

## Leaflet B-130 The Problem of Bogus Parts

**1** The CAA is becoming increasingly concerned about the quantity and variety of unapproved parts which are finding their way on to UK registered aircraft, in particular helicopters. Evidence indicates that these counterfeit and/or fraudulently identified parts are being imported, largely from North America; however, the CAA also has evidence of such bogus parts originating from the UK and also other foreign sources.

1.1 Manufacturing and/or marketing bogus parts is not endemic to the United Kingdom but evidence of the falsification of release documentation (Form One or equivalent) has been observed.

1.2 Installing bogus parts onto aircraft has serious airworthiness implications; to illustrate just how serious, the following two examples are quoted involving aircraft which are available in the international market place:

- a) A helicopter main rotor blade complete with release documentation was traced as having been scrapped by the manufacturer during the manufacturing process.
- b) An engine mount described as fitted new to an aircraft in 1979 was traced as having been factory installed in 1966.

**2** **Unapproved Part** For the purpose of this Leaflet an Unapproved part is a part or material intended for installation on a type certificated product/aircraft, which has been neither manufactured according to approved procedures, nor conforms to an approved type design; or it fails to conform to declared specifications or accepted industry standards (i.e. standard parts).

2.1 Unapproved parts include, but are not limited to:

- a) Parts specified in the illustrated parts catalogues (IPC) of a type certificated aircraft, but which have been manufactured, reclaimed or reworked and then marked by an unauthorised source and provided with documents which indicate falsely that the part(s) are genuine and conform to the approved type design, or meet a particular industry standard and are offered for use as conforming with an aircraft manufacturer's authorised IPC.
- b) Parts shipped directly to users by manufacturers, suppliers, or distributors who do not themselves hold appropriate production approvals for the parts, and have not been authorised to make direct shipments to users or stockists by the Type Certificate holder, who alone has production approval, e.g. production overruns. This is a particular phenomenon in the United States.
- c) Parts which have not been maintained, overhauled or repaired in accordance with the requirements of approved airworthiness data and/or statutory requirements, or that have been maintained, overhauled or repaired by persons not authorised to perform and certify these functions.

### **3** **FAA Suspect Unapproved Parts Notifications**

3.1 The FAA and CAA have intensified efforts to educate the public regarding the potential safety threat posed by aeronautical parts that do not meet applicable design, manufacturing or maintenance requirements. To achieve this, the FAA established a Suspect Unapproved Parts programme (SUPs) and issued guidance in an Advisory Circular 21-29B.

3.2 Suspect Unapproved Parts Notifications can be found on FAA Internet site: [www.faa.gov/about/office\\_org/headquarters\\_offices/avs/offices/sup/](http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/sup/)

4 Because of the increased activity being undertaken in the United States against suspect unapproved parts, it is likely that the vendors of these parts will direct their activities towards Europe and other parts of the world because of the reduced risk of detection.

## 5 **Mandatory Occurrence Reporting Procedures**

5.1 Users of aircraft components and spares are reminded that suspected unapproved parts should be reported to the CAA through the Mandatory Occurrence Reporting (MOR) procedures.

5.2 Although the MOR procedure does not extend to piston engined aircraft used for Aerial Work or privately operated, and any aircraft with a Permit to Fly, users of aircraft parts or material for this class of aircraft are encouraged to use the procedure where suspect parts are identified.

5.3 On receipt of an MOR, and where appropriate, the CAA will pass the details to the FAA SUPs office by the submission of a SUPS Report. In addition to assisting the FAA, who are implementing a vigorous campaign against unapproved parts, this procedure will enable the CAA to establish the dimensions of the problem as it affects the United Kingdom.

5.4 To assist in tracing unapproved parts or material, persons raising an MOR should, as far as possible, provide the following information on their report:

- a) The name of the suspected unapproved part.
- b) Part number, or any other number on the part.
- c) Serial number of part.
- d) List next higher assembly that suspected unapproved part is assembled into (i.e. fuel pump, engine, landing gear) and list part number, if known.
- e) Quantity of suspected unapproved 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 part. If the part is identified with Part Manufacturer or Distributor marking, this should be quoted.
- h) Describe any pertinent facts relating to the suspected unapproved part and identify where part may be inspected (provide photos, invoices, etc., if available).
- i) The date suspected unapproved part was discovered.
- j) Name and address in full or the location where suspected unapproved part(s) was discovered.

5.5 In accordance with normal protocol for confidentiality any SUPS report submitted to the FAA would not give details of the MOR reporter.

6 Foreign aircraft and approved component manufacturers can be contacted by users through their UK agent or direct, for verification that specific serial numbered items purported to be manufactured by them are in fact recorded in their archives. As an example, this process was used to verify that a particular helicopter main rotor head was in fact bogus.

## **7 The Certifying Person and User Responsibility**

- 7.1 The Certifying Person (User) can be either the Approved Organisation, a person authorized in accordance with that organisation's Exposition, or an appropriately CAA Type Rated Licensed Engineer, who issues the Certificate of Release to Service for installation of an aircraft part into an aircraft, its engine(s), propeller(s) or equipment.
- 7.2 The User of an aircraft part is responsible for ensuring that the part is serviceable and conforms to the standard determined by the appropriate Type Certificate holder as being suitable for the intended application. In order to discharge this responsibility to the satisfaction of the CAA/EASA, the user must, when obtaining an aeronautical part from a supplier:
- a) Ensure that the purchase order contains accurate definition of the aircraft parts and full details of the quality control and certification requirements to be met by the supplier in satisfying the order;
  - b) Take all necessary steps to verify that the supplier is meeting the requirements of the purchase order. This may require the user visiting the supplier's facilities.
- 7.3 In order to contain the serious problem of unapproved parts, Commercial Air Transport Operators and associated Maintenance organisations who are users of aircraft spares should ensure that their aircraft spares purchasing policy and procedures are unequivocally stated in their company expositions/engineering procedural documents. They should also ensure that any deviation from that policy must be approved by the quality manager in accordance with procedures acceptable to the CAA.
- 7.4 Other organisations and private owners who purchase aircraft parts or materials can only be advised to exercise extreme caution and remember they will have to convince the user of the authenticity of such spares.
- 8** CAP 562 Book 1, Leaflets B-100, B-110, C-140 and Book 2, Leaflet 70-20 provide further information on the acquisition of parts and materials for use in aircraft.