THE PROBLEM OF BOGUS PARTS (UNAPPROVED PARTS)

1. The FAA and CAA have long been concerned about unapproved or 'bogus parts' which are finding their way on to registered aircraft. Superficially, many of these parts are identical with the genuine parts which they are supposed to replace. Although this problem has not occurred to the same extent in Malaysia, bogus parts have been discovered.

1.1 Installing bogus parts onto aircraft has serious airworthiness implications; to illustrate just how serious, the following two examples were quoted by other aviation authorities 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) A starter motor unit was discovered fitted with a re-welded shaft and released as serviceable unit.

2. UNAPPROVED PART For the purpose of this Notice 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 manufacturers authorized 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.

(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. PARTS ORIGINATING FROM THE SURPLUS MILITARY STOCK

3.1 Under the contract of United States Department of Defence (DOD), spares may have been produced using the manufacturers' drawings under the terms of production contract with the OEM. Bidders are then invited by the United States Government to manufacture the parts.

3.2 The suppliers of these parts may not have the stringent quality controls that are required by the aircraft/ component type certificate holder to satisfy FAA requirements. The US Government may also substitute military specifications in lieu of originally approved material and process specifications, thereby rendering those parts not conforming to the FAA approved civil type design.

4. FAA SUSPECT UNAPPROVED PARTS NOTIFICATIONS

4.1 The FAA 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.

4.2 Suspect Unapproved Parts Notifications can be found on FAA Internet site: http://www.faa.gov/avrlsups.htm

4.3 Because of the increased activity being undertaken in the United States against suspect unapproved parts, it is likely that the vendors of these parts may direct their activities towards 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 DCA through the Mandatory Occurrence Reporting procedures (MOR). MOR is reflected in MCAR Regulation 195 and Thirteenth Schedule Part A, Paragraph 13.

5.2 On receipt of an MOR, and where appropriate, the DCA will pass the details to the responsible National Authority in relation to the suspected unapproved part. In addition to assisting other National Authorities such as the FAA, who are implementing a vigorous campaign against unapproved parts, this procedure will enable the DCA to establish the dimensions of the problem as it affects Malaysia.

5.3 To assist in tracing unapproved parts or material, persons raising on 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.

6. Aircraft and approved component manufacturers can be contacted by users through their 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 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 DCA, 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 problem of unapproved parts, aircraft owners/operators and associated maintenance organizations should ensure that their aircraft spares purchasing policy and procedures are clearly 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 DCA.

7.4 Other organisations and private owners who purchase aircraft parts or materials can only be advised to exercise extreme caution to establish the authenticity of such spares.

8. Airworthiness Notices No. 1, 29 and 73 provide advice on the acceptance of parts or materials for Malaysian registered aircraft.

9. CANCELLATION This Notice cancels Airworthiness Notice No. 48, Issue 2, dated 01 September 1994, which should be destroyed.

DIRECTOR GENERAL
DEPARTMENT OF CIVIL AVIATION
MALAYSIA.