

ACCIDENT

Aircraft Type and Registration:	Cessna 172S Skyhawk, G-ENNK	
No & Type of Engines:	1 Lycoming IO-360-L2A piston engine	
Year of Manufacture:	2000 (Serial no: 172S8538)	
Date & Time (UTC):	31 March 2016 at 0606 hrs	
Location:	Sherlowe Airstrip, Shropshire	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Aircraft inverted; probably damaged beyond economic repair	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	73 years	
Commander's Flying Experience:	8,000 hours (of which 1,000 were on type) Last 90 days - 58 hours Last 28 days - 29 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The pilot was attempting to take off from Sherlowe airstrip, using grass Runway 15 which is approximately 240 m long. However, he realised that the aircraft was not accelerating quickly enough to reach flying speed as the ground was too soft. He abandoned the takeoff and the aircraft ran off the end of the runway and into a soft, cultivated field where it flipped inverted.

The pilot was uninjured and evacuated the aircraft unaided. He stated that he regularly operated from Sherlowe airstrip and had calculated that Runway 15 gave a 40% margin for soft ground based on the performance figures for a short-field takeoff quoted in the Pilot's Operating Handbook.

The Cessna 172S Pilot's Operating Handbook (POH) shows that, for a short-field takeoff, the minimum ground roll required to lift off from a flat, level and dry paved surface is 186 m at 0°C ambient temperature and 2,200 lb All-Up Weight. The POH notes that 15% should be added to the ground roll when operating from a dry grass runway which means that the minimum calculated ground roll is 214 m. There was thus a margin of 12% to offset against the soft, damp runway conditions.

The CAA's Safety Sense leaflet 7c '*Aircraft Performance*' contains a paragraph which urges pilots to establish a decision point at which takeoff can be safely abandoned without overrunning if a pilot is not happy with his aircraft's or his engine's performance.

Bulletin Correction

A correction was issued concerning this Bulletin on 14 July 2016 amending the airfield name to Sherlowe, correcting the length of the runway and adding paragraph three. Full details of the correction will be published in the August Bulletin (8/2016).