



**CIVIL AVIATION AUTHORITY  
OF VIETNAM**

# **ADVISORY CIRCULAR AC-04-009**

## **GUIDANCE FOR USAGE OF PARTS REMOVED FROM AN AIRCRAFT NO LONGER IN SERVICE.**

### **SECTION 1 POLICY & GENERAL INFORMATION**

#### **1.1 PURPOSE**

This Advisory Circular (AC) is issued to provide guidance and information on the proper usage of aircraft parts removed from an aircraft withdrawn from service or parts recovered from an aircraft involved in an accident, and intended to be returned to service.

#### **1.2 STATUS OF THIS AC**

This is the original issue of the AC

#### **1.3 BACKGROUND**

In the aviation industry, owners of aircraft parts may be involved in the usage of parts removed from an aircraft no longer in service or parts recovered from an aircraft involved in an accident. This AC provides information and guidance to persons and organisations involved in the maintenance, distribution, sale, or control of such aircraft parts. The need to ensure that parts installed on an aircraft meet the design specification and are serviceable is self-evident. It is important that the part removal process be planned and controlled in a manner as close as possible to that adopted for routine maintenance tasks on in-service aircraft. The installation of any part failing to meet the intended design requirements degrades those requirements, leading to a degradation of airworthiness. Caution must be exercised where these parts, although serviceable at the time the aircraft was placed on storage, may have been affected adversely by storage conditions, including environmental factors or by the length of storage.

#### **1.4 APPLICABILITY**

The guidance provided in this advisory circular is applicable to Viet Nam-registered aircraft and the personnel and organizations involved in the maintenance, distribution, sale or control of such aircraft parts.

#### **1.5 RELATED REGULATIONS**

This advisory circular provides guidance regarding airworthiness reliability that is applicable to compliance with—

- VAR Part 4, Continuing Airworthiness.
- VAR Part 5, Approved Aircraft Maintenance Organizations

- Advisory Circulars are intended to provide advice and guidance to illustrate a means, but not necessarily the only means, of complying with the Regulations, or to explain certain regulatory requirements by providing informative, interpretative and explanatory material.
- Where an AC is referred to in a 'Note' below the regulation, the AC remains as guidance material,
- ACs should always be read in conjunction with the referenced regulations.

## 1.6 RELATED PUBLICATIONS

The following publications also contain pertinent technical background regarding repairs and modifications—

- 1) Civil Aviation Authority of Viet Nam (CAAV)
  - ◆ Airworthiness Inspector Manual
- 2) CAO Annex 6 Part I, II & III
- 3) Document 9760, Airworthiness Manual

The CAAV Airworthiness Division can provide access to these reference documents.

### 1.6.1 Parts Removed From An Aircraft withdrawn from service

#### Prerequisites

- A. Removing parts from an aircraft even no longer in service is to be considered as a maintenance activity and shall be accomplished under the control of a maintenance organization approved under Vietnam Aviation Regulation Part 5 holding the appropriate rating(s).
- B. It's important that the part or equipment removal process be planned and controlled in a manner as close as possible to that adopted for routine maintenance tasks on in-service aircraft.
- C. The part may only be considered eligible if the last flight operation with the part fitted revealed no faults on that part or related system.
- D. The aircraft records and maintenance history record shall be reviewed for any unusual events that could affect the serviceability of the part such as but not limited to involvement in accidents, incidents, heavy landings, lightning strikes or any other conditions from extremes of stress, temperature or immersion.
- E. Compliance with known applicable Airworthiness Directives shall be established and maintained.
- F. 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 shall be recorded.
- G. Consideration shall be given to undertaking a component/system functionality test.

#### PARTS REMOVAL AND INSPECTION

- A. Suitable facilities for the removal and storage of removed components are to 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 to be removed, given local environmental conditions, without the benefit of an enclosed facility subsequent disassembly (if required) and storage of the components should be in accordance with the manufacturer's recommendations.

- B. The disassembly is to be carried out by an approved maintenance organization and appropriately qualified personnel under the supervision of certifying staff, who will ensure that the aircraft components are removed and documented in a structured manner in accordance with the appropriate maintenance data.



Caution must be exercised where these parts or equipment's, although serviceable at the time the aircraft was placed on storage, may have been affected adversely by storage conditions, including environmental factors or by the length of storage. The part may exhibit satisfactorily external appearance, but internal conditions or degradation may not be visible through normal visual inspection.

- C. Removal of part or equipment shall be carried out in accordance with the approved maintenance technical data of the aircraft TC holder or the OEM and by using the required tools mentioned in these technical data.
- D. Inspect the part or the equipment in accordance with the approved technical data mentioned

in paragraph B.

- E. Part or equipment removed from aircraft which has doubtful maintenance records, must undergo recertification to meet the manufacturers recommendations before returning to service.

## **PARTS CERTIFICATION AND STORAGE**

- A. Serviceable aircraft components removed from a Vietnamese registered aircraft withdrawn from service may be issued a maintenance release entry in accordance with VAR Part 4.107 only by a maintenance organization approved under VAR Part 5 subject to compliance with satisfactory evidences of serviceability defined in paragraphs 2.1 and 2.2 of this AC and any additional inspections or maintenance deemed necessary to recover the airworthy condition of the part or equipment has been satisfactory performed and documented.
- B. The part must be properly identified, tagged.
- C. Serviceable part or equipment shall be stored in a controlled environment that prevents deterioration or damage and the manufacturer's recommended storage procedures shall be observed.

### 1.6.2

## **1.6.2 Caution And Considerations On Parts Recovered From An Aircraft Involved In An Accident**

In the case of a part or equipment that could be considered to be removed from an aircraft involved in an accident and being installed on another airworthy aircraft, in addition to the requirements described in section 2 of this AC, the following warning must be observed:

- D. When an aircraft has been involved in an accident, the title to the salvage may pass from the insured owner to the other person (e.g. aircraft insurers) and this salvage may be offered for sale either complete or as separate aircraft item in an "as is, where is" condition. Though such items may not manifest any visual evidence of damage, distortion or change of characteristics, a serious airworthiness hazard could result from their use if special precautions are not taken. While some items may be totally unaffected by the accident or incident which caused the aircraft to be declared as salvage, it is essential to obtain clear evidence that this is the case. If such evidence cannot be obtained, the item shall not be returned to service.
- E. Before removal, overhaul and reinstallation can be considered, all such part and equipment must therefore be subject to competent assessment and inspection in the light of adequate knowledge of the circumstances of the accident, subsequent storage and transport conditions, and with evidence of previous operational history obtained from valid airworthiness records. Confirmation of this assessment in the form of an airworthiness release is essential.
- F. In particular, if a crash load is sufficient to take any part above its proof strength, residual strains may remain which could reduce the effective strength of the item or otherwise impair its functions. Loads higher than this may cause the item to crack, with an even more dangerous potential. Further, a reduction in strength may be caused by virtue of the change of a material's characteristics following overheat from a fire. It is therefore of the utmost importance to establish that the item is neither cracked, distorted or overheated. The degree of distortion may be difficult to assess if the precise original dimensions are not known, in which case there is no option but to reject the item. Any suggestion of overheating would be cause for a laboratory investigation into significant change of material properties.

## **1.7 Documentation and Identification.**

- 1) Ensure proper documentation of the parts, including their origin, maintenance history, and any relevant certification.
- 2) Clearly label and identify each part with a unique serial number or other traceable information

## **1.8 Removal and Inspection.**

- 1) Parts should be removed by certified and authorized personnel.
- 2) Conduct a thorough inspection of the removed parts to assess their condition and determine if they meet airworthiness standards.

## **1.9 Tagging and Certification**

- 1) Tag each removed part with information such as part number, serial number, condition, and the reason for removal.
- 2) Certify the part as airworthy or non-airworthy based on the inspection results.

## **1.10 Record Keeping.**

Maintain detailed records of the removal process, including documentation of inspections, certifications, and any repairs or modifications made.

### **1.11 Storage.**

- 1) Store the removed parts in a controlled environment that prevents deterioration or damage.
- 2) Implement proper storage procedures to ensure the parts remain in a serviceable condition.

### **1.12 Notification to Regulatory Authorities.**

- 1) Notify the relevant aviation authorities about the removal of the aircraft from service and the status of its parts.
- 2) Provide any required documentation or reports to demonstrate compliance with regulations.

### **1.13 Disposition of Parts:**

- 1) Determine the intended use of the removed parts, whether for resale, repair, or scrap.
- 2) Ensure compliance with regulations regarding the sale and distribution of aircraft parts.

### **1.14 Quality Assurance and Certification:**

- 1) If the parts are intended for reuse, ensure they undergo necessary quality assurance processes and obtain the required certifications.
- 2) Follow established guidelines for the repair and overhaul of components.

### **1.15 Traceability:**

Maintain traceability of parts by documenting their movement, usage, and any changes in ownership or status.

### **1.16 Compliance with Applicable Standards:**

Adhere to industry standards and regulations, such as those outlined by aviation authorities and international organizations.

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