

- **SUBJECT :** ELIGIBILITY AND QUALITY OF AIRCRAFT REPLACEMENT PARTS AND SUPPLIES
- 1. <u>FURPOSE</u>. This circular is to advise the aircraft industry of an increasing amount of replacement parts and supplies being offered for sale as aircraft products but which may not meet acceptable standards for use on certificated aircraft.
- 2. <u>CENERAL</u>. Civil Air Regulations specify that materials used in the maintenance and repair of aircraft shall be of such quality and strength that the part of the aircraft affected shall be at least equivalent to its original or properly altered condition.

Parts and supplies indicated most often in the reports as being of questionable quality are as follows:

- a. <u>Antifriction Bearings</u>. Bearings advertised as "high quality," "apparently unused," or "looks good" should be carefully evaluated by the user. If they have been in storage for a long period, even though encased in protective coating, they are subject to the deteriorating effects of time and the elements. The placing of such bearings in service without a careful, detailed inspection to assure their serviceability can result in early failure.
- b. <u>Aircraft Fabric</u>. Prefabricated covers and fabric by the yard should be used only if it is identifiable as meeting aircraft standards. In addition, all fabric should be examined for freedom from deterioration due to age, climatic conditions, or contamination prior to use on certificated aircraft.
- c. <u>Dope</u>. Advertised as aircraft dope of fresh material but found to be of questionable quality.
- d. <u>Tubing</u>. Advertised as aircraft 4130 steel tubing but reported to have unsatisfactory welding characteristics.

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3. <u>SUMMARY</u>. Current CARs place upon the installing agency the responsibility for determining that materials used in aircraft repair and maintenance conform to appropriate standards. To assure continued safety in aircraft operation it is essential that great care be used in examining, testing, or otherwise determining the acceptability of aircraft parts, especially when their origin may be in doubt.

George S. Moore Director Flight Standards Service