

ACCIDENT

Aircraft Type and Registration:	Jodel D117A, G-BEDD
No & Type of Engines:	1 Continental Motors Corp C90-14F piston engine
Year of Manufacture:	1958 (Serial no: 915)
Date & Time (UTC):	10 July 2013 at 1657 hrs
Location:	Abbots Bromley Airfield, Staffordshire
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - 1
Injuries:	Crew - 1 (Serious) Passengers - 1 (Serious)
Nature of Damage:	Aircraft inverted and beyond economic repair
Commander's Licence:	Private Pilot's Licence
Commander's Age:	52 years
Commander's Flying Experience:	141 hours (of which 5 were on type) Last 90 days - 16 hours Last 28 days - 4 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Summary

Whilst attempting to land at Abbots Bromley Airfield the aircraft encountered a downdraft that caused it to lose height. Despite the pilot applying full power the aircraft landed short of the runway, colliding with two hedges before coming to rest inverted. It is likely that the downdraft resulted from a combination of the local topography and turbulence from nearby trees. The pilot's lack of familiarity with the aircraft type may also have been a factor.

History of flight

The runway at Abbots Bromley is a grass strip orientated 04/22, with the 04 threshold located approximately 630 m from, and 30 m above, the edge of a reservoir. The northwestern boundary of the airfield is bordered

by a small wood and, at the time of the accident, the strip itself was surrounded by a standing crop.

The pilot and his passenger arrived at the airfield with the intention of conducting a 30-minute flight in the local area. Although there was some haze the pilot estimated the visibility was around 10 km. The wind was light, with the direction varying between 020° and 040° and the pilot judged from the windsock that there were gusts of around 10 kt.

The aircraft took off from Runway 04 and entered a left-hand circuit. After climbing downwind to approximately 1,300 ft it became evident that the visibility was worse than it had appeared on the ground; the pilot therefore

decided to land. After descending on base leg the aircraft turned onto final approach, much of it being over the reservoir. The pilot later stated that he set the speed at around 60 kt and aimed for a touchdown point some 20 m beyond the runway threshold. At a late stage on the approach, the aircraft suddenly dropped, losing a “large amount of height” and the airspeed reduced to 45 kt. The pilot applied full power but the aircraft did not climb and subsequently collided with two hedges located either side of a road close to the threshold of Runway 04. After passing through the second hedge the aircraft nosed over, coming to rest inverted in the crop on the left side of the runway. Although injured, the occupants managed to escape on the passenger’s side of the aircraft via the broken canopy.

Discussion

The pilot subsequently commented that a combination of the wind direction and topography resulted in a downdraft in the area where the ground rises from the reservoir to the level of the runway. There was also the possibility that turbulence from the trees adjacent to the airfield affected the aircraft. Finally, he considered that his lack of familiarity with the aircraft type may also have been a factor and that the accident may have been avoided had he flown at 65-70 kt and selected a touchdown point further into the runway.