

Auster D4-108, G-ARLG

AAIB Bulletin No: 1/2000 **Ref: EW/G99/11/06** **Category: 1.3**

Aircraft Type and Registration: Auster D4-108, G-ARLG

No & Type of Engines: 1 Lycoming O-235-C1 piston engine

Year of Manufacture: 1961

Date & Time (UTC): 3 November 1999 at 1004 hrs

Location: Hook Airstrip, Hampshire

Type of Flight: Private

Persons on Board: Crew - 1 - Passengers - None

Injuries: Crew - None - Passengers - N/A

Nature of Damage: Propeller, engine shock loaded, tail wheel and engine cowling

Commander's Licence: Private Pilot's Licence

Commander's Age: 52 years

Commander's Flying Experience: 426 hours (of which 124 were on type)
Last 90 days - 4 hours
Last 28 days - 1 hour

Information Source: Aircraft Accident Report Form submitted by the pilot

The pilot planned to fly from Scotland Farm strip to Henstridge, and then to Yeovil. The strip, designated Runway 08, was about 900 yards long with a down slope to the east, the normal take off direction. The pilot made a preflight inspection and noted that the final 200 to 250 yards was unusable because of standing water. There were also some very wet patches to the south of the centreline, at about the midpoint. He assessed that the ground to the north of the centreline was slightly firmer, and that the first 500 yards at least was useable. He estimated that the surface wind was 230°/2 kt and the temperature 15°C; there was no other significant weather.

The pilot did not do a formal take-off weight calculation but he estimated that it was 1,622 lbs (MAW - 1,900 lbs). He reported that he calculated the take-off run required and applied the factors from CAA Safety Sense Leaflet 7B (Aeroplane Performance) for wet grass and soft ground; after applying the additional safety factor of 1.33, this came to 411 yards. Local knowledge dictates that

it is prudent to abandon the take off if not airborne shortly after passing the windsock which is on the northern side of the strip, about 300 yards from the start of roll.

The 'soft field' technique, with the first stage of flap selected, was used for take off. The speed reached 40 mph a short distance before the windsock and the pilot selected the take-off attitude. The aircraft left the ground briefly, flew for about 20 yards and settled back onto the runway. After about 10 yards it became airborne for about 40 to 50 yards before again settling back onto the runway. The pilot was conscious of an "almost immediate 'drag' on the wheel". He decided to abandon the take off, closed the throttle and started to brake. As the aircraft slowed he released the brakes to prevent skidding and pulled the mixture control fully out. When the tailwheel was on the runway, the pilot lost forward vision and allowed the aircraft to cross the centreline onto the softer ground to the south. Deceleration was rapid, the nose suddenly pitched down and the propeller struck the ground. When the aircraft had stopped, it settled back onto the tailwheel and the pilot, who was wearing full upper torso restraint, carried out the shutdown check and made his escape uninjured.