

ACCIDENT

Aircraft Type and Registration:	Thruster T600N 450, G-CCUZ	
No & Type of Engines:	1 Jabiru Aircraft Pty 2200A piston engine	
Year of Manufacture:	2004	
Date & Time (UTC):	20 March 2011 at 1515 hrs	
Location:	Wickenby Airfield, Lincolnshire	
Type of Flight:	Training	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Failure of screws attaching the propeller flange to the crankshaft, leading to propeller detachment	
Commander's Licence:	National Private Pilot's Licence	
Commander's Age:	25 years	
Commander's Flying Experience:	508 hours (of which 477 were on type) Last 90 days - 55 hours Last 28 days - 17 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and subsequent AAIB enquiries	

The propeller and hub assembly separated from the aircraft shortly after takeoff. The pilot completed a successful forced landing in an adjacent field. Examination revealed that all of the propeller flange mounting screws had failed. Some of the screws showed evidence of having fractured some time before the propeller finally separated.

Two previous, similar propeller attachment failures on this aircraft type were reported on in AAIB bulletins; both had resulted from fatigue failures of the corresponding screws. These were on aircraft G-EVEY on 26 October 2009 and G-CBWJ on 2 August 2010.

On 20 May 2011 the UK Civil Aviation Authority published an Emergency Mandatory Permit Directive applicable to all Thruster T600 aircraft having Jabiru 2200A engines driving two-bladed ground-adjustable Warp Drive propellers of 64-inch nominal diameter. This required replacement of the flange-to-crankshaft screws on reaching 500 hours operating life, or within 5 flight hours for those having lives between 500 and 1,000 hours, and before further flight on those having exceeded 1,000 hrs life.