ACCIDENT

Aircraft Type and Registration:	Jodel D117, G-AWVB
No & Type of Engines:	1 Continental Motors Corp C90-14F piston engine
Year of Manufacture:	1957
Date & Time (UTC):	28 April 2010 at 1420 hrs
Location:	Old Park Farm, Margam, Port Talbot
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - None
Injuries:	Crew - None Passengers - N/A
Nature of Damage:	Damaged beyond economic repair
Commander's Licence:	Private Pilot's Licence
Commander's Age:	69 years
Commander's Flying Experience:	960 hours (of which 879 were on type) Last 90 days - 9 hours Last 28 days - 6 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Synopsis

Whilst landing on an uphill grass runway with a tailwind component, the wheels locked under braking and the aircraft overran the strip, colliding with fences and a hedge.

History of the flight

The pilot had returned from Enstone to Old Park Farm in conditions similar to those he had experienced earlier that day on the outbound flight. The ambient temperature was 16ºC.

He had owned the aircraft for 16 years and had experience of operating it from grass strips. The runway at Old Park Farm is 350 m long and is orientated directly north-south. It has a significant slope, so all landings are made uphill and takeoffs downhill, regardless of wind direction. Runway 36 is the uphill direction. A windsock is positioned to the left at the top end of Runway 36. Approximately one mile from the beginning of this runway are two high voltage cables on pylons approximately 200 ft tall, the cables running at 90º to the runway.

On approaching the vicinity of the airstrip the pilot switched to the Swansea radio frequency, the nearest significant airfield. He was able to obtain the surface wind, which was 220º at 7 kt, and to establish their QNH. He then changed to the Old Park Farm radio frequency.

As he passed abeam Port Talbot steel works he was able to observe the steam plumes. He noted that some were rising vertically, whilst others were indicating a south-easterly wind. He then transmitted a downwind call for Runway 36 left-hand and slowed to 70 mph. No response was heard from any other traffic. He turned onto base leg and then onto final at 300 ft, announcing the fact on the radio, and slowing to between 60 and 65 mph.

He subsequently stated that, since the aircraft type had no flaps, it was his custom on clearing the second cable run to sideslip the aircraft to position it at the correct approach height, with an airspeed of 55 to 60 mph.

On rounding out he became aware that the groundspeed seemed slightly high, although the correct 50 mph airspeed was being indicated. Nonetheless, a normal three-point landing was achieved, albeit followed by poor deceleration as the aircraft ran uphill. The pilot braked gently, but then more firmly. The aircraft continued up the slope and struck the barbed wire fence at the end, before crossing a lane and striking a second fence and hedge.

Subsequent examination of ground marks indicated that both wheels were locked as the aircraft proceeded up the slope. Within the space of two hours, three other aircraft arrived with no problems.

The pilot regarded the failure of the aircraft to stop as perplexing; in his previous experience of G-AWVB this lack of deceleration had not occurred on grass strips. On the contrary, landings at Old Park Farm normally required some application of power to vacate the runway. He considered that the south-westerly wind must have briefly strengthened during the landing roll.