

ACCIDENT

Aircraft Type and Registration:	Cyclone AX2000, G-BYJM	
No & Type of Engines:	1 Rotax 582-48 piston engine	
Year of Manufacture:	1998	
Date & Time (UTC):	10 November 2010 at 1415 hrs	
Location:	Caunton Airfield, Nottinghamshire	
Type of Flight:	Private	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Landing gear collapsed	
Commander's Licence:	Private Pilot's Licence (Microlight) with Instructor and Examiner ratings	
Commander's Age:	50 years	
Commander's Flying Experience:	7,000+ hours (of which 900+ were on type) Last 90 days - about 70 hours Last 28 days - about 20 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and further enquiries by the AAIB	

Synopsis

During a simulated engine failure after takeoff the student pilot reduced the throttle rapidly and did not immediately lower the nose of the aircraft. The examiner took control and increased the power to full but his actions were too late to prevent a heavy touchdown.

History of the flight

The Cyclone AX2000 is a high-wing three-axis microlight aircraft with tricycle landing gear. It has side-by-side seating with a single control stick mounted in the centre. It has a high thrust-line configuration with its engine mounted on a strut forward of the wing

leading edge. The purpose of the flight was to conduct a 'General Skills Test' (GST). The student pilot was in the left seat and the examiner (pilot-in-command) was in the right seat. Following successful completion of the Oral Test the examiner briefed the student on the GST. The student was told to expect to be asked to perform a simulated engine failure after takeoff (EFATO) and that this might be requested during the first takeoff. The examiner expected the student to retard the throttle when the simulated EFATO was called for and then to land straight ahead.

After carrying out the pre-flight and pre-takeoff checks

the student lined up on Runway 29 (grass) which was 450 m long and 15 m wide. The wind was from the north-west at about 10 kt. After a normal takeoff, and at a height of about 100 feet, the examiner called “Engine Failure”. The examiner reported that at this point the student closed the throttle “very abruptly” and did not lower the nose of the aircraft. The aircraft decelerated and, when the examiner realised that the student was not performing the correct recovery procedure, he took control of the aircraft and increased the power to full. However, his actions were too late to prevent a heavy touchdown, causing the landing gear to collapse.

Student’s comments on the accident

The student said that he recalled having practised the EFATO on two previous occasions, both of which were using the longer runway. He agreed that he had not lowered the nose quickly enough, but also commented

that as it was the first manoeuvre of the test he had not yet had a chance to get settled.

Examiner’s comments on the accident

The examiner stated that in a teaching situation he would always cover the controls with his hands in case a student made an error but that, in a GST in an aircraft with a single control stick, he cannot easily do this as he needs to give the student full control of the aircraft. He also said that he called for the EFATO on the first takeoff because the wind was due to increase and because the student had performed a good takeoff. He stated that with the benefit of hindsight it might have been better to have done the EFATO later in the test sequence. He also noted that the aircraft’s high thrust line meant that the aircraft had a tendency to pitch up when power was reduced.