIBILITIES

- NOTES:**
- 1 This certificate does not automatically constitute authority to install the item(s).
 - 2 Where the user/installer performs work in accordance with the regulations of another airworthiness authority, it is essential that the user/installer ensure that his/her airworthiness authority accepts items from the UK CAA.
 - 3 Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer, before the aircraft may be flown.

APPROVED CERTIFICATE

COMPLETION INSTRUCTIONS

These instructions relate only to the use of the UK CAA Approved Certificate for manufacturing purposes.

1 *PURPOSE AND SCOPE*

The primary purpose of the certificate is to release products, parts and appliances (hereafter referred to as 'item(s)') as identified in Blocks 7 through 11 as applicable after manufacture, or to release maintenance work carried out on items under the approval of the CAA.

The Certificate serves as an official certificate for the delivery of items from the manufacturer to users. The Certificate is not, however, a delivery or shipping note.

It may only be issued by organisations certificated by the CAA, within the scope of such an approval. Aircraft are not to be released using the Certificate. Products, Parts or Appliances for aircraft that are the responsibility of the European Aviation Safety Agency (EASA) are NOT to be released using the Certificate.

A mixture of 'New' and 'Used' items is not permitted on the same Certificate.

A mixture of items certified in conformity with 'approved data' and to 'non-approved data' is not permitted on the same Certificate, and consequently only one box in Block 14 can be ticked.

2 *GENERAL*

The Certificate must comply with the format attached including block numbers and the location of each Block. The size of each Block may however be varied to suit the individual application, but not to the extent that would make the Certificate unrecognisable. The overall size of the Certificate may be significantly increased or decreased so long as the Certificate remains recognisable and legible. The Certificate must be in 'Portrait' rather than 'Landscape' to help differentiate it from the EASA Form

1. If in doubt consult the CAA.

Please note that the user responsibility statements can be placed on either the reverse or front of this Certificate.

All printing must be clear and legible to permit easy reading and be in English.

The Certificate may either be pre-printed or computer generated but in either case the printing of lines and characters must be clear and legible. Pre-printed wording is permitted in accordance with the attached model but no other certification statements are permitted.

The details to be entered on the Certificate may be either machine/computer printed or hand-written using block letters, permit easy reading and be in English. Abbreviations must be restricted to a minimum.

The space remaining on the reverse side of the Certificate may be used by the originator for any additional information but must not include any certification statement.

The original Certificate must accompany the items and correlation must be established between the Certificate and the item(s). A copy of the Certificate must be retained by the organisation that manufactured the item. Where the Certificate format and the data

is entirely computer generated, subject to acceptance by the CAA, it is permissible to retain the Certificate format and data on a secure database.

There is no restriction in the number of copies of the Certificate sent to the customer or retained by the originator.

The Certificate that accompanies the item may be attached to the item by being placed in an envelope for durability.

3 COMPLETION OF THE APPROVED CERTIFICATE BY THE ORIGINATOR

Except as otherwise stated, there must be an entry in all Blocks to make the document a valid certificate.

Block 1 Pre-printed 'United Kingdom Civil Aviation Authority'.

Block 2 Pre-printed 'UK CAA Approved Certificate'.

Block 3 A unique number must be pre-printed in this Block for Certificate control and traceability purposes except that in the case of a computer generated document, the unique number need not be pre-printed where the computer is programmed to produce the number.

Block 4 The information in this Block needs to satisfy two objectives:

1. to relate the Certificate to an organisation approval, for the purposes of verifying authenticity and authority of the Certificate;
2. to provide a ready means of rapidly identifying the place of manufacture and release, to facilitate traceability and

communication in the event of problems or queries.

Therefore, the name entered in the box is that of the organisation approval holder who is responsible for making the final determination of conformity or airworthiness, and whose Approval Reference Number is quoted in Block 16. The name must be entered in exactly the same form as appears in the Approval Certificate held by the organisation.

The address(es) entered in Block 4 will assist in the identification of the approval holder and in identifying the place of release.

If the place of manufacture and release is one of the organisation addresses listed on the Approval Certificate, then that is the only address needed in this Block.

If the place of manufacture and release is a location which is NOT listed in the Approval Certificate then two addresses are required. The first address will be the address of the approval holder (as listed in the Approval Certificate) and a second address entered to identify the place of manufacture and release.

This Block may be pre-printed. Logo of the production approval holder, etc., is permitted if it can be contained within the Block.

Block 5 The purpose is to reference work order/contract/invoice or any other internal organisational process such that a fast traceability system can be established. The use of the Block for such traceability is mandatory in the absence of item Serial Numbers or batch numbers in Block 11. When not used, state N/A.

Block 6 The Block is provided for the convenience of the organisation issuing the Certificate to permit easy cross-reference to the 'Remarks' Block 13 by the use of line item numbers. Block 6 must be completed where there is more than one line item.

Where a number of items are to be released on the Certificate, it is permissible to use a separate listing cross-referring Certificate and list to each other.

Block 7 The name or description of the item must be given. Preference must be given to use of the Illustrated Parts Catalogue (IPC) designation.

Block 8 State the Part Number. Preference must be given to use of the IPC number designation.

Block 9 State the quantity of items being released.

Block 10 State the items Serial Number or Batch Number if applicable. If neither is applicable, state 'N/A'.

Block **11** Enter one or a combination of appropriate standard words from the following table. The table lists, in quotes, the standard words permitted for use when releasing new items prior to entry into service, i.e. the items have not been previously used in operational service. It also details the circumstances and conditions under which they may be used. In all cases the certification rules relating to Block 14 apply, the appropriate box is to be marked, and Block 15 is to be signed.

TABLE OF STANDARD WORDS FOR NEW PARTS

1	<p>‘MANUFACTURED’</p> <p>a) The production of a new item in conformity with the applicable design data, or</p> <p>b) Re-certification by the original manufacturer after rectification work on an item, previously released under paragraph 1 a), which has been found to be unserviceable prior to entry into service, e.g., defective, in need of inspection or test, or shelf life expired. Details of the original release and the rectification work are to be entered in Block 13, or re-certification of new items from conformity purpose to airworthiness purpose at the time of approval of the applicable design data, provided that the items conform to the approved design data. An explanation of the basis of release and details of the original release are to be entered in Block 13.</p>
2	<p>‘INSPECTED/TESTED’</p> <p>The examination of a previously released new item:</p> <p>a) to establish conformity with the applicable design data, or</p> <p>b) in accordance with a customer-specified standard or specification, details of which are to be entered in Block 13, or</p> <p>c) to establish serviceability and condition for safe operation prior to re-release as a spare, where the item has been obtained with an EASA Form 1 or Approved Certificate. An explanation of the basis of release and details of the original release are to be entered in Block 13.</p>
3	<p>‘MODIFIED’</p> <p>The alteration, by the original manufacturer, of a previously released item prior to entry into service. Details of the alteration and the original release are to be entered in Block 13</p>

The above statements must be supported by reference to the approved data/manual/specification. Such information shall be identified in either Block 12 or 13.

Block 12 State any information in this block, either directly or by reference to supporting documentation, necessary for the user or installer to determine the airworthiness of the item in relation to the work being certified. If necessary a separate sheet may be used and referenced from the main Certificate. Each statement must be clearly identified as to which item in block 6 it relates. If there is no statement, state 'None'.

Examples of statements in block 12 are:

- Maintenance documentation used, including the revision status.
- Compliance with airworthiness directives or service bulletins.
- Repairs carried out.
- Modifications carried out.
- Replacement parts installed.
- Life limited parts status.
- Deviations from the customer work order.
- Release statements to satisfy a foreign CAA maintenance requirement.

Block 13a This Block may only be used to indicate the status of new items.

The main purpose of the Certificate is to release items for airworthiness purposes, which means conformity with approved design data and in condition for safe operation.

This airworthiness certification is valid in the UK.

The certificate may also be used as a Conformity Certificate when items conform to applicable design data which are not approved for a reason which is stated in Block 12 (e.g, pending type certificate, for test only, pending approved data).

In this case the following additional statement must be entered at the beginning of Block 12 itself and not in a separate document. 'ONLY FOR CONFORMITY, NOT ELIGIBLE FOR INSTALLATION ON IN-SERVICETYPE CERTIFICATED AIRCRAFT/ENGINE/PROPELLER'.

Mixtures of items released for Airworthiness and for Conformity purposes are not permitted in the same certificate.

Block 13b The hand-written normal signature of a person who has written authority from an approved production organisation to make Certifications in respect of new items. Use of a stamp instead of a signature is not permitted, but the authorised person may add a stamp impression to his or her signature to aid recognition. Subject to the agreement of the CAA in any particular case, computer-generated

signatures are permitted if it can be demonstrated that an equivalent level of control, traceability and accountability exists.

Block 13c State the full authorisation reference given by the CAA to the organisation releasing the new items.

Block 13d The name of the person signing Block 15, printed, typed, or written in a legible form.

Block 13e The date on which Block 15 is signed, in the format day/month/year. The month must be stated in letters (sufficient letters must be used so there can be no ambiguity as to the month intended).

Block 14a Pre-printed certification statement.

The certification statement 'except as otherwise specified in block 12' is

intended to address the following situations;

a) The case where the maintenance could not be completed.

b) The case where the maintenance deviated from the standard required by A8-23.

c) The case where the maintenance was carried out in accordance with a non A8-23 requirement.

Whichever case or combination of cases, this shall be specified in block 12.

Block 14b The hand-written normal signature of a person who has written authority from an approved production organisation to make Certifications in respect of new items. Use of a stamp instead of a signature is not permitted, but the authorised person may add a stamp impression to his or her signature to aid recognition. Subject to the agreement of the CAA in any particular case, computer-generated signatures are permitted if it can be demonstrated that an equivalent level of control, traceability and accountability exists.

Block 14c State the full authorisation reference given by the CAA to the organisation releasing the new items.

Block 14d The name of the person signing Block 15, printed, typed, or written in a legible form.

Block 14e The date on which Block 15 is signed, in the format day/month/year. The month must be stated in letters (sufficient letters must be used so there can be no ambiguity as to the month intended).

Chapter A8-23: Approval of Organisations Responsible for Maintenance and Restoration of Non- EASA Aircraft

Background

The change in Chapter A8-23 clarifies the requirement for certifying staff to hold appropriate aircraft type or group rating when performing base maintenance of other than large aircraft.

Relevant parts of paragraph 6 for Personnel Requirements appear below providing the reader with wider context of the section.

6 Personnel Requirements

- 6.1 The organisation shall appoint an accountable manager who has corporate authority for ensuring that all maintenance required by the customer can be financed and carried out to the standard required by this Chapter A8-23. The accountable manager shall:
- a) ensure that all necessary resources are available to accomplish maintenance in accordance with paragraph 15.2 to support the organisation approval;
 - b) establish and promote the safety and quality policy specified in paragraph 15.1;
 - c) demonstrate a basic understanding of this Chapter A8-23.
- 6.2 The organisation shall nominate a person or group of persons, whose responsibilities include ensuring that the organisation complies with this Requirement. Such person(s) shall ultimately be responsible to the accountable manager, and:
- a) the person or persons nominated shall represent the maintenance management structure of the organisation and be responsible for all functions specified in this Requirement;
 - b) the person or persons nominated shall be identified and their credentials submitted in a form and manner established by the CAA;

- c) the person or persons nominated shall be able to demonstrate relevant knowledge, background and satisfactory experience related to aircraft or component maintenance and demonstrate a working knowledge of this Requirement;
 - d) the procedures shall make clear who deputises for any particular person in the case of lengthy absence of the said person.
- 6.3 The accountable manager under paragraph 6.1 shall appoint a person with responsibility for monitoring the quality system, including the associated feedback system as required by paragraph 15.3. The appointed person shall have direct access to the accountable manager to ensure that the accountable manager is kept properly informed on quality and compliance matters.
- 6.4 The organisation shall have sufficient staff to plan, perform, supervise, inspect and quality monitor the organisation in accordance with the approval. In addition the organisation shall reassess work intended to be carried out when actual staff availability is less than the planned staffing level for any particular work shift or period.
- 6.5 The organisation shall establish and control the competence of personnel involved in any maintenance, management and/or quality audits in accordance with a procedure and to a standard agreed by the CAA. In addition to the necessary expertise related to the job function, competence must include an understanding of the application of human factors and human performance issues appropriate to that person's function in the organisation. 'Human factors' means principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration of human performance. 'Human performance' means human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.
- NOTE:** For further information on human factors in aviation maintenance, see CAP 716 'Aviation Maintenance Human Factors (EASA Part-145)'.
- 6.6 The organisation shall ensure that personnel who carry out and/or control, a continued airworthiness non-destructive test of aircraft structures and/or components, are appropriately qualified for the particular non-destructive test in accordance with the European or equivalent Standard recognised by the CAA. Personnel who carry out any other specialised task shall be appropriately qualified in accordance with officially recognised Standards. By derogation to this paragraph those personnel specified in paragraphs 6.7, 6.8 a) and 6.8 b), qualified in accordance with BCAR

Section L, or category B1 or B3 in accordance with Part 66, may carry out and/or control colour contrast dye penetrant tests.

- 6.7 Any organisation maintaining aircraft, except where stated otherwise in paragraph 6.10, shall in the case of aircraft line maintenance, have appropriate aircraft type rated certifying staff qualified in accordance with BCAR Section L, or category B1, B2, B3, as appropriate, in accordance with Part-66, and paragraph 7 of this Chapter A8-23. In addition such organisations may also use appropriately task trained certifying staff holding the privileges described in points 66.A.20(a)(1) and 66.A.20(a)(3)(ii) and qualified in accordance with Annex III (Part-66) and point 145.A.35 to carry out minor scheduled line maintenance and simple defect rectification. The availability of such certifying staff shall not replace the need for category B1, B2, B3 certifying staff, as appropriate.
- 6.8 Any organisation maintaining aircraft, except where stated otherwise in paragraph 6.10 shall:
- a) in the case of base maintenance of large aircraft, have appropriate aircraft type rated certifying staff qualified in accordance with BCAR Section L, or category C in accordance with Part-66, and paragraph 6 of this Chapter A8-23. In addition, the organisation shall have sufficient aircraft type rated staff qualified in accordance with BCAR Section L, or category B1 and B2 in accordance with Part-66, and paragraph 6 of this Chapter A8-23, to support the base maintenance certifying staff in particular:
 - i) appropriately type rated BCAR Section L or B1 and B2 support staff shall ensure that all relevant tasks or inspections have been carried out to the required standard before the base maintenance certifying staff issues the certificate of release to service;
 - ii) the organisation shall maintain a register of any such base maintenance support staff;
 - iii) the base maintenance certifying staff shall ensure that compliance with sub- paragraph i) above has been met and that all work required by the customer has been accomplished during the particular base maintenance check or work package, and shall also assess the impact of any work not carried out with a view to either requiring its accomplishment or agreeing with the operator to defer such work to another specified check or time limit.
 - b) in the case of base maintenance of aircraft other than large aircraft have either:

- i) appropriate aircraft group or type rated certifying staff qualified in accordance with BCAR Section L or category B1, B2, as appropriate, in accordance with Part-66 paragraph 6 of this Chapter A8-23; or
 - ii) appropriate aircraft group or type rated certifying staff qualified in Part-66 category C assisted support staff as specified in subparagraph 6.8 a).
- c) in the case of aircraft with a Permit to Fly
- i) The organisation shall have appropriate staff for the normal expected contracted work. The use of temporary staff is permitted in the case of higher than normally expected contracted work.
 - ii) The organisation may use volunteers to support the maintenance of an aircraft eligible for a National Permit to Fly.
 - iii) By derogation from paragraph i), for long term restoration work of Permit to Fly aircraft, an organisation may utilise throughout the project, temporary staff provided they are under the management and control of the nominated engineer.

Chapter A8-24: Approval of Organisations Responsible for Maintenance and Restoration of Non-EASA Aircraft below 5700kg, or Single Engine Helicopters, not used for Commercial Air Transport or State Purposes

Background

The change in Chapter A8-24, clarifies by excluding aircraft that are below 5700kg but are fitted with aircrew assisted escape/egress systems, whether activated or not, from the scope of the chapter. This amendment follows AAIB investigation into the accident of G-BXFI during an air display near Shoreham airport and the subsequent recommendation arising from the Accident Report AAR 1/2017, Safety Recommendation 2015-042.

Relevant part of the Chapter appears below providing the reader with the context of the amended section.

1 Scope

- 1.1 This Requirement applies only to aircraft and associated parts, that are not required to comply with European Regulation (EC) No. 216/2008, i.e. Non-EASA Aircraft with a Certificate of Airworthiness or a Permit to Fly. It establishes the procedure for the approval of Non-EASA Aircraft maintenance organisations and rules governing the rights and obligations of applicants for, and holders of, such approvals. Any organisation involved with the maintenance of EASA Aircraft and/or associated parts, should refer to the appropriate European regulations; see Note 2 below.

NOTES:

- 1 The requirements of this Chapter A8-24 are applicable to organisations maintaining and restoring: aircraft below 5700 kg, not classified as complex (Ref A8-25 Supplement 2), and single engine rotorcraft, that are not used for Commercial Air Transport, or for State purposes. Aircraft fitted with aircrew assisted escape/egress systems, whether activated or not, are excluded from the scope of this Chapter.

- 2 “Non-EASA aircraft” are aircraft that are within the categories of Annex II of Regulation (EC) No. 216/2008 (reference Article 4 of the Regulation). Non-EASA aircraft are not subject to regulation of airworthiness by EASA, but are subject to national regulations.
- 3 Individual aircraft engaged in military, customs, police, search and rescue, firefighting, coastguard or similar activities or services are subject to national airworthiness regulations, even if other aircraft of the same type (that are not engaged in such activities) are subject to regulation by EASA (reference Article 1 of Regulation (EC) No. 216/2008).
- 4 BCAR A8-24 has been developed from Part M which is an Annex to European Commission Regulation (EU) No. 1321/2014. As guidance for the reader the Part M paragraphs corresponding to their BCAR A8-24 equivalents have been tabulated in Appendix 3 of this chapter. It should be noted however, that for BCAR A8-24 the applicable legislation is the Air Navigation Order 2016, as amended.