

Aircraft type and registration: Jodel DR 1051 G-AYLF (light single engined fixed wing aircraft)

Year of Manufacture: 1965

Date and time (GMT): 7 July 1985 at 1215 hrs

Location: Tilbrook, St Neots, Cambs

Type of flight: Private (pleasure)

Persons on board: Crew — 1 Passengers — 2

Injuries: Crew — None Passengers — None

Nature of damage: Damage to undercarriage, propeller, and flaps

Commander's Licence: Private Pilot's Licence

Commander's Age: 27 years

Commander's Total Flying Experience: 109 hours (of which 37 were on type)

Information Source: Aircraft Accident Report Form submitted by the pilot and telecon with maintenance engineer.

Following an uneventful take-off from Abbotsley the aircraft was flown in the local area for approximately 30 minutes before setting course for Sywell. Approximately 15 minutes later, whilst cruising at 2000 feet there was a loud bang from the engine followed by engine vibration and a severe loss of power. The pilot was concerned about the risk of fire and the possibility of the engine vibrating loose, and decided to force land without delay. A distress call was made to Sywell informing them of the decision to land and giving the aircraft's position, after which the engine was shut down, the fuel shut off, and the passengers briefed.

A field of standing wheat was selected as the most suitable field available and a forced landing carried out during which the undercarriage, propeller and flaps were damaged. None of the occupants was injured.

Examination of the engine, a Potez 4E20, by the pilot immediately after landing showed that one of the spark plug inserts had loosened and dropped out of the cylinder with the plug still attached. The engine had previously been fitted with helical coil inserts and then with threaded steel inserts, but problems of loosening had been experienced with both types. Subsequently a special light alloy insert was manufactured and fitted, which appeared to perform satisfactorily up until the time of the accident.

The spark plugs were refitted during a 50 hour check approximately 2 flying hours prior to the accident. No looseness was noted during a pre-flight inspection of the engine compartment.