

# Airworthiness Directive Schedule

## Propellers & Propeller Governors

Sensenich

26 July 2007

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The date above indicates the amendment date of this schedule.

New or amended ADs are shown with an asterisk \*

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**\* DCA/SENS/101 Cancelled – DCA/SENS/106 refers****Effective Date:** 26 July 2007**DCA/SENS/102A Mid Blade Corrosion - Inspection****Applicability:** All fixed pitch metal propeller models with water soluble mid blade decals**Background:** Fatigue failures have occurred overseas which were found to have originated from corrosion pits under blade decal labels.

Sensenich Propeller Bulletins R-10 and R-11 and R-12 also refer to this subject

- Requirement:**
1. Soak water soluble mid blade decals with paint remover and rub off with a rag. (Scraping or sanding of decals may inadvertently obscure evidence of possible corrosion).
  2. Apply dye penetrant to mid blade area and inspect for corrosion and cracks with a glass of at least 3 power.
  3. Remove corrosive pits 0.015 inch deep or less by sanding with 220 grit wet or dry abrasive paper and polishing with a paper of 320 grit or finer.
  4. Clean area thoroughly and re-inspect in accordance with para 2 to ensure that the removal of all corrosive pits has been accomplished. Clean and spray repaired area with a clear lacquer.

**Compliance:** Within the next 20 hours TIS**DCA/SENS/103A Metal Fatigue - Reconditioning****Applicability** M76EMM, M76EMMS, 76EM8 and 76EM8S( ) propellers.

These propellers are installed on but not limited to the following aircraft types; Piper PA-28-180, PA-28-181, American AA-5 series, Beech B23, C23 and Cessna 172Q.

Part 1 of this airworthiness directive does not apply to those propellers installed on the following solid crankshaft Textron Lycoming O-360 series engines; O-360-A4A, -A4D, -A4G, -A4J, -A4K, -A4M, -A4N, -A4P and -A5AD, or additional engines identified by suffixes having a digit "4" or higher in the second position.

**Requirement:** To prevent propeller blade tip fatigue failure, accomplish the following:-

1. Mark engine tachometer with a red arc from 2150 RPM to 2350 RPM.
2. Rework propellers per Sensenich SB R-14A. Remove from service those propellers that do not meet the inspection and rework requirements of SB R-14A. Mark with a suffix letter "K" propellers that have been inspected and reworked per SB R-14A and found satisfactory. (FAA AD 69-09-03R3 refers)

- Compliance:**
1. Within next 25 hours TIS, unless already accomplished.
  2. At 500 hours TTIS or within next 50 hours TIS, whichever is the later.

**Effective Date:** DCA/SENS/103 - 1 June 1969  
DCA/SENS/103A - 5 July 1996

**DCA/SENS/104 T & W Propellers Inc - Overhaul**

**Applicability:** All Sensenich Propellers that were overhauled by T&W Propellers Inc, of Chino California and are listed in Table 1 of FAA AD 2003-13-17

**Requirement:** Following an NTSB investigation the FAA determined that T & W Propellers were not properly carrying out propeller repairs and overhauls. The investigation revealed that overhaul processes had not been carried out rendering the propellers unserviceable. To avoid failure of the propeller and loss of control of the aircraft:

Remove propellers from service and return to an authorised propeller repair centre other than T & W Propellers for disassembly and re-inspection.

(FAA AD 2003-13-17 refers)

**Compliance:** Within 10 hours TIS

**Effective Date:** 31 August 2003

**DCA/SENS/105 Propeller Blades – Inspection and Overhaul**

**Applicability:** All Sensenich metal propellers models which have last been returned to service by Southern California Propeller Service of Inglewood, CA.

**Note:** No further action is required for propeller models that have last been serviced, repaired or overhauled by a manufacturer approved service center **other than** Southern California Propeller Service.

**Requirement:** To prevent blade failure that could result in separation of a propeller blades and loss of control of the aircraft, disassemble and clean the propeller and inspect per the applicable propeller manufacturer's service documentation for the following:

Cracks, corrosion or pits, nicks, scratches, blade minimum dimensions, unapproved localized heating of blade, unapproved use of helicoil inserts in actuating pin holes, improperly drilled actuating pin holes, chemical conversion coat or paint or both applied over corrosion, lack of chemical conversion coating, lack of paint on internal surfaces, bolts incorrectly torqued, incorrect parts, incorrect installation of parts, reinstallation of parts intended for one-time use, and lack of proper shot peening.

Repair and replace with serviceable parts as required, and reassemble and test per the applicable propeller manufacturer's service documentation.

(FAA AD 2005-14-11 refers)

**Compliance:** Within the next 28 days.

**Effective Date:** 25 August 2005

**\* DCA/SENS/106 Pilot Bore – Inspection and Replacement**

**Applicability:** Model M74DM propellers which do not have a S/N preceded by letter "A" or "K" and are installed on 160 hp Lycoming O-320 series engines.

**Note:** This AD supersedes DCA/SENS/101 and is applicable to all 160 hp Lycoming O-320 series engines as per Sensenich Service Bulletin No. R-8-1.

**Requirement:** To prevent failure of the propeller as a result of cracked pilot bores, remove the propeller and inspect for cracks originating in the pilot bore per Sensenich Service Bulletin No. R-8-1.

If any cracks are found, replace the propeller, before further flight.

If no cracks are found, polish out any scratches in the bore and, break and polish any sharp edges at the front and rear chamfers of the pilot bore per SB No. R-8-1.

When reinstalling the propeller, torque retaining bolts to 300 inch-pounds.  
(FAA AD 60-11-8 refers)

**Compliance:** Within the next 100 hours TIS, unless already accomplished, and thereafter at intervals not to exceed 100 hours TIS.

**Effective Date:** 26 July 2007