



ADVISORY CIRCULAR

AC Reference N^o: AC-AW/001

AC approval date: 5th AUG 2021

SUBJECT: DISPOSITION OF UNSALVAGEABLE PARTS & MATERIALS

EFFECTIVE DATE: 6th AUGUST 2021

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APPROVAL SIGNATURE: _____

HON. MOSES Y. KOLLIE

DIRECTOR GENERAL

SECTION 1 POLICY & GENERAL INFORMATION

1.1 PURPOSE

- (a) This advisory circular (AC) provides information and guidance to persons involved in the sale, maintenance or disposal of aircraft parts.
- (b) It provides information and guidance to prevent unsalvageable aircraft parts and materials from being sold as serviceable parts and materials.
- (c) It provides one means of complying with procedures for control of rejected parts and materials.

1.2 STATUS OF THIS ADVISORY CIRCULAR

This AC is an original issuance.

1.3 APPLICABILITY

- (a) This advisory circular is applicable to all aircraft registered in Liberia and the parts that are installed on those aircraft.
- (b) It is also applicable to the performance standards for persons performing maintenance and signing maintenance release for those parts.

1.4 RELATED REGULATIONS

- (a) The following regulations are directly applicable to the guidance contained in this advisory circular—
 - (1) LCARS Part 5, Aircraft and Component Original Certificate
 - (2) LCARS Part 5, Continuing Airworthiness of Aircraft

1.5 RELATED PUBLICATIONS

- (a) For further information on this topic, individuals, organizations and other entities are invited to consult the following publications—
 - (1) Liberia Civil Aviation Authority (LCAA)
 - (i) AC-AW/004, Eligibility & Traceability of Replacement Parts. copies may be obtained from LCAA
 - (ii) AC-AW/005, Handling of Suspected Unapproved Parts
 - (iii) Annex 8, Airworthiness of Aircraft

- (2) International Civil Aviation Organization (ICAO)
 - (i) Document 9760, Airworthiness Manual

Copies may be obtained from
Document Sales Unit, ICAO, 999
University Street, Montreal, Quebec,
Canada H3C 5H7

1.6 DEFINITIONS & ACRONYMS

- (a) The following definitions apply to this advisory circular—
 - (1) **New.** A product, accessory, part, or material that has no operating time or cycles.
 - (2) **Surplus.** This term is used to describe a product, assembly, part, or material that has been released as surplus by the military, manufacturers, owners/operators, repair facilities, or any other parts supplier. These products should show traceability to an approved manufacturing procedure.
 - (3) **Overhauled.** This term is used to describe an airframe, aircraft engine, propeller, appliance, or component part using methods, techniques, and practices acceptable to the LCAA, which has undergone the following—
 - (i) Has been disassembled, cleaned, inspected, repaired when necessary, and reassembled to the extent possible.
 - (ii) Has been tested in accordance with approved standards and technical data, or current standards and technical data acceptable to the LCAA (i.e., manufacturer's data), which have been developed and documented by the holder of one of the following—
 - (A) TC.
 - (B) Supplemental Type Certificate (STC), or material, part, process, or appliance approval.
 - (C) PMA.
 - (4) **Rebuilt.** This term is used to describe an aircraft, airframe, aircraft engine, propeller, or appliance, using new or used parts that conform to new part tolerances and limits or to approved oversized or undersized dimensions that has undergone the following—
 - (i) Has been disassembled, cleaned, inspected, repaired as necessary, and reassembled to the extent possible.
 - (ii) Has been tested to the same tolerances and limits as a new item.
 - (5) **Appropriately Certificated Person.** As related to return to service after maintenance, preventative maintenance, rebuilding, or modification, can include the holder of a—

- (i) **Mechanic certificate.** May perform maintenance, preventative maintenance, and modifications as provided in LCARS Part 5.

 - (ii) **Inspection authorization.** May inspect and approve for return to service any aircraft or related part or appliance (except aircraft maintained in accordance with a continuous airworthiness program under LCARS Part 09 after a major repair or modification as defined by the regulations, if the work was done in accordance with technical data approved by LCARS. Perform an annual, or supervise a progressive inspection according to LCARS Part 5.

 - (iii) **Approved Maintenance Organization** under LCARS Part 5, may perform maintenance, preventative maintenance, or modifications as provided in that regulation.
- (b) The following acronyms are used in this advisory circular:
- (1) **AD** – Airworthiness Directive
 - (2) **AMO** – Approved Maintenance Organization
 - (3) **C of A** – Certificate of Airworthiness
 - (4) **C of R** – Certificate of Registration
 - (5) **ICAO** – International Civil Aviation Organization
 - (6) **PAH** – Production Approval Holder
 - (7) **PC** – Production Certificate
 - (8) **PMA** – Part Manufacturer Approval
 - (9) **STC** – Aircraft Supplemental Type Certificate
 - (10) **SUP** – Suspected Unapproved Part
 - (11) **TC** – Aircraft Type Certificate

SECTION 2: INFORMATION RELEVANT TO UNSALVAGEABLE PARTS

2.1 BACKGROUND

- (a) It is common practice for possessors of aircraft parts to dispose of unsalvageable parts and materials by selling, discarding, or transferring such items.

- (b) In some instances, these items have reappeared for sale and in the active parts inventories of the aviation community.

- (c) Misrepresentation of the status of parts and material and the practice of making such items appear serviceable has resulted in the use of unsalvageable nonconforming parts and materials.

2.2 TYPES OF PARTS & MATERIALS THAT MAY BE MISREPRESENTED

- (a) Persons disposing of unsalvageable aircraft parts and materials should consider the possibility of such parts and materials later being misrepresented and sold as serviceable parts and materials.
- (b) Caution should be exercised to ensure that the following types of parts and materials are disposed of in a manner that does not allow them to be returned to service—
 - (1) Parts with non-repairable defects, whether visible or not to the naked eye.
 - (2) Parts that are not within the specifications set forth by the approved design, and cannot be brought into conformance with applicable specifications.
 - (3) Parts and materials for which further processing or rework cannot make them eligible for certification under a recognized certificate holder's system.
 - (4) Parts subjected to unacceptable modification or rework that is irreversible.
 - (5) Life-limited parts that have reached or exceeded their life limits, or have missing or incomplete records.
 - (6) Parts that cannot be returned to airworthy condition due to exposure to extreme forces or heat.
 - (7) Principal structural elements (PSE) removed from a high cycle aircraft for which conformity cannot be accomplished by complying with the applicable aging aircraft airworthiness directives.

2.3 PREVENTING MISREPRESENTATION OF UNSALVAGEABLE PARTS

- (a) Persons disposing of unsalvageable aircraft parts and materials should, when appropriate, mutilate those parts and materials prior to release.
- (b) Mutilation should be accomplished in such a manner that the parts become unusable for their original intended use;
- (c) Mutilated parts should not be able to be reworked or camouflaged to provide the appearance of being serviceable, such as by re-plating, shortening and rethreading long bolts, welding, straightening, machining, cleaning, polishing, or repainting.
 - (1) Mutilation may be accomplished by one or a combination of the following procedures, but is not limited to—
 - (i) Grinding.
 - (ii) Burning.

- (iii) Removal of a major lug or other integral feature.
 - (iv) Permanent distortion of parts;
 - (v) Cutting a hole with cutting torch or saw;
 - (vi) Melting;

 - (vii) Sawing into many small pieces
- (2) The following procedures are examples of mutilation that are often less successful because they may not be consistently effective—
- (i) Stamping (such as a stamped "R" on a part);
 - (ii) Spraying with paint;
 - (iii) Hammer marks; (d) Identification by tag or markings;
 - (iv) Drilling small holes;
 - (v) Sawing in two pieces

Persons who rework unsalvageable parts and materials may be highly skilled technicians and have been known to re-join parts cut in two pieces in such a manner that the mutilation proves difficult to detect.