

ACCIDENT

Aircraft Type and Registration:	Thruster T600N 450, G-CCCH	
No & type of Engines:	1 Jabiru Aircraft Pty 2200A piston engine	
Year of Manufacture:	2003	
Date & Time (UTC):	15 July 2006 at 1330 hrs	
Location:	Cloughan Lane, Ballyclare	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Severe damage to wings, fuselage and vertical fin	
Commander's Licence:	National Private Pilot's Licence	
Commander's Age:	33 years	
Commander's Flying Experience:	73 hours (of which 53 were on type) Last 90 days - 11 hours Last 28 days - 4 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

Whilst taking off from a grass field, the aircraft struck a hedge and overturned.

History of the flight

The pilot was landing at a private field belonging to a friend, about one mile to the north of Ballyclare. He assessed the wind as 2 to 3 kt from the south and made three practice approaches at lowering heights, during which he noticed some buffeting on approach and climb out, but this did not concern him. The field was roughly square in shape with power cables and trees running along the south-eastern boundary, so the pilot landed on a south-easterly heading without incident, stopping in approximately ¼ of the distance available.

After a stay of about 45 minutes, he and his passenger boarded the aircraft for the return flight. He judged that the wind conditions had not changed, so he elected to taxi the aircraft to the south-eastern corner of the field to commence the takeoff run in a north-westerly direction. His rationale for doing this was to maximise the distance available (ie diagonally across the field) and to avoid the cables, even though it meant there was a slight crosswind at 90° to the aircraft's heading. After briefing his passenger and completing the pre-flight checks, the pilot applied full power and commenced his takeoff roll. From the beginning, he had applied slight back pressure on the control column to protect the nosewheel and, with the aircraft just airborne, he relaxed the pressure to enable it to accelerate. However it became apparent

that the aircraft was not going to clear a 5-foot hedge on the field boundary and the pilot tried to coax the aircraft over the hedge and accept a forced touchdown in the next field, which he knew was suitable. Unfortunately the aircraft's wheels hit the top of the hedge, pitching it forward nose-first into the field whereupon it stopped immediately and flipped onto its back.

The pilot and passenger exited the aircraft uninjured and unassisted via the doors: the pilot turned off the master switch and the fuel and alerted the emergency services.

The pilot cited the following factors as causal to the accident:

- The grass had recently been cut for silage but fresh growth had had an adverse effect on the aircraft's performance.

- The ambient temperature was 26 C° - the warmest day of that period – and the effects on engine and climb performance were significant.
- The decision to take off with a cross-wind, although this was somewhat forced upon him by the presence of obstructions.

In summary, although he states that he was aware of the individual effects of the three factors on takeoff performance, the combined effects “were significantly more than the sum of the parts”.