EASA Safety Information Bulletin

SIB No.: **2008-44**
Issued: **26 May 2008**

Subject: **Malfunctioning of the Carburettor Accelerator Pump in the Fuel System of Piston Engine Powered Helicopters.**

Ref. Publication: Civil Aviation Safety Authority (CASA) of Australia Airworthiness Bulletin (AWB) 73-004 issue 1 dated 16 April 2008.

Description: CASA has published the referenced advisory document (attached as pages 2 and 3 of this bulletin) to bring to the attention of operators and maintenance personnel of piston-engine powered helicopters that difficulty in engine starting may indicate a malfunctioning accelerator pump system and recommends that the proper function of the carburettor accelerator pump is checked during trouble shooting.

After reviewing the available information, EASA concurs with the advisory and fully supports the CASA recommendations contained therein. This SIB is published to ensure that all owners and operators of affected helicopters (as indicated, not limited to the Robinson R44 Raven I), registered in European Union Member States or associated countries, are aware of these recommendations.

Applicability: All piston-engine powered helicopters that have a carburettor accelerator pump installed.

Contact: For further information contact the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu.

Australian Government
Civil Aviation Safety Authority

AIRWORTHINESS BULLETIN

Robinson R44 Carburettor Accelerator Pump

AWB 73-004 **Issue :** 1
Date : 16 April 2008

1. Applicability

All Robinson R44 Raven I helicopters, and any piston powered helicopter using a carburettor incorporating an accelerator pump in the fuel delivery circuit.

2. Purpose

To bring to the attention of operators and maintenance personnel that difficulty in engine starting may indicate a malfunctioning accelerator pump system.

3. Background

An operator has reported difficulty in engine starting which was traced to a faulty carburetor accelerator pump system.

Engines with faulty accelerator pumps may suffer either ‘hesitation’ or stop when the engine is accelerated from idle to hover power, typically upon rapid throttle application at the bottom of a practice autorotation.

Should the engine hesitate or stop instead of delivering commanded power for flight during autorotative practice, loss of control of the helicopter may result.

Difficulty in starting may be the first indication of a malfunctioning accelerator pump. The carburetor accelerator pump is usually employed to prime the engine by repeatedly moving the throttle control from closed to fully open.

Persisting with an engine that is difficult to start may later result in unreliable engine performance under critical flight conditions.

4. Recommendation

CASA strongly recommends that whenever difficulty in starting the engine is experienced, that the proper function of the carburettor accelerator pump is checked during trouble shooting.

5. Enquiries

Enquiries with regard to the content of this Airworthiness Bulletin should be made via the direct link e-mail address:

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Or in writing, to:

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