Airworthiness Directive Schedule

Engines

Jabiru 2200 and 3300 Series

27 September 2012

The date above indicates the amendment date of this schedule.

New or amended ADs are shown with an asterisk *

Contents

DCA/JABENG/1 Propeller Installation - Inspection

Applicability: Jabiru 2200 engines all S/Ns
Jabiru 3300 engines all S/Ns

Note 1: AD applicability includes engines fitted to microlight aircraft.

Requirement: To prevent loosening of the propeller attachment bolts accomplish the following:

1. **Jabiru engines fitted with Jabiru propellers**

Inspect propeller for security of attachment in accordance with Jabiru Aircraft Service Bulletin JSB 009-1 and update propeller installation to latest configuration (with Belleville washers) in accordance with JSB 009, if not already accomplished.

2. **Jabiru engines fitted with fixed pitch wooden propellers (other than Jabiru)**

Inspect for security of propeller attachment in accordance with propeller manufacturer's instructions for continued airworthiness.

3. **Jabiru engines fitted with any other propeller types**

Install, inspect and maintain in accordance with the propeller manufacturer's instructions for continued airworthiness.

Note 2: All direct drive aircraft engines require careful matching of engine and propeller vibration characteristics. Some engine/propeller combinations can cause torsional vibration resulting in catastrophic failure. (Usually of the crankshaft, occasionally of propeller components)

If you are using engine/propeller combinations other than those approved by the engine and/or propeller manufacturer, you should seek technical advice. JSB 014-1 provides essential safety information relevant to Jabiru engines regardless of propeller type. All Jabiru engine owners should obtain a copy and review.

Note 3: The 'Manufacturer's Instructions for Continued Airworthiness' includes owner's manuals, handbooks or maintenance manuals provided by the manufacturer and includes updates to these documents as contained in service bulletins, letters, etc.

Compliance:

1. Within 50 hours TIS or 3 months, whichever occurs first and thereafter at intervals not to exceed 100hrs or 12months whichever occurs first. These repetitive intervals are as specified in the Jabiru Engine Maintenance and Inspection Manual.

2. Within 50 hours TIS or 3 months, whichever occurs first and thereafter within the intervals recommended by the propeller manufacturer's instructions for continued airworthiness or within 100 hours TIS or 12 months whichever occurs first.

3. At intervals not to exceed those detailed in the propeller manufacturer's instructions for continued airworthiness.

Effective Date: 30 November 2006

DCA/JABENG/2 Flywheel Attachment Screws - Inspection

Applicability: Jabiru 2200 engines all S/Ns
Jabiru 3300 engines all S/Ns

Note 1: AD applicability includes engines fitted to microlight aircraft.

Requirement: To prevent fatigue fractures of the flywheel attachment screws which may lead to uncommanded shutdown of the engine in flight, accomplish the following:

1. All Engines:
   Inspect flywheel attachment screws per JSB012-1 section 4. If any screws have become loose or broken, replace all six screws in accordance with JSB012-1 section 7. Report broken/loose screws to CAA, on defect reporting form CA005D, available from www.caa.govt.nz under 'rules and more'.
2. Engines not fitted with dowels and 5/16" screws:
   Upgrade flywheel attachment to 5/16" screws and dowels in accordance with Jabiru approved modification, refer JSB012-1.

Note 2: The following engines were fitted with dowels at factory:

2200 engines S/N 2058 onwards
3300 engines S/N 837 onwards

Compliance: 1. Within 50 hours TIS or three months whichever occurs first. Thereafter at intervals not to exceed 50 hours TIS for un-dowelled flywheel attachments, and 100 hours TIS for engines fitted with dowels.

2. At overhaul or next engine removal, whichever occurs first. (eg next time engine removed for repair, prop strike, inspection, etc**)**

Effective Date: 30 November 2006

DCA/JABENG/3 Flywheel Attachment Screws – Replacement and Finite Life

Applicability: Jabiru 2200 engines, all S/N
Jabiru 3300 engines, all S/N

Note 1: This AD introduces a 500 hour finite life for 5/16" flywheel attachment screws. The AD is prompted by a recent inflight flywheel attachment failure which resulted in an accident. AD applicability includes engines fitted to microlight aircraft.

Requirement: To prevent fatigue fractures of the flywheel attachment screws which may result in an uncommanded engine shutdown in flight, replace the 5/16" screws flywheel attachment screws with new screws per the instructions in section 7 of Jabiru Aircraft SB No JSB 012-1 issue 1, dated 30 October 2006, or later approved revisions.

Note 2: Jabiru 2200 engines, S/N 2058 onwards and Jabiru 3300 engines, S/N 837 onwards were fitted with flywheel attachment dowels at the factory.

Note 3: For all other S/N engines DCA/JABENG/2 introduces 5/16" flywheel attachment screws and dowels in accordance with a manufacturer approved modification per Jabiru SB No JSB012-1.

(NZ Occurrence 10/4450 refers)

Compliance: Before 500 hours TSN or 500 hours TIS since engine overhaul, or within the next 25 hours TIS for engines with more than 500 hours TSN or overhaul, and thereafter at intervals not to exceed 500 hours TIS.

Effective Date: 25 November 2010

*** DCA/JABENG/4 Piston Circlips – Inspection and Replacement**

Applicability: Jabiru 2200J and 2200C series engines, all S/N.

Note 1: The referenced Jabiru SB JSB 033-1, dated 17 August 2012 is applicable to all Jabiru 2200 and 3300 engine models. Some of these engines are fitted to experimental, Light Sport Aircraft (LSA), microlights and amateur built aircraft and may be subject to a Manufacturer's Safety Direction. This AD is applicable to type certificated engine models. The CAA strongly recommends that owners of LSA, microlights and amateur built aircraft fitted with affected engines review and comply with the requirements in this AD and SB JSB 033-1.

Requirement: To prevent piston circlip failure which could result in a catastrophic engine damage, accomplish the requirements in CASA AD/JABIRENG/1.

Note 2: A copy of CASA AD/JABIRENG/1 can be obtained from the CASA AD web site at http://www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD::pc=PC_90822

Note 3: Jabiru Aircraft Pty Ltd. SB JSB 033-1 dated 17 August 2012 or later approved revisions are acceptable to comply with the requirements of this AD.

(CASA AD/JABIRENG/1 refers)

Compliance: Within the next 5 hours TIS or by 7 March 2013 whichever occurs sooner.

Effective Date: 7 September 2012