ACCIDENT

Aircraft Type and Registration:	Denney Kitfox Mk 3, G-BWYI
No & Type of Engines:	1 ROTAX 912 piston engine
Year of Manufacture:	1997
Date & Time (UTC):	4 August 2007 at 1400 hrs
Location:	Rollington Farm private strip, near Corfe, Dorset
Type of Flight:	Private
Persons on Board:	Crew - 2 Passengers - None
Injuries:	Crew - None Passengers - N/A
Nature of Damage:	Damage to airframe, propeller, landing gear
Commander's Licence:	National Private Pilot's Licence
Commander's Age:	71 years
Commander's Flying Experience:	274 hours (of which 140 were on type) Last 90 days - 3 hours Last 28 days - 3 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Synopsis

As power was applied for takeoff, the aircraft veered to the left. Despite the application of right rudder, the aircraft drifted left until the left wheel ran into the long grass by the side of the airstrip. The aircraft swung further left, tipped forward and came to rest inverted.

History of the flight

This accident took place on 4 August 2007 and was reported to the AAIB on 18 March 2009. The pilot planned to take off from a grass airstrip approximately 400 m long and 18 m wide, orientated south west, with long grass on each side. The flight was the second flight the pilot had undertaken in G-BWYI and its Rotax 912 was a more powerful engine than he was used to. He reported that the weather was "good with a light to moderate south west wind, good visibility and 'few' cumulus cloud at approximately 3,000 ft".

The pilot applied power for the takeoff and stated "the aircraft soon drifted to the left. I applied right rudder, however this was not effective and soon the left wheel started to run through the long grass." The aircraft turned further left and tipped forward, coming to rest inverted. Both occupants were able to exit the aircraft unaided and were unhurt.

AAIB notification

The pilot notified his insurance company of the accident and was told the AAIB would be informed. The fact that this

did not happen became apparent when, subsequently, the Light Aircraft Association (LAA) received an application for a Permit to Fly for the repaired aircraft.

Analysis

As with many aircraft engines, the Rotax 912 rotates the propeller clockwise when viewed from the pilot's seat. Such engines at high power produce a yawing moment to the left which must be resisted through the application of right rudder. In this case the engine was more powerful than the pilot was used to and, although rudder was applied in the correct sense, the aircraft continued to veer left. The airstrip was only 18 m wide and so there was little time for further corrective action. Once the left wheel ran into the grass, the extra friction increased the swing to the left and made the aircraft less controllable.

AAIB comment

This type of accident is fairly frequent and characterised by the lack of time available to pilots for corrective action. The swing is caused by the high power of the engine and the yawing tendency would be removed by closing the throttle. Although many pilots consider their actions should the engine fail during takeoff, it seems that fewer pilots consider their actions in the case of loss of control.

Although the AAIB is often informed about a given accident by a number of sources, the responsibility for notification lies with the aircraft commander.