

AAIB Bulletin No: 11/94

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Category: 1.3

Aircraft Type and Registration: PZL-104 Wilga 80, G-BURO

No & Type of Engines: 1 WSK-PZL Kausz A1-14RA piston engine

Year of Manufacture: 1980

Date & Time (UTC): 4 September 1994 at 1200 hrs

Location: Adjacent to Aston Down Airfield, Gloucestershire

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - Serious Passengers - N/A

Nature of Damage: Extensive, beyond economic repair

Commander's Licence: Private Pilot's Licence

Commander's Age: 51 years

Commander's Flying Experience: 460 hours (of which 45 were on type)
Last 90 days - 8 hours
Last 28 days - 5 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The aircraft was engaged in aero-tow glider launching from Aston Down Airfield. It was fitted with sight gauge type fuel quantity indicators, but these were regarded as being unreliable at low fuel states. The pilot therefore calculated his expected endurance based on a known fuel quantity uplift and time already flown after refuelling. The pilot was more usually engaged in aero-tows to 2,000 feet agl, but on this occasion was conducting tows to 4,000 feet agl, with a consequent increase in fuel consumption.

Prior to this flight, the pilot was aware of a low fuel state and he briefed the glider pilot that should fuel starvation occur in the number one tank, then the glider should remain attached while he changed to the number two fuel tank. This occurred shortly after takeoff, and the procedure was duly followed. However, at approximately 1,500 feet, adjacent to the airfield boundary, the number two tank also ran dry. The glider was waved off and landed normally. The pilot stated that he then attempted a routine dead stick landing. His normal recovery technique from aero-tows was to select full fine pitch, cooling gills closed, idle power, full flaps, and make a glide approach back to the airfield.

On this occasion, with plenty of height at his disposal, he elected to carry out a 360° turn. On completion, he realised that he had drifted away from the airfield boundary, and had insufficient height remaining to reach the airfield. A busy road bounded by two dry stone walls was situated between the aircraft and the airfield, so the pilot elected to land in an adjacent field. Unfortunately, the chosen field had recently been ploughed. The aircraft touched down with a high vertical speed and in a nose down attitude. This caused the aircraft to come to an abrupt halt, folding the landing gear back underneath the aircraft, and rolling back the cockpit floor and engine firewall. This in turn caused the engine to be pivoted downwards towards the vertical. The instrument panel and wings also moved downwards. The pilot's legs were left in a small gap between the rolled up cockpit floor and the instrument panel. He also sustained vertical impact injury to his back. There was no fire, and the pilot was assisted to vacate through the right side passenger window.

The pilot considered that he had made the error of judgement as a result of overconfidence in his abilities.