BGA Airworthiness and Maintenance Procedure

PART 21 AIRCRAFT AIRWORTHINESS REVIEW CERTIFICATE RENEWAL

Version 1.3 effective date 24th March 2023

Contents

- 1. General
- 2. Reference material
- 3. ARC validity & renewal
- 4. Eligible aircraft
- 5. Where to find the TCDS for CAA Part 21 aircraft with a full C of A
- 6. Where to find the TCDS for CAA Part 21 aircraft that are orphans (SAS or no manufacture support)
- 7. Where to find the TCDS for CAA Part 21 aircraft that have a legacy pre-EASA issued TCDS
- 8. Authorisation to carry out the Airworthiness Review and ARC signatories
- 9. Airworthiness Review
- 10. Completion of BGA 276
- 11. ARC Dating Protocol
- 12. Payment
- 13. Completing the process and issue of ARC
- 14. Process flow chart

1. General

An Airworthiness Review is a thorough audit by a BGA Chief Engineer that if successful results in the issue of an Airworthiness Review Certificate (ARC). The audit includes the aircraft's documentation and a physical review of the aircraft. The review is carried out by BGA nominated staff approved by the BGA Combined Airworthiness Organisation (CAO). The ARC process described in this document applies to Part 21 aircraft issued with a current CAA-issued non-expiring C of A which are registered with the BGA.

2. Reference information

UK regulation (EU) 1321/2014 and its amendments detail the regulatory requirements, including Part-ML.A.903 and ML.A.302(c) Aircraft Maintenance Programme.

3. ARC validity & renewal

The ARC is normally valid for 1 year. The BGA CAO has an approval for and operates an 'uncontrolled' environment, which is designed to meet the needs of clubs and individuals. The owner/operator described in the maintenance program controls the aircrafts airworthiness. Therefore, a BGA ARC cannot be extended. The ARC must be renewed each year by carrying out an airworthiness review. A new ARC must be issued for every renewal.

The arrangement between owners and the BGA CAO is formalised through a Letter of Agreement (LOA) which forms a limited contract. For LOA details, see the members website 'airworthiness' section.

4. Eligible aircraft

Eligible aircraft are Part 21 aircraft issued with a current CAA-issued non-expiring C of A which are registered with the BGA and listed in the BGA scope of approval. If in doubt, contact the BGA office.

Check that the details for the aircraft are correct on the G INFO CAA website including that the aircraft has a current C of A, including that it has not been revoked or cancelled. Note that if the owner ignores repeated requests from the CAA registrations department about insurance or other status checks, the CAA

will revoke or cancel the C of A. Applying for a new C of A will usually require a CAA survey. https://www.caa.co.uk/aircraft-register/g-info/search-g-inf

If the previous ARC has expired by more than 3 months, an application for BGA airworthiness support will be required before the ARC can be issued.

https://members.gliding.co.uk/wp-content/uploads/sites/3/2015/04/BGAAirworthinessSupportApplication.pdf

5. Part 21 aircraft TCDS search

An ARC may only be issued to aircraft on the CAA Part 21 TCDS list. https://www.caa.co.uk/commercial-industry/aircraft/airworthiness/type-certificate-and-type-approval-data-sheets/part-21/approval-of-part-21-sailplanes/

The CAA list has a search function by pressing Control F that brings up a search box. Note that legacy pre-EASA TCDS (eg. the ASK13) will not be found on the website. The very top document in the list is the CAA sailplane product list.

https://www.caa.co.uk/Documents/Download/9066/506d9764-ac69-46f9-8b5c-ee898596e214/3313

If a TC holder changes their TCDS with EASA, it will not automatically change with the CAA until the TC holder applies for with the CAA. Therefore, CAA and EASA TCDS lists can be different. To ensure there is no conflict between EASA and CAA TCDS, compare the UK TCDS list and EASA TCDS list. If a conflict is an issue, please contact the CTO for advice unless already in touch with the TC holder.

By way of example, say DG make a new LS7 Neo winglet and issue a new EASA TCDS that covers the fitting of that winglet, but they do not then update the CAA with the new TCDS. In that case, an ARC for the LS7 with Neo winglet configuration cannot be issued until such time the CAA have approved the amended TCDS.

Link to EASA TCDS list here https://www.easa.europa.eu/en/downloads/136199/en

ONLY issue/certify the ARC to the TCDS on the CAA website - not the EASA list.

6. Where to find the TCDS for Part 21 aircraft that have restricted C of A (with no manufacture support, also known as SAS or orphan aircraft)

The CAA has a dedicated part of the website for restricted C of A (orphan) aircraft. The TCDS can be found here https://www.caa.co.uk/commercial-industry/aircraft/airworthiness/type-certificate-and-type-approval-data-sheets/part-21/specific-airworthiness-specifications/

If the pre-EASA TCDS details for the aircraft are not here, there are lot of these pre-EASA legacy TCDS on the linked from the 'airworthiness' webpage on the BGA members website.

7. Where to find the TCDS for Part 21 aircraft that have a legacy pre-EASA TCDS

At time of writing there are about 109 sailplane types that have TCDS issued before EASA existed and have not been updated with an EASA issued TCDS. These legacy TCDS are currently not on the CAA or EASA websites. But the TCDS number *is* on the CAA website, which helps with a web-search. The BGA website has a lot of these legacy TCDs in the archive (best found using google). Their latest CAA TCDS number is listed on the CAA product list.

https://www.caa.co.uk/Documents/Download/9066/506d9764-ac69-46f9-8b5c-ee898596e214/3313

8. Authorisation to carry out the Airworthiness Review, ARC signatories & currency

BGA inspectors with a 'Chief Engineer' rating are identified by "ARC Signatory" on their inspector certificate. Under Part ML, 'form 4 approval' has been replaced with 'nominated person'.

BGA ARC signatories are authorised to carry out the Airworthiness Review and sign the ARC on behalf of the BGA CAO in line with their inspector privileges. There are no associated ARC privileges outside of the BGA CAO.

To retain legal currency to issue ARCs, the BGA inspector **must have issued an ARC in the previous 12 months**. To regain lost currency, an ARC must be carried out under supervision. Contact the BGA office for further details of who can carry out the supervision.

BGA Chief Engineers may not carry out an airworthiness review on aircraft where they also manage the maintenance. Maintenance management does not include maintenance certification.

If the BGA Chief Engineer is sole owner of an aircraft, they cannot carry out the airworthiness review. The only exception is where the BGA Chief Engineer is not involved with the maintenance management.

9. Airworthiness Review

Before an airworthiness review can be carried out, the aircraft owner/maintenance manager must complete a Maintenance Work Order detailing the requirement. The work order may also include any planned maintenance activity (for example a repair or annual maintenance). Maintenance work orders forms are found on the BGA members website.

The airworthiness review is recorded on the BGA 276. Once the review has been completed, an ARC can be issued. A copy of the ARC (marked 'copy'), the BGA 276 form, and payment must reach the BGA within 5 days (not working days). Regulation requires that the ARC must be registered by the BGA with the CAA within 10 days of ARC issue.

Please note that the airworthiness review is a compliance verification and in-depth review of **all** relevant documents that are listed on the 276. For example, it must be verified that all Airworthiness Directives have been complied with (including non-applicable ADs) and that an in-depth document check is carried out as indicated to verify all aspects of the AD have been embodied as required. ADs must be entered in the logbook. Note that UK CAA ADs as well as State of Design ADs (EASA is now the state of design for all EASA approved products) must be checked.

<u>An example of how the in-depth review is accomplished.</u> Say a required modification is mandated by an AD. The 'chief engineer' would examine the TN/SB modification instructions, verify the instructions have been complied with, check that the correct parts have been used, and check that the AD has been properly recorded in the aircraft documents and logbook (including the pink pages).

10. Completion of BGA 276

<u>Aircraft and owner details.</u> Fill out all relevant fields. If a field is not applicable to the aircraft being reviewed, then enter N/A.

Minor defects (like a self-sustainer that has an unserviceable engine waiting spares) that can be deferred are acceptable. All defects must be listed on a BGA worksheet.

When checking the Aircraft Maintenance Program (AMP) during the ARC, ensure that all repeat ADs and lifed items are documented in the program. Any TC or equipment manufacture recommendations being deviated are signed for by the owner/operator as required.

Ensure all ADs and lifed components (ALI) are entered in the pink pages and repetitive ADs are corrected certified on worksheets.

Ensure any Pilot Owner Maintenance has been correctly recorded.

Certifying the ARC

The ARC issue must be entered in the logbook. Note that a Certificate of Release to Service (CRS) is NOT required as the airworthiness review is not maintenance certification. In addition to name and signature, include the signatories BGA inspector number as the certification is being carried out on behalf of the BGA CAO. The Part-66L licence number is not required.

In cases where the ARC renewal is not carried out at the same time as the annual inspection, the previous annual (within the previous 12 months) must be current to support the ARC renewal. The annual inspection date is entered on the BGA 276.

Care is needed by owners to ensure that not only do they maintain a valid ARC, but also that they comply with the maintenance programme, eg annual maintenance. Note that the annual inspection is recorded on worksheets and logbook. Worksheets must be completed, certified with all associated worksheets and retained in the aircraft records.

11. ARC Dating Protocol

Note that under Part ML the annual maintenance dating protocol no longer allows anticipation of the annual. An owner can extend the annual by 30 days.

It is permissible to anticipate ARC issue by up to 90 days without loss.

ARC issued 90 days or less prior to the expiry of the current ARC:

- The new ARC issue date is from the date the new ARC is issued
- The new ARC expiry date is one year from the expiry date of the current ARC

Expired ARC or ARC issued more than 90 days before the expiry of the current ARC

- The new ARC issue date is from the date the new ARC is issued.
- The new ARC expiry date is one year less one day from the date of physical survey.

Note 1. Where the ARC renewal is anticipated within ninety 90 days prior to expiry of the old ARC, both the document review and physical survey must be carried out within 90 days prior to the current ARC expiry.

Note 2. Where the ARC renewal anticipation is more than 90 days prior to the expiry of the old ARC, both the document review and the aircraft survey must be carried out within the ninety days preceding the issue date.

The above rules set a limit to the latest that an ARC can expire. An ARC can be issued with a sooner expiry date, for example if you wish to keep it aligned with the expiry of the annual. However it will not be possible to reclaim this time on subsequent ARC issues.

Any ARC that does not comply with the dating protocols or ARC issue currency will have to be rejected.

12. Payment

One of the challenges the BGA has with processing the ARC within the required time is lack of payment. It is strongly recommended that ARC signatories do not rely on the owner to pay the ARC fee - if they forget, it causes delays and if not processed within the 10 days requires a new ARC to be issued.

13. Completing the process and issue of ARC

The ARC form 15C template is found on the BGA members website. https://members.gliding.co.uk/library/inspector-information/bga-arc-template/

a. Copy and paste all the details from the GINFO website. The only handwritten entry allowed is the signature.

- b. Airworthiness Review is completed by BGA Chief Engineer / ARC signatory who completes the BGA 276.
- c. BGA ARC template is downloaded from BGA web site after accepting terms and conditions Note 1: a serviceable printer is required. The BGA recommends good quality paper is used for the original ARC for the aircraft owner. Note 2: the format of the ARC must be as per the BGA template and retain the sections that are not used by the BGA.
- d. ARC is produced by the Chief Engineer / ARC signatory, signed and forwarded to the aircraft owner.
- e. A signed second copy of the ARC (Marked COPY) together with the completed BGA 276 is forwarded to the BGA with payment within 5 days. It can be emailed.
- f. BGA checks and updates records and notifies CAA.

14 Flow chart

BGA ARC renewal process flow chart.

