ACCIDENT

Aircraft Type and Registration: Ikarus C42 FB UK, G-IAJS

No & Type of Engines: 1 Rotax 912 ULS piston engine

Category: 1.4

Year of Manufacture: 2005

Date & Time (UTC): 30 August 2005 at 1910 hrs

Location: Kinderton Farm, Middlewich, Cheshire

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 1

Injuries: Crew - 1 Passengers - none

Nature of Damage: Substantial damage to right wing, cabin floor, propeller

and landing gear

Commander's Licence: National Private Pilot's Licence

Commander's Age: 36 years

Commander's Flying Experience: 237 hours (of which 34 were on type)

Last 90 days - 8 hours Last 28 days - 0 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

Synopsis

The aircraft had completed its first three flights without incident with a PFA check pilot. During a subsequent high speed taxi run made by the owner the aircraft became airborne, so he elected to take off and fly a circuit. On touchdown, the aircraft yawed to the left and the pilot decided to go-around. However, the engine speed decayed, probably due to carburettor icing, and the aircraft stalled from a height of around 50 ft.

History of the flight

The aircraft had been constructed in the pilot/owner's garage and the initial checks and subsequent start-up

were carried out with the assistance of a Rotax service centre engineer. The aircraft was transported to Fern Farm for final assembly and there the owner carried out fuel flow checks. A Popular Flying Association (PFA) registered check pilot performed low and high speed taxi tests and also the first three test flights, which were uneventful and which totalled 40 minutes.

The aircraft was then de-rigged and moved to Kinderton Lodge Farm on 29 August 2005, where it was re-assembled. Although it was planned to resume the flight test programme on 30 August 2005 with the PFA

check pilot, the pilot/owner decided to carry out some ground runs and taxi the aircraft the evening before. Engine ground runs and some low speed taxiing were completed to his satisfaction and he subsequently decided to perform some high speed taxi runs with a passenger aboard. The pilot/owner completed one uneventful high speed taxi run but, during the second run, he reported that the aircraft "hit a bump" on Runway 07 and "bunny hopped and bounced", causing him to nudge the throttle forward. This resulted in an increase in engine speed. Rather than try to land the aircraft in the limited runway length available, the pilot/owner elected to take off and therefore applied full power. He then flew a left hand circuit without incident and lined up for a landing on Runway 07. As the aircraft touched down, it yawed to the left and the pilot decided to go-around and applied full power. He estimated that the aircraft had reached 50 or 60 ft above the ground when the engine speed decayed, the aircraft stalled and the right wing dropped, resulting in the aircraft striking the ground in a right turn.

The passenger exited the aircraft and was uninjured. The pilot, however, was admitted to hospital having fractured several vertebrae. The aircraft sustained substantial damage, most significant being damage to the propeller, landing gear, cabin frame and the right hand rear wing spar. A general view of the aircraft is shown in Figure 1.

Local conditions

Kinderton Lodge Farm is an unlicensed grass airfield. The pilot was using Runway 07, which is 374 m long and there are trees along the northern edge of the field.

An aftercast supplied from the Meteorological Office, valid for nearby Shawbury and Manchester Airport, indicated that the wind was likely to have been 080°/110°, 3 to7 kt, and the temperature and dew point between 21°/24°C and 15°/16°C, respectively. The latter combinations are consistent with conditions that are favourable for serious carburettor icing at low power settings and it is considered that this was a likely factor in the decay in engine speed as the pilot attempted to climb.

Further information

The pilot/owner later reported that he had purchased a carburettor heating system for the Rotax 912 engine but had decided not to fit this to the aircraft.



Figure 1