ACCIDENT

Aircraft Type and Registration:	DH82A Tiger Moth, G-AHLT
No & Type of Engines:	1 De Havilland Gipsy Major 1C piston engine
Year of Manufacture:	1939 (Serial no: 82247)
Date & Time (UTC):	12 August 2012 at 1240 hrs
Location:	3 nm south-west of Mold, Flintshire
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - None
Injuries:	Crew - None Passengers - N/A
Nature of Damage:	Right side wings and tailplane destroyed, propeller destroyed
Commander's Licence:	Private Pilot's Licence
Commander's Age:	47 years
Commander's Flying Experience:	624 hours (of which 464 were on type) Last 90 days - 30 hours Last 28 days - 21 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Synopsis

The pilot was attempting to land the aircraft at a site with restricted length and obstacles at its far end. The aircraft touched down too far into the field to complete a safe landing and the pilot applied power to go around, during which the right wings struck tree branches.

History of the flight

The accident occurred soon after the pilot had completed a multiple-leg tour of France, totalling 28 flying hours. Some three years earlier, the pilot had identified a field near Mold, North Wales for possible use as a landing site. On the day of the accident he intended to fly there on a short positioning flight from a field a few miles to the south, and obtained permission from the landowner to use the new field. The pilot walked it twice on the morning of the accident and was aware that it was a difficult landing site, approximately 200 yards (183 m) long, of which about 170 yards (155 m) was useable. The field sloped steeply upwards for its first half and less steeply for the second half. The pilot had measured the Tiger Moth's nil-wind landing roll on a flat grass surface as 120 yards (110 m), so estimated it would stop within about 50 yards (46 m) when the upslope was taken into account. The landing direction was to the north.

Crossing the northern end of the field were a small earth bank, a low fence, two trees and power and telephone

lines at a height of about 50 ft. It was evident to him that any go-around decision would need to be made in good time, and would require careful flying to avoid the wires and trees. However, as the pilot had recently completed a lengthy series of flights and therefore had a good deal of recent flying practice, he was confident that a safe landing could be made.

On arrival at the field after the short positioning flight, the pilot made a flypast to assess the site. Conditions were fine, with a light and variable wind and a temperature of 20°C. The pilot abandoned the first approach to the field because the aircraft was too fast. The airspeed on the second approach was 55 mph, but the pilot felt he could decelerate to 50 mph by the start of the field (the aircraft's stall speed was 45 mph). However, as the aircraft crossed the hedge at the start of the field, the pilot became aware that the aircraft was still too fast to land safely, yet also now too low to be able to climb above the obstacles at the far end.

The main wheels touched down at the top of the steeply sloping section of field. Speed was still above the stall and the aircraft bounced, touching down again about 70 yards (64 m) before the end of the field. The pilot opened the throttle part way with the intention of maintaining flying speed and flying between the trees. Concentrating mainly on flying through the gap between the fence and the wires, the aircraft's right wing tip struck branches of one of the trees. The pilot ducked and protected his head. He was aware only of rolling sensations until the aircraft came to a stop, resting on its right side and pointing back in the direction from which it had come. He quickly made switches safe, released his straps and vacated the badly damaged aircraft.

In his report, the pilot observed that the choice of landing site was not a good one and that he had not adhered to his own pre-flight plan to go-around if the approach was not entirely satisfactory.