

Follow-up Action on Occurrence Report

ACCIDENT TO PIPER PA28-161, G-MAND, AT WOLVERHAMPTON AIRPORT ON 30 JUNE 2001

(ENGINE FAILURE AFTER TAKEOFF)

CAA FACTOR NUMBER : F20/2003
FACTOR PUBLICATION DATE : 07 August 2003
OPERATOR : Private
CAA OCCURRENCE NUMBER : 2001/04388
AAIB REPORT : Bulletin 7/2003

SYNOPSIS

(From AAIB Report)

The aircraft, with two pilots on board, suffered an engine failure shortly after takeoff from Runway 28 at Halfpenny Green Airfield. The instructor pilot managed to effect a landing on the reciprocal runway but overran the paved surface. All three landing gear legs failed during the overrun and the left wing detached. The pilots suffered minor whiplash injuries. At the time of the accident the engine had accumulated 1,865 hours since its rebuild in 1997. Examination of the engine revealed severe wear to the engine valve operating mechanism and extensive cracking of the No 1 cylinder assembly. Wear to the valve operating mechanism was considered not to be a factor in this accident but the use of an oil additive, mandated by the manufacturer for other engine models, would possibly have reduced this wear. The total power loss had probably resulted when a substantial pre-existing cylinder head crack had suffered a rapid and large extension around most of the cylinder head circumference allowing the crack to open up and vent the cylinder. A safety recommendation has been made concerning the reduction in wear to the valve operating mechanisms, in this and other similar engine types, by mandating the use of oil additives.

FOLLOW UP ACTION

The one Safety Recommendation, made by the AAIB following their investigation, is reproduced below, together with the CAA's response.

Recommendation 2003-69

It is recommended that the FAA require Textron Lycoming to take measures to substantially reduce the incidence of excessive wear to the valve operating mechanism of the Lycoming O-320-D3G engine and all other affected engine models. Measures considered should include advising or requiring usage of the oil additive in engines not covered by Mandatory Service Bulletin No 446D, advising on engine starting procedures and re-emphasising use of the correct grade of oil for the prevailing ambient temperature.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed