Propellers - Variable Pitch - Hartzell

### AD/PHZL/64 Amdt 2

### **Hub Pilot Tube Bore**

8/95 DM

Applicability:

All HC-B4TN-5(D,G,J)L/LT10282(N)(B,K)-5.3R propellers installed on Mitsubishi MU-2B-26A, MU-2B-36A, MU-2B-40 or MU-2B-60 aircraft or any other MU-2 series aircraft which has been modified by installation of the subject propeller.

Note: The parentheses indicate the presence or absence of additional letter(s) which vary the basic propeller hub and propeller blade model designation. This Directive applies regardless of whether these letters are present or absent in the propeller hub and blade model designation.

#### Requirement:

- 1. Action in accordance with Hartzell Alert SB A182A or A183A, as applicable. Propeller hubs removed from Mitsubishi model MU-2B-26A, -36A, -40 or -60 series aircraft must not be installed on any other aircraft unless an inspection has been performed in accordance with Hartzell ASB A182A or A183A dated March 11, 1994.
- 2. Action in accordance with Hartzell Alert SB A188.

Note 1: The inspection required by this Directive is not the same as specified in AD/PHZL/63 Amdt 1 which calls up Hartzell Alert SB 170B.

Note 2: AD/PHZL/63 Amdt 1 requires fitment of the "N" suffix blades.

Note 3: FAA AD 95-01-02 Amdt 39-9113 refers and supersedes FAA AD 93-01-09 Amdt 39-8463, FAA AD 93-09-04 Amdt 39-8583 and FAA AD 93-12-01 Amdt 39-8642.

#### Compliance:

1. a. If hub total time since new is 3000 hours time in service or greater as of 24 February 1995 or if the hub total time in service is unknown, inspect hub in accordance with the Requirement Document within 10 hours time in service from 24 February 1995 or by 30 April 1995, whichever occurs first.

Thereafter, reinspect at intervals not exceeding 600 hours time in service (TIS) or 5 years TIS, whichever occurs first, until hub unit P/N 840-139 with pilot tubes P/N A1891A has been fitted. Once a hub with compressively rolled internal pilot tube bores has been fitted, reinspect in accordance with the Requirement Document at intervals not exceeding 3000 hours time in service.

1. b. If hub total TIS is less than 3000 hours TIS inspect hub in accordance with the Requirement Document prior to reaching 3010 hours TIS or within 200 hours TIS from 24 February 1995 or by 24 February 1996, whichever occurs first.

Thereafter, reinspect hubs at intervals not exceeding 600 hours TIS or 5 years TIS whichever occurs first, until hub unit P/N 840-139 with pilot tubes P/N A1891A has been fitted. Once a hub with compressively rolled internal pilot tube bores has been fitted, reinspect in accordance with the Requirement Document at intervals not exceeding 3000 hours time in service.

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1. c. Regardless of time since new, any propeller that has experienced a propeller blade strike\* prior to 24 February 1995, must have the hub inspected IAW the Requirement Document within 10 hours TIS from 24 February 1995 or by 30 April 1995, whichever occurs first.

Thereafter, reinspect hub at intervals not exceeding 600 hours TIS or 5 years TIS, whichever occurs first, until hub unit P/N 840-139 with pilot tubes P/N A1891A has been fitted. Once a hub with compressively rolled internal pilot tube bores has been fitted, reinspect in accordance with the Requirement Document at intervals not exceeding 3000 hours TIS.

1. d. Regardless of time since new, any propeller hub assemblies that experience a blade strike\* after 24 February 1995 must have the hub inspected in accordance with the Requirement Document prior to further flight.

Thereafter, reinspect hub at intervals not exceeding 600 hours TIS or 5 years TIS, until hub unit P/N 840-139 with pilot tubes P/N A1891A has been fitted. Once a hub with compressively rolled internal pilot tube bores has been fitted, reinspect in accordance with the Requirement Document at intervals not exceeding 3000 hours TIS.

2. For blades with 2900 or more hours TIS inspect within 100 hours TIS from 24 February 1995.

Thereafter, reinspect in accordance with the Requirement Document at each propeller overhaul or at intervals not exceeding 3000 hours TIS, whichever occurs first.

2. a. For blades with less than 2900 hours TIS but more than 2200 hours TIS by 24 February 1995 inspect prior to blades reaching 3000 hours TIS.

Thereafter, reinspect in accordance with the Requirement Document at each propeller overhaul or at intervals not exceeding 3000 hours TIS, whichever occurs first.

2. b. For blades with 2200 hours or less TIS inspect within 800 hours time in service from 24 February 1995.

Thereafter, reinspect in accordance with the Requirement Document at each propeller overhaul or at intervals not exceeding 3000 hours TIS, whichever occurs first.

Note: \*A blade strike is defined as a propeller having blade/s that have been bent beyond the repair limits specified in Hartzell Blade Repair and Overhaul Manual No 133B.

Background:

There has been two propeller hub arm separations and one crack indication involving propellers from MU-2B-60 aircraft. Hartzell issued ASB A182 specifically for the MU-2B-60 aircraft. Due to the similarity of the MU-2 propeller assembly, Hartzell has extended the inspection to include the propellers fitted to the MU-2B-26A, -36A and -40 series aircraft.

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Amendment 1 added the MU-2B-60 to the AD requirements, provided terminating action for the repetitive 600 hourly hub inspection and introduced the revised blade width and thickness limits to ensure REACTIONLESS MODE vibration does not affect the propeller airworthiness.

Amendment 2 has been raised to include the part numbers of the hub units that are exempted from the 600 hour repetitive inspection.