ACCIDENT

Aircraft Type and Registration: Pioneer 300 Hawk, G-OHJE
No & Type of Engines: 1 Rotax 912ULS piston engine
Year of Manufacture: 2010 (Serial no: LAA 330A-14853)
Date & Time (UTC): 6 July 2013 at 1400 hrs
Location: Private strip, Alloa, Clackmannanshire
Type of Flight: Private
Persons on Board: Crew - 1  Passengers - None
Injuries: Crew - None  Passengers - N/A
Nature of Damage: Damage to propeller, engine, nosewheel and left main landing gear
Commander’s Licence: Private Pilot’s Licence
Commander’s Age: 53 years
Commander’s Flying Experience: 140 hours (of which 36 were on type)
                      Last 90 days - 19 hours
                      Last 28 days - 15 hours
Information Source: Aircraft Accident Report Form submitted by the pilot

Synopsis
The aircraft was taking-off on a flight as part of the renewal of its Permit-to-Fly, from an airstrip with a 470 m runway. The pilot elected to use the direction which had an upslope because this was favoured by the wind direction. However, the aircraft was unable to clear a high wire fence at the far end of the runway. This brought the aircraft to a standstill with the nose landing gear collapsed.

History of the flight
The aircraft had been prepared for a flight to renew its Permit-to-Fly. This involved adding 20 kg of ballast and refuelling to full such that the aircraft was at 70% of its maximum gross weight. The pilot knew that he would later have to perform the test at 92% gross weight for the Permit process, but wanted to check the aircraft’s performance at a lower weight first because the 8 kt prevailing wind favoured use of the westerly runway, which had an upslope for the first 330 m of its 470 m total length.

Having performed all the required checks, the pilot commenced the takeoff roll. As the aircraft reached the top of the upslope it became airborne briefly but then descended. The pilot decided to continue the takeoff because he felt that, with 140 m of level ground remaining, he would be able to clear the 8 ft wire netting fence at the end of the runway. Unfortunately, this was
not the case and the aircraft contacted the fence at a height of about 6 ft, winding the netting around the propeller and bringing the aircraft to a halt some 100 m beyond the fence with the nosewheel collapsed.

Discussion

The pilot stated that, having read after the event numerous reports on the effect of upslope and wind speed on takeoff distance, he believed the aircraft was on its performance limit and that he should have used the downhill runway instead. He thought that a slight downdraft caused by nearby trees may have reduced the aircraft’s climb rate still further. In future he intends to estimate a point on a runway with an upslope beyond which the takeoff would be abandoned if not airborne.