



**GUERNSEY
ADVISORY
CIRCULARS**
(GACs)



GAC 145-1

**USED
COMPONENTS/
PARTS**

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Second Issue

February 2019

Guernsey Advisory Circulars (GACs) are issued to provide advice, guidance and information on standards, practices and procedures necessary to facilitate the application and processing of applications for services related to the Guernsey Aircraft Register.

They are not in themselves law or a regulation but may amplify provisions of the laws and regulations, including the Guernsey Aviation requirements, or provide practical guidance.

The definitive version of GACs is on the States of Guernsey website:

<https://cidca.aero/article/166741/Legislation> which should be viewed to establish the latest issue.

Enquiries regarding the content of this publication should be addressed to the Director of Civil Aviation, Guernsey Airport, Airport Terminal Building, La Villiaze, Forest, Guernsey, GY8 ODS.

Processing of applications will be done by the Guernsey Aircraft Registry, which operates as '2-REG'. For further information consult <http://www.2-reg.com> or send a message to info@2-reg.com.

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Revisions

GAR Issue	Subject
Issue 1	First issue
Issue 2	Second issue <ul style="list-style-type: none">• Included the identification and reporting of misrepresented or unapproved components/ parts;• Notification of misrepresented or unapproved components/ parts;• Disposal of scrap aircraft components/ parts and materials.

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1 - Purpose

The purpose of this Guernsey Advisory Circular (GAC) is to provide information to Maintenance Organisations, Technical Co-ordinators and CAMO's on used components/ parts from serviceable aircraft, aircraft withdrawn from service and aircraft involved in incidents/ accidents and the required release procedures for these components/ parts. Furthermore this GAC provides information on identification, reporting and notification of misrepresented or unapproved components/ parts and disposal of scrap aircraft components/ parts and materials.

2 - Related laws and regulations

This GAC relates to:

- The Air Navigation (Bailiwick of Guernsey) Law, 2012 (ANL), Chapter II.
- Guernsey Aviation Requirements (GAR), sections Part 21 Subpart K, Part 43 article 43.105, Part 145 article 145.59, Part 145 article 145.115 and GAR Part 13.

3 - Definitions

Definitions, in the context of this GAC shall have the meanings listed in GAR Part 1 (Definitions, Abbreviations and Units of Measurement).

4 - Acceptable means of compliance

4.1 Used components/parts removed from serviceable aircraft

Serviceable aircraft components/parts removed from a serviceable aircraft, irrespective of whether the aircraft holds a certificate of airworthiness or not, may be issued with an acceptable release certificate (either an internal release certificate or an authorised release certificate) by an appropriately approved and rated GAR 145 maintenance organisation in accordance with GAR Part 145.115 subject to compliance with the following:

- (a) The donor and recipient aircraft must be on the Guernsey register.
- (b) The donor aircraft must be in an airworthy condition or in a controlled maintenance environment and the continuing airworthiness is managed according to the requirements of GAR 39.

- (c) If an internal release procedure is used the donor and recipient aircraft must be from the same operator's fleet. If an authorised release certificate procedure is used the donor and recipient aircraft may be of a different owner or operator.
- (d) The maintenance organisation should ensure that an appropriately qualified person removes the component/part from the aircraft using approved data.
- (e) The component/part may only be considered eligible if the last flight operation with the component fitted revealed no faults on that component/ part or related system.
- (f) The component/part should be inspected for satisfactory condition including, in particular, damage, corrosion or leakage and compliance with any additional manufacturer's maintenance instructions and the requirements of the aircraft's approved maintenance programme.
- (g) The aircraft records should be reviewed for any unusual events that could affect the serviceability of the component/ part such as involvement in accidents, incidents, heavy landings or lightning strikes. A Guernsey acceptable release certificate should not, in any circumstance, be issued if it is suspected that the component/ part or related system has been subjected to extremes of stress, temperature or immersion, which could affect its operation.
- (h) A maintenance history record to include flight hours/ cycles/ landings as applicable should be available for all used serialised and life limited parts including details of scheduled maintenance requirements derived from the donor aircraft maintenance programme and maintenance planning schedule.
- (i) Compliance shall be established with any continuing airworthiness instructions for applicable modifications and repairs for the used component/ part by incorporating the continuing airworthiness requirements into the recipient's aircraft maintenance programme and maintenance planning schedule.
- (j) The flight hours/ cycles/landings as applicable of any service life limited parts including time since overhaul should be established and the details of

- service life remaining should be transferred to the recipient aircraft records.
- (k) Compliance with known applicable Airworthiness Directives should be established and maintained particularly where non terminating action had previously been taken.
 - (l) Where applicable, mandatory reporting such as CPCP and SSID records should be transferred including any pending actions associated with a modification or supplemental inspection regime.
 - (m) A modification status review should be undertaken of the recipient aircraft and component/ part to ensure eligibility for fitment.
 - (n) Consideration should be given to undertaking a component/ system functionality test.
 - (o) Under no circumstances should a donor aircraft be fitted with an unserviceable component/part in order to make a recipient aircraft serviceable.
 - (p) Components/parts should not be removed for the purpose of storage pending the identification of a suitable recipient aircraft in the case an internal release certificate is issued.

4.2 Used components/parts removed from aircraft withdrawn from service

Serviceable aircraft components/parts removed from an aircraft withdrawn from service, irrespective of whether the aircraft holds a certificate of airworthiness or not, may be issued with an acceptable release certificate (either an internal release certificate or an authorised release certificate) by an appropriately approved and rated GAR 145 maintenance organisation in accordance with GAR Part 145.115 following a satisfactory assessment and subject to compliance with the following:

- (a) As a minimum, the assessment should satisfy the standards set out in section 4.1. 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/ part is to be installed.

- (b) Irrespective of whether the aircraft holds a certificate of airworthiness or not, the organisation responsible for certifying any removed component/ part should satisfy itself that the manner in which the components/ parts were removed and stored are compatible with the standards required by GAR 145.
- (c) 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/ parts are removed and documented in a structured manner in accordance with the appropriate maintenance data and disassembly plan.
- (d) All recorded aircraft defects should be reviewed and the possible effects these may have on both normal and standby functions of removed components/ parts should be considered.
- (e) Dedicated control documentation should 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/ parts found to be unserviceable should be identified as such and quarantined pending a decision on the actions to be taken. Records of the maintenance accomplished to establish serviceability should form part of the component/ parts maintenance history.
- (f) Suitable GAR 145 facilities for the removal and storage of removed components/parts should 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/ parts to be removed, given local environmental conditions, without the benefit of an enclosed facility subsequent disassembly (if required) and storage of the components/ parts should be in accordance with the manufacturer's recommendations.

4.3 Used aircraft components/parts removed from an aircraft involved in an accident or incident

Such components/parts should only be issued with an acceptable release certificate when processed in accordance with paragraph 4.1 and a specific work order including all additional necessary tests and inspections made necessary by the accident or incident. Such a work order may require input from the Type Acceptance Certificate holder or original manufacturer as appropriate. This work order should be referenced to on the accepted release certificate.

4.4 Used components/parts release procedures

Subject to the satisfactory compliance with items above an acceptable release certificate (this can either be an internal release certificate or an authorised release certificate) may be issued and should contain the following information:

- (a) The details pertaining to the donor aircraft (Type, Registration, Serial number etc).
- (b) When the last major maintenance event was carried out and by whom.
- (c) If the component/part is unused, when the component/part was manufactured and by whom with a cross-reference to any original documentation which should be included with the form.
- (d) A list of all airworthiness directives, repairs or modifications known to have been incorporated. If no airworthiness directives, repairs or modifications are incorporated then this should be stated.
- (e) Detail of life used for service life limited parts being any combination of fatigue, overhaul or storage life.
- (f) For any component/part having its own maintenance history record, reference to the particular maintenance history record.
- (g) The location of the donor and recipient aircraft.
- (h) The component/part description, part number and serial number.

- (i) Component/part original release certificate number and the State of Authority if details available.
- (j) Details pertaining to the recipient aircraft (Type, Registration, Serial number etc)
- (k) Remarks (installation requirements, functional testing, adjustment, modification, life limitation, mandatory compliance, inspection, reactivation etc).
- (l) Maintenance manual references.
- (m) The service release certificate shall include the following statement “the work recorded has been carried out in accordance with the Air Navigation (Bailiwick of Guernsey) Law 2012 and in respect of that work the aircraft or component is fit for release to service”.
- (n) The signature of the certifying staff, aircraft maintenance organisation approval or authorisation number and date of entry.

4.5 Identification and reporting of misrepresented or unapproved components/ parts

Misrepresented or unapproved scrap components/ parts and materials should not be received into an active stores inventory. The following are examples of conditions to be alert for when receiving parts:

- (a) Components/ parts showing signs of rework which were purchased as ‘new’;
- (b) Used components/ parts showing signs of unapproved or inappropriate repair;
- (c) Components/ parts with poor workmanship;
- (d) Components/ parts with signs of rework in the area of the part data plate, part number or serial number;
- (e) Used components/ parts lacking verifiable documentation of history and approval;
- (f) Components/ parts with prices that are ‘too good to be true’;

- (g) Questionable part numbers, fraudulent or suspicious TSO, ETSO or FAA PMA markings and/or re-identification, stamp-overs or vibro-etching on the dataplate;
- (h) Components/ parts delivered with photocopied or missing release certificates (ref GAR Part 21 Subpart K);
- (i) Components/ parts with a finish that is inconsistent with industry standards (e.g. discolouration, inconsistencies, resurfacing);
- (j) Components/ parts purchased as new but with release documentation reflecting a status other than new;
- (k) Components/ parts with poor documentation exhibiting incomplete or inconsistent part identity information;
- (l) Intact 'scrap' unsalvageable components/ parts offered in bulk weight for prices higher than for mutilated parts with identical weight and content.

4.6 Notification of misrepresented or unapproved components/ parts

Users of aircraft components/ parts and materials are reminded that suspected misrepresented/unapproved parts should be reported to the Guernsey DCA/ 2-REG, as applicable, through the Mandatory Occurrence Reporting Scheme as defined in GAR Part 13.

To assist in tracing misrepresented/unapproved parts and materials, persons raising an Maintenance Occurrence Report (MOR) should as far as possible provide the following information on their report:

- (a) The name of the suspected unapproved component/ part;
- (b) Part number, or any other number on the component/ part;
- (c) Serial number;
- (d) List the next higher assembly that the suspected unapproved component/ part is assembled into and list the part number, if known;
- (e) Quantity of suspected unapproved components/ parts found or identified;

(f) Make and model number of the aircraft or component that the suspected unapproved part is applicable to;

(g) The identification of the commercial source of the suspected unapproved component/ part. If the part is identified with the Part Manufacturer or Distributor marking this should be quoted;

(h) Describe any pertinent facts relating to the suspected unapproved component/ part and identify where the part may be inspected (provide photos, invoices etc if available);

(i) The date the suspected unapproved component/ part was discovered;

(j) Name and address in full or the location where the suspected unapproved component/ part(s) was discovered.

4.6 Disposal of scrap aircraft components/ parts and materials

Disposed scrap components/ parts and materials may, in some instances, reappear for sale in the serviceable components/ parts inventories within the aviation community. Such misrepresentation of the status of components/ parts and material and the practice of making these items appear serviceable could result in the use of non-conforming components/ parts and material. The owner's/operator's permission should be sought prior to the disposal of scrap components/ parts and materials. Caution should therefore be exercised to ensure that the following types of components/ parts and materials are disposed of in a controlled manner that does not allow them to be returned to service:

(a) Components/ parts with non-repairable defects.

(b) Components/ parts that are outside the specifications set by the approved design and cannot be brought into conformance with the applicable specifications.

(c) Components/ parts and materials where further processing or rework cannot make them eligible for certification.

(d) Components/ parts subjected to rework or unacceptable modification that is irreversible.

(e) Life-limited parts that have reached or exceeded their life limits or have missing or incomplete records.

(f) Principal Structural Elements removed from a high-cycle aircraft for which conformity cannot be accomplished by complying with the mandatory requirements applicable to ageing aircraft.

Persons disposing of scrap parts and material should, when appropriate, mutilate those parts and materials prior to disposal. Mutilation should be such that the parts and materials become unusable for their original intended use. It should also not be possible for them to be reworked or camouflaged to provide the appearance of being serviceable for example by re-plating, shortening and re-threading long bolts, welding, straightening, machining, cleaning, polishing or repainting.

Mutilation may be accomplished by one or a combination of the following procedures, but not limited to:

- (a) Grinding;
- (b) Burning;
- (c) Removal of a major lug or other integral feature;
- (d) Permanent distortion of parts;
- (e) Cutting a hole with cutting torch or saw;
- (f) Melting;
- (g) Sawing into many small pieces.

The following are examples of mutilation that are often less successful since they may not be consistently effective:

- (a) Stamping (such as a stamped 'R' on the part);
- (b) Spraying with paint;
- (c) Hammer marks;
- (d) Identification by tag or markings;

(e) Drilling small holes;

(f) Sawing in two pieces since it may be possible to attempt to restore parts cut in two pieces in such a manner that the mutilation proves difficult to detect.

For the disposal of scrap aircraft parts and materials for legitimate non-flight uses, such as training and education, research and development, or non-aviation applications mutilation is not appropriate and the following methods should be used to prevent misrepresentation:

(a) Permanently marking or stamping the parts, subparts and material as 'NOT SERVICEABLE'. Ink stamping is not an acceptable method;

(b) Removing original part number identification;

(c) Removing the data plate;

(d) Maintaining a tracking system, by serial number or other individualised data, to record transferred scrap aircraft parts and material, and

(e) Include written instructions concerning disposition and disposal of such parts and materials in any agreement or contract transferring the parts and materials.

END