

Advisory Circular

Subject:

MECHANICAL WORK PERFORMED ON U.S. AND CANADIAN REGISTERED AIRCRAFT Date: 2/25/83

Initiated by: AWS-340

AC No: 43-10A

Change:

- 1. <u>PURPOSE</u>. This circular provides updated information and guidance to aircraft owners/operators and maintenance personnel concerning mechanical work performed on U.S.-registered aircraft by Canadian maintenance personnel and Canadian aircraft by U.S. maintenance personnel.
- 2. CANCELLATION. Advisory Circular 43-10 dated January 26, 1976, is canceled.
- 3. <u>REFERENCES</u>. Federal Aviation Regulations (FARs) Part 91, Subpart C; Part 43, Section 43.17; and Canadian Ministry of Transport, Engineering and Inspection Manual, Parts I and II.
- 4. <u>BACKGROUND</u>. U.S. and Canadian aircraft owners/operators frequently have the need for maintenance to be performed on their aircraft by maintenance persons of the other country. Civil aviation authorities have recognized the performance of maintenance, repair, and alteration to aircraft of Canadian or United States registry by certificated and appropriately rated maintenance persons of the other country.
- 5. MECHANICAL WORK PERFORMED ON U.S. AIRCRAFT IN CANADA. FAR 91, Subpart C, requires owners/operators to have their aircraft maintained in an airworthy condition. Part 43, Section 43.17, Mechanical work performed on U.S.-registered aircraft by certain Canadian persons, permits work functions to be performed on U.S. aircraft by the following Canadian persons: an Aircraft Maintenance Engineer (AME) holding a valid mechanic certificate and appropriate ratings, or a person who is an authorized employee (Approved Inspector) performing work for a company whose system of quality control for the inspection and maintenance of aircraft has been approved by the Canadian Ministry of Transport. These persons may perform the following functions on U.S.-registered aircraft:
- a. Perform maintenance, preventive maintenance, and alterations if done in accordance with the performance rules of Section 43.13 and maintenance record entries are made in accordance with Section 43.9.
- b. Except for an annual inspection, perform any inspection required by Section 91.169, if the inspection is done in accordance with Section 43.15 and the maintenance record entries are made in accordance with Section 43.11.

- c. Approve (certify) maintenance, preventive maintenance, and alterations; however, an AME may not approve a major repair or major alteration for return to service. A Canadian Ministry of Transport Airworthiness Inspector or an authorized employee performing work for a company approved by the Canadian Ministry of Transport may approve (certify) this work for return to service, provided that technical data used to accomplish major repairs or major alterations is approved by the FAA Administrator.
- 6. MECHANICAL WORK PERFORMED ON CANADIAN AIRCRAFT IN THE U.S. The Canadian requirements for approval for return to service of their aircraft in the U.S. are contained in the following excerpts from their Engineering and Inspection Manual.
- "2.15.2 Minor modification (alterations) as defined in the U.S. Federal Aviation Regulations (FAR), and periodic routine maintenance shall be completed and documented in accordance with the requirements of FAR 43.
- 2.15.3 Data relating to major modifications (alterations) shall be approved either by the DOT, or in the case of an aircraft manufactured in the U.S. by the issue of an FAA Supplemental Type Certificate. These modifications shall be certified (approved for return to service) in accordance with the requirements of FAR 43, by a FAA Flight Standards Inspector or by an authorized employee of an appropriately rated Certificated Repair Station.
- 2.15.4 Repairs shall be certified in accordance with the requirements of FAR 43 by persons appropriately rated and authorized by the Administrator of the FAA. For the purpose of this requirement an engine overhaul shall be deemed to be a Major Repair.
- 2.15.5 On return of an aircraft to Canada following overhaul, major repair, or major modification, DOT Form 26-0023 shall be completed and a copy forwarded to the appropriate Regional Office together with a copy of FAA Form 337 or equivalent certification document."
- 7. CANADIAN ENGINES OVERHAULED BY U.S. REPAIR AGENCIES. The following requirements for Canadian engines are contained in an excerpt from their Engineering and Inspection Manual.

"4.1 ENGINES - OVERHAUL STANDARDS

- 4.1.1 Engines must be overhauled in accordance with the following:
- a. the manufacturer's recommendations as to tolerances and procedures are to be followed;
- b. parts from the engine being overhauled which are serviceable or are within reconditioning tolerances must be replaced (reinstalled) in that particular engine; the practice of pooling parts is not permitted;
 - c. All replacement parts must be either:
- (i) new, with documentary proof of compliance with the standards for the new type, or

- (ii) used parts from other engines, if subjected to a close inspection for condition, are within the manufacturer's recommended tolerances and have a known history as to the engine model and the total number of hours in service at the time of installation in the overhauled engine, the details of which must be recorded in the engine log or overhaul data sheet;
 - d. all replacements for "lifed" parts must be new;
- e. matched parts (wherever components of an assembly are not available individually from the manufacturer) must be replaced as an assembly;
- f. magnetos and carburetors of fuel injectors must be overhauled and tested with the overhauled engine;
- g. the overhauled engine must be run in and tested before being certified;
- h. the log entry shall include details of the overhaul, a list of all parts replaced, modifications incorporated, and a record of the run-in test."

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