



AAC No. 4 of 2003 R1

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GOVERNMENT OF INDIA
CIVIL AVIATION DEPARTMENT
DIRECTOR GENERAL OF CIVIL AVIATION

AIRWORTHINESS ADVISORY CIRCULAR

**SUBJECT: Return to Service of Aircraft items- Recovered from the aircraft
involved in Accidents/Incidents**

1. INTRODUCTION

- 1.1 DGCA receives request at times seeking permission for use of aircraft instrument/ equipment from the aircraft, which has been involved in an accident/incident. 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 without special precautions being taken as detailed in the AAC.
- 1.2 Para 2.9 of AMC No. 02 to 145.A.50 (d) Certificate of Maintenance provides for the detailed requirement for certification of aircraft items recovered from the aircraft involved in accident/incident.
- 1.3 This Airworthiness Advisory Circular (AAC) provides information and the guidance of establishing the acceptability of aircraft items recovered from the aircraft involved in an accident/incident and states the conditions to be met before such items may be returned to service.

2. ESTABLISHING THE ORIGINS OF RECOVERED ITEMS

- 2.1 When an aircraft has been involved in an accident/incident, the title to the salvage may pass from the insured owner to 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. While some items may be totally unaffected by the accident/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 may not be returned to service.
- 2.2 All such items must therefore be subjected to airworthiness assessment and inspection by a competent person/agency 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, before overhaul and re-installation can be considered. Conformation of this assessment in the form of an airworthiness release is essential.

- 2.3 In particular, if the crash load is sufficient to take any part above its proof strength, the residual strain may remain which may reduce the effective strength of the item or otherwise impair its functioning. Loads higher than this may of course crack the item, with an even more dangerous potential. Further, a reduction in the strength may be caused by virtue of change of a materials characteristic following overheat from a fire. It is therefore of the utmost important to establish that the items neither cracked, distorted nor 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 evidence of overheating would call for a laboratory investigation into significant change of material properties.
- 2.4 The standard procedure appropriate to items removed for overhaul following service life may not therefore be considered sufficient for the items from the salvage aircraft. If the information in the manufacturer manual or other technical publication is insufficient to deal with the situation detailed above then the TC Holder/ manufacture must be consulted for guidance.

3. INFORMATION REQUIRED FROM AVIATION INSURERS

- 3.1 Aviation insurers and other persons who obtain title to salvage parts may supply to salvage purchasers the details of the accident/incident leading to aircraft or aircraft item, being declared as salvage. It is also common practice for aviation insurer to pass over the airworthiness records to the salvage purchaser. Whilst such information and records are an essential part of the assessment, where return to service is considered, they are not a guarantee that the item is acceptable for re-installation.
- 3.2 No operator should use any item/equipment of the aircraft, which has been involved in an accident/incident without observing the above detailed procedures and the permission of the DGCA Headquarters. The operator should forward their request seeking permission for use of item/equipment from such aircraft through respective regional office ensuring the above procedure.

Sd/-
(K. P. Srivastava)
Deputy Director General of Civil Aviation
For Director General of Civil Aviation