63-13-03

Amendment 577 Part 507 Federal Register June 22, 1963.

Applies to Models HC-93Z30- 2/10152-5 1/2, HC-B3Z30-2/ 10152-5 1/2, and HC-B3Z30-2/10160-6 Propellers Installed on Pratt and Whitney R-985 Engines.

Compliance required as indicated.

To preclude propeller blade slippage and blade shank failures, accomplish the following:

(a) Within 25 hours' time in service after the effective date of this AD, on blades with less than 1,975 hours' total time in service that have not been previously indexed in the manner described in (e)(4), accomplish the following:
  (1) By means of a portable propeller blade protractor, measure the angle of each blade on the propeller at the 30-inch radius station, when each is set in a true horizontal position.
  (2) Should the relative blade angle between each blade of a given propeller differ by more than 1 degree (a tolerance of + 1/2 degree is permissible) from each of the other blades, inspections in accordance with (e) shall be accomplished before further flight, regardless of propeller total time in service. However, if the blades are set within acceptable limits, they shall be indexed in accordance with (e) (4), and shall be inspected and reworked in accordance with (e) before the accumulation of 2,000 hours' total time in service.

(b) Blades with less than 1,975 hours' total time in service that have been previously indexed in the manner described in (e)(4) shall be inspected and reworked in accordance with (e) before the accumulation of 2,000 hours' time in service.

(c) Blades with 1,975 hours' or more total time in service on the effective date of this AD, shall be inspected and reworked within 25 hours' time in service after the effective date of this AD in accordance with (e).

(d) Blades for which the total time in service cannot be determined shall be inspected and reworked in accordance with (e) within 25 hours' time in service after the effective date of this AD.

(e) The inspection and rework shall be accomplished as follows:
  (1) Inspect for cracks, the blade and blade shank by a dye penetrant method, and the hub by a magnetic particle process, in accordance with instructions outlined in Hartzell Overhaul Manual No. 114, and Hartzell Service Bulletin No. 83. Remove cracked blades from service before further flight.
  (2) Shot peen the blade shank and hub per instructions and specifications in Hartzell Service Bulletin No. 83. (Not applicable to the HC-93Z30 hub.)
  (3) The blades of the propellers shall be checked for proper blade clamp clearances, and the blade angles set up as outlined in Hartzell Service Bulletin No. 69 and Overhaul Manual No. 114.
  (4) The blades and clamps shall be indexed with red plastic tape as indicated in Hartzell Service Bulletin No. 69, Supplement No. 1. During the routine preflight inspections this provides a method for visual inspection of any blade slippage in the blade clamps.

(Hartzell Service Bulletins Nos. 69 dated September 16, 1959, Supplement No. 1 dated September 19, 1962, 83 dated October 18, 1962, cover this subject, and Hartzell Manuals Nos. 104A and 114 also apply, including all supplements thereto of the preceding releases.)

This directive effective July 23, 1963.