



**CIVIL AVIATION AUTHORITY OF SRI LANKA
AVIATION SAFETY NOTICE**

ASN No 120	Ref No: AWS/2010/02	File Ref: AW/20/2/2
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- Recipients : 1) Holders of Air Operator Certificates issued by DGCA
2) Prospective applicants who seek approval to establish an Approved Maintenance Organization
3) Continuing Airworthiness Management Organizations
4) Private Operators
5) Flying Training Organizations
- 01.Subject : **Authenticity and Serviceability of Aircraft Parts**
- 02.Nature : Compulsory
- 03.Issue no : 01
- 04.Status : New
05. Effective date : With immediate effect
06. Validity : Until Further Notice
- 07.Contact person : For more details / clarifications/ about this ASN please contact Deputy Director (Airworthiness) Civil Aviation Authority, No.64, Galle Road, Colombo 03, Sri Lanka. Telephone: +94 11 2391305.E-mail:ddaw@caa.lk
- 08.Availability : A copy of this document is available on web site- **www.caa.lk** and the technical library of Civil Aviation Authority. Copies can be collected at reproduction cost from the library.
- 09.Applicability : All Aircraft engaged in Commercial Air Transport Operations in Sri Lanka Airspace.
- 10.Comments : Comments (if any) on the contents of this Aviation Safety Notice (ASN) may be forwarded to the contact person. However the Aviation Safety Notice will come into effect on the date shown therein notwithstanding any objection or comment made by any person or party unless and until an amendment to the Aviation Safety Notice is issued afresh by the Director General of Civil Aviation.

11. Notice : Any Aircraft to be operated into and out of Sri Lanka including foreign registered aircraft shall confirm to the requirements specified in the attachment hereto.
12. History of Revision : Not applicable
13. Related ASNs : ASN 14, 85 & 94
14. Action Required : For strict compliance of the contents in the attachment by all aircraft in the Sri Lanka airspace.
15. Check list : List of current ASN nos. are as follows

ASN No	Issue No	Date of Applicability	Remarks
ASN002	01	10.03.2000	nil
ASN003	01	18.08.2000	nil
ASN004	01	13.02.2001	nil
ASN005	01	26.03.2001	nil
ASN007	01	15.09.2001	nil
ASN008	02	16.11.2006	Replaced ASN no 008 issue no 01
ASN009	01	18.02.2002	nil
ASN010	01	18.02.2002	nil
ASN011	01	18.02.2002	nil
ASN012	01	18.02.2002	nil
ASN013	01	08.02.2002	nil
ASN014	01	01.03.2002	nil
ASN015	01	01.03.2002	nil
ASN016	01	01.03.2002	nil
ASN017	02	10.03.2005	Replaced ASN no 017 issue no 01
ASN018	01	20.03.2002	nil
ASN019	01	01.04.2002	nil
ASN021	01	01.04.2002	nil
ASN022	01	08.04.2002	nil
ASN023	01	01.06.2002	Replaced ASN no 003
ASN024	01	02.09.2002	nil
ASN025	02	15.10.2002	Replaced ASN no 001
ASN026	01	15.10.2002	nil
ASN027	01	20.12.2002	nil
ASN028	01	12.03.2003	nil
ASN029	01	21.03.2002	nil
ASN030	01	10.07.2002	nil
ASN031	01	15.07.2003	Replaced ASN no 006
ASN032	01	25.07.2003	nil
ASN033	02	25.08.2005	Replaced ASN no 033 issue no 01
ASN034	01	11.09.2003	nil
ASN035	01	12.09.2003	nil
ASN036	01	12.09.2003	nil
ASN037	01	13.10.2003	nil
ASN038	02	30.06.2010	Replaced ASN no 038 issue no 01
ASN039	04	19.08.2008	Replaced ASN no 039 issue no 03
ASN040	01	07.06.2004	nil
ASN041	01	16.06.2004	nil
ASN042	06	10.06.2010	Replaced ASN no 042 issue no 05
ASN043	02	12.08.2004	Amendment to ASN no 013
ASN044	03	24.05.2010	Replaced ASN no 044 issue no 02
ASN045	02	05.01.2007	Replaced ASN no 045 issue no 01
ASN046	03	10.06.2010	Replaced ASN no 046 issue no 02

ASN047	04	24.05.2010	Replaced ASN no 047 issue no 03
ASN048	02	05.01.2007	Replaced ASN no 048 issue no 01
ASN049	01	20.09.2004	nil
ASN051	02	10.06.2010	Replaced ASN no 051 issue no 01
ASN052	01	20.09.2004	nil
ASN053	05	10.06.2010	Replaced ASN no 053 issue no 04
ASN054	04	15.12.2009	Replaced ASN no 054 issue no 03
ASN055	04	17.07.2009	Replaced ASN no 055 issue no 03
ASN056	02	20.07.2009	Replaced ASN no 056 issue no 01
ASN057	02	01.10.2009	Replaced ASN no 057 issue no 01
ASN058	03	21.07.2009	Replaced ASN no 058 issue no 02
ASN059	02	16.12.2009	Replaced ASN no 059 issue no 01
ASN060	02	05.08.2005	Replaced Page no 01 of the attachment to the ASN no 060 issue no 01
ASN061	02	05.08.2005	Replaced Page no 01 of the attachment to the ASN no 061 issue no 01
ASN062	01	01.03.2005	nil
ASN063	01	20.12.2004	nil
ASN065	01	06.04.2005	nil
ASN066	01	16.05.2005	nil
ASN067	01	16.05.2005	nil
ASN068	01	18.05.2005	nil
ASN069	01	18.05.2005	nil
ASN070	01	18.05.2005	nil
ASN071	01	18.05.2005	nil
ASN072	01	19.05.2005	nil
ASN073	01	19.05.2005	nil
ASN074	01	19.05.2005	nil
ASN075	01	19.05.2005	nil
ASN076	01	16.06.2005	nil
ASN077	01	08.08.2005	nil
ASN078	01	21.12.2005	nil
ASN079	01	16.09.2005	nil
ASN080	02	01.07.2010	Replaced ASN no 080 issue No. 01
ASN081	05	10.06.2010	Replaced ASN no 081 issue No. 04
ASN082	01	23.11.2005	nil
ASN083	01	01.12.2005	nil
ASN084	01	16.12.2005	nil
ASN085	01	05.01.2006	nil
ASN086	02	02.05.2008	Replaced ASN no 086,087,088
ASN087	01	06.04.2006	nil
ASN088	01	06.04.2006	nil
ASN089	01	10.05.2006	nil
ASN090	03	02.12.2009	Replaced ASN no 090 issue No. 02
ASN091	02	24.03.2008	Replaced ASN no 091 issue No. 01
ASN092	01	09.11.2007	nil
ASN093	01	26.05.2008	nil
ASN094	01	02.06.2006	nil
ASN095	01	25.09.2006	nil
ASN096	01	11.09.2007	nil
ASN097	02	20.01.2010	Replaced ASN no 097 issue No. 01
ASN098	01	04.04.2007	nil
ASN099	02	25.05.2010	Replaced ASN no 099 issue No. 01
ASN100	03	08.06.2010	Replaced ASN no 100 issue No. 02
ASN101	01	28.01.2008	nil
ASN 102	01	04.03.2008	nil
ASN 103	01	01.08.2008	nil
ASN 104	01	28.08.2008	nil
ASN 105	01	07.08.2008	nil
ASN 106	01	03.12.2008	nil

ASN 107	01	12.01.2009	nil
ASN 108	01	20.05.2009	nil
ASN 109	01	07.09.2009	nil
ASN 110	01	08.09.2009	nil
ASN 111	01	25.09.2009	nil
ASN 112	01	22.02.2010	nil
ASN 113	01	03.03.2010	nil
ASN 114	01	04.03.2010	nil
ASN 115	01	06.04.2010	nil
ASN 116	01	06.04.2010	nil
ASN 117	01	21.05.2010	nil
ASN 118	01	24.05.2010	nil
ASN 119	01	22.06.2010	nil
ASN 120	01	02.07.2010	nil

H M C Nimalsiri
Director General of Civil Aviation
& Chief Executive Officer

Civil Aviation Authority of Sri Lanka,
No. 64, Supreme Building
Galle Road, Colombo 03.
Telephone: 94 11 2433213, Fax: 94 11 2440231
E-mail: sldgca@caa.lk



AUTHENTICITY AND SERVICEABILITY OF AIRCRAFT PARTS

1. INTRODUCTION

- 1.1 ASN 14 – Service Difficulty Reporting (SDR) Programme, ASN 85-Requirements for the establishment of facilities for maintenance of aircraft registered in Sri Lanka and ASN 94- Requirement for the establishment of an approved Maintenance Organisation, lays down requirements on identifying, reporting, disposition and investigation of Unapproved / Suspected Parts. Since it is a basic requirement in aviation maintenance that all materials used in those parts of an aircraft which are essential for its safe operation shall conform to approved specifications, this ASN is issued for the guidance of industry for establishing the authenticity and serviceability of aircraft parts. It also describes, in details, the approved and unapproved parts, supporting documents for approved parts, precautions to prevent inadvertent acceptance of unapproved parts and reporting the same if received, means to use aircraft parts removed from unserviceable aircraft and disposal of scrapped parts.
- 1.2 The need to ensure that parts installed on an aircraft meet the design specification and are serviceable is self-evident. The installation of any part failing to meet the intended design requirements degrades those requirements, leading to a degradation of airworthiness. Every part fitted to aircraft should carry a release to service certificate. The parts which are not supported by CRs are considered not meeting the designed specification and are unairworthy.

Note : CAA SL accepts aircraft spare parts supported by EASA Form 1 or FAA Form 8130 – 3 or any other aviation overhaul organization issued CRs with approval from CAA-SL which is on part by part basis.

- 1.3 It is essential that purposes for continuing airworthiness a system of control exists which ensures that only parts meeting the approved design data applicable to a particular aircraft are installed on that aircraft. This ASN is in conformance with Volume II of the ICAO Document 9760 – Airworthiness Manual and provides guidance for the establishment of such a system.

2. APPROVED PARTS

- 2.1 An approved part is one meeting approved design data applicable to that part and which has been manufactured and subsequently maintained in accordance with the requirements stipulated for the purpose by the manufacture on the approved of state of design.

Note : Parts approved pursuant to 2.1 are eligible for installation on a specific aircraft if and only if they also meet the approved design data applicable to the particular aircraft they are to be installed on. For example, a seat designed and approved for 9 g forward loads is not eligible for installation on an aircraft which is required to have a seat that is dynamically tested for 16g.

- 2.2 Standard parts such as fasteners are considered as approved parts when they are in accordance with an approved or accepted standard and when referenced in the type design of the particular aircraft.

3. UNAPPROVED PARTS

- 3.1 Parts not meeting the criteria described in 2.1 and 2.2 are considered to be unapproved. Unapproved parts also include those parts also include those parts improperly returned to service, for example
- a) parts supplied directly to the user by a subcontractor not entitled to do so.
 - b) parts maintained or approved for return to service by a person or organization not approved to do so;
 - c) parts not maintained in accordance with the requirements of the applicable approved data; and
 - d) parts having reached their life limit, including, if applicable, any shelf-life limit.

4. SUPPORTING DOCUMENTATION

- 4.1 A documentation process providing written evidence of the acceptability of a part is an essential element of any system designed to ensure that only approved parts are installed on an aircraft. Such a process is intended to provide all relevant information, concerning the part to which it refers, sufficient to enable a potential installer to readily ascertain its status.
- 4.2 Such documents (for example the FAA Form 8130-3 EASA Form One) will contain information relating to :
- a.) the authority under which it is issued;
 - b.) reference identification for the purposes of traceability;
 - c.) name, address and approval reference of the issuing organization;
 - d.) work order, contract or invoice number;
 - e.) quantity, description, part number and, if applicable, serial number of the part;
 - f.) relevant information concerning any life limitations, compliance or noncompliance with any airworthiness directives, etc.;
 - g.) the signature and approval reference of the person issuing the document; and
 - h.) whether the part is now or used
- 4.3 Any part not accompanied by the appropriate documentation would be considered to be unapproved

5. PRECAUTIONS TO PREVENT THE INADVERTENT ACCEPTANCE OF UNAPPROVED PARTS

- 5.1 Documentary evidence of compliance with an approved process will not in itself provide a guarantee against the installation of unapproved parts if the original supplier of such parts knowingly provides false information or otherwise sets out to deceive.

- 5.2 It is always necessary to have secondary defenses in place designed to give early warning of unapproved parts prior to their release for fitment. The primary defense in such cases is a strong, well-informed and alert parts ordering and receiving system which, through auditing and reports, establishes a level of confidence in its parts suppliers and which :
- a) ensures a continual correlation between parts ordered and parts received;
 - b) is alert to any unauthorized alterations to supporting documentation and to any inability of the supplier to supply the required documentation;
 - c) is aware if a quoted price for the part is significantly lower than that quoted by other suppliers;
 - d) is aware that delivery times are significantly shorter than those quoted by other suppliers; and
 - e) is aware of parts packaging methods used by approved parts manufacturers, maintenance organizations and distributors and can detect deviations from these methods.
- 5.3 Organizations, particularly approved maintenance organizations and operators, should ensure that all staff who have routine contact with parts, including especially buyers, stores staff, mechanics and certifying staff, are fully aware of the dangers posed by unapproved parts and also the likely sources. Ample warning should be given to such staff about accessing any unapproved parts database. Approved maintenance organizations and operators will also need to ensure that their parts suppliers are fully integrated into the reporting network, and audits will be necessary among staff at intervals to ensure that all remain vigilant to the problem.

6. UNAPPROVED PARTS REPORTING

- 6.1 System used by end users, to report to the Manufacturer / Type Certificate holders and CAASL, are intended to provide widespread warning of the detection of unapproved parts so that operators of similar equipment can be made aware as soon as possible. In view of the likely random appearance of unapproved parts, access to a reporting system must be easy and available at all reasonable times. It follows that publicity for the reporting system (and the programmes generally) should be widespread. The ASN 14 provides the reporting format.
- 6.2 In order to obtain as much information as possible from a report of a suspected unapproved part, it is necessary to have a standardized reporting format. Information required will include part description and from where received; part number and (if applicable) serial number; particular colours, markings, dimensions and features common to the unapproved part which distinguish it from the genuine item; and the nature of any accompanying documentation.
- 6.3 At any time a part is deemed to be suspect, it and the accompanying documentation, if any should be quarantined immediately and held until the body responsible for processing the reports is satisfied that the evidence is no longer required or until the authenticity of the part has been established.
- 6.4 Some reports of suspected unapproved parts will eventually turn out to be false as further information becomes available in the form of supporting documentation etc. A successful reporting system should accept such false alarms and the wasted effort they generate in the knowledge that to discourage them might eventually lead to the suppression of a genuine report.

7. PARTS STORAGE AND DISTRIBUTORS

- 7.1 It is recognized that organization involved in storage and distribution of parts have a significant influence over the control of unapproved parts. Such organizations have an established commercial role of stocking or obtaining parts, often at short notice.
- 7.2 In airworthiness terms, the parts supplier's role is simply that of a holder of a part and its supporting data for a limited period, the part and data being passed in their entirety to the purchaser. The most effective control is exercised by the purchaser of the parts by ensuring that the part is correct and that the documentation truly reflects the status of the part. Further, the installer purchasing only from those suppliers having a known satisfactory record provides assurance.
- 7.3 All MRO approved by CAASL should list down such organizations addressed in the above paragraph in respective MCM/ MMOE and MPM/ MME which is an approved document explaining the procedure.

8. PARTS REMOVED FROM AN AIRCRAFT NO LONGER IN SERVICE

- 8.1 Aircraft withdrawn from service are often used as a source of spare parts. These parts, although serviceable at the time the aircraft was placed in storage, may have been affected adversely by storage conditions, including especially environmental factors, or by the storage period.
- 8.2 It is important that the 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 following points in particular should be considered :
 - a) the means by which the part is removed should be in accordance with the normal maintenance data (e. g. maintenance manuals), using the tooling specified;
 - b) adequate access equipment should be provided;
 - c) if conducted in the open, disassembly should cease during inclement weather;
 - d) all work should be carried out by appropriately qualified maintenance personnel;
 - e) all open connections should be blanked; and
 - f) a protected and enclosed quarantine storage area for the parts being removed should be provided appropriately at the work area and proper identification documents.
- 8.3 An assessment for condition and eventual return to service of each removed part will need to be conducted by an approved organization for the purpose. The extent of the work necessary before the part is returned to service may, depending on the factors noted in 8.1, range from a simple external visual inspection to a complete overhaul.

9. PARTS RECOVERED FROM AIRCRAFT INVOLVED IN AN ACCIDENT / INCIDENT

- 9.1 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 it 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 without special precautions being taken. While some of the 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.

- 9.2 All such items must therefore be subjected to an 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 reinstallation be considered.
- 9.3 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 manufacturer must be consulted for guidance.
- 9.4 **INFORMATION REQUIRED FROM AVIATION INSURERS :**

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 a common practice for aviation insurers 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. 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 CAASL. The operator should forward their request seeking permission of the CAASL. The operator should forward their request seeking permission for use of item / equipment of the aircraft, which has been involved in an accident/incident without observing the above detailed procedures and the permission of the CAASL. The operator should forward their request seeking permission for use of item/equipment accidental aircraft ensuring the above procedure.

10. DISPOSAL OF SCRAPPED PARTS

- 10.1 Those responsible for the disposal of scrapped aircraft parts and materials should consider the possibility of such parts and materials being misrepresented and sold as serviceable at a later date. Caution should be exercised by entering an agreement that the following types of parts and materials are disposed of in a controlled manner that does not allow them to be returned to service:
 - a) parts with non-repairable defects, whether visible or not to the naked eye;
 - b) parts that are not within the specifications set forth by the approved design, and cannot be brought into conformity with applicable specifications;
 - c) parts and materials for which further processing or rework cannot make them eligible for certification under an approved system;
 - d) parts subjected to unacceptable modifications or rework that is irreversible;
 - e) life-limited parts that have reached or exceeded their life limits, or have missing or incomplete records;

- f) parts that cannot be returned to an airworthy condition due to exposure to extreme forces or inclement weather condition (see paragraph 8 above); and
 - g) principal structural elements removed from a high-cycle aircraft for which conformity cannot be accomplished by complying with the mandatory requirements applicable to aging aircraft.
- 10.2 Scrapped parts should always be segregated from serviceable parts and when eventually disposed of should be mutilated or clearly and permanently marked. This should be accomplished in such a manner that the parts become unusable for their original intended use and unable to be reworked or camouflaged to provide the appearance of being serviceable.
- 10.3 When scrapped parts are disposed of for legitimate non-flight uses, such as training and education aids, research and development, or for non-aviation applications, mutilation is not acceptable. In such cases the parts should be permanently marked indicating that they are not serviceable; alternatively, the original part number or data plate information can be removed or a record kept of the disposition of the parts.
- 10.4 No operator should use any item/equipment of the aircraft, which is no longer in service or which has been involved in an accident/incident without observing the above detailed procedures and the permission of the CAA SL. The operator should forward their request with all supporting evidences seeking permission for use of item/equipment of the accidental aircraft ensuring the above procedure. Other procedures such as unapproved parts reporting, disposal of scrapped parts and etc shall be strictly followed in order to ensure continued airworthiness of aircraft and also to prevent unintentional use of unapproved parts.