

ACCIDENT

Aircraft Type and Registration:	Grumman AA-5 Traveller, G-BBSA	
No & Type of Engines:	1 Lycoming O-320-E2G piston engine	
Year of Manufacture:	1974	
Date & Time (UTC):	19 November 2005 at 1011 hrs	
Location:	Durham Tees Valley Airport, Co Durham	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Nose landing gear strut bent, propeller tip damaged	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	29 years	
Commander's Flying Experience:	136 hours (of which 32 were on type) Last 90 days - 4 hours Last 28 days - 0 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

After lift-off, the aircraft appears to have developed a 'porpoising' motion and the nose landing gear and propeller struck the runway. No reason for the pitch oscillations has been found.

History of flight

The pilot and a passenger were intending to fly from Durham Tees Valley Airport to Chichester (Goodwood) Airfield. The pilot had done extensive flight planning at home prior to leaving for the airport but he checked the weather again upon arrival. The aircraft was refuelled and, after the normal pre-flight checks, the aircraft was taxied to line-up on Runway 23. The wind direction was 210° at 3 kt.

The pilot applied full power and the aircraft started to accelerate. With the sun low on the horizon and very bright, he had to move his head to the right to avoid being dazzled, although he could still see the runway centre line. He was expecting the take-off distance to be fairly long in the calm conditions but, when he glanced at the airspeed indicator, he saw that it was reading 80 mph. As he had intended to rotate the aircraft at 70 mph, he pulled back on the control column at this point and the aircraft lifted-off but then suddenly the nose pitched down and, despite full back movement of the yoke, he was unable to arrest the pitch rate and the nosewheel and propeller struck the runway. The pilot, aware that two other aircraft were intending to land, said he deliberately

steered the aircraft to the left and onto the grass before it came to rest. After securing the aircraft, the pilot and passenger vacated the aircraft normally.

The reason for the uncommanded pitch-down is not clear, since no defects were found during the subsequent

repair, which included a new propeller, nose landing gear strut and a shock-load check of the engine. Eyewitnesses in the control tower have stated that they observed a number of oscillations in pitch before the impact with the runway.