

ACCIDENT

Aircraft Type and Registration:	Mainair Rapier microlight, G-MZON
No & type of Engines:	1 Rotax 503-2V piston engine
Year of Manufacture:	1998
Date & Time (UTC):	5 July 2006 at 14:29 hrs
Location:	Selby Home Farm, Stanton, Netherwitton, Northumberland
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - 1
Injuries:	Crew - 1 (Serious) Passengers - 1 (Serious)
Nature of Damage:	Aircraft trike unit destroyed
Commander's Licence:	National Private Pilot's Licence
Commander's Age:	46 years
Commander's Flying Experience:	Approximately 107 hours (of which 50 were on type) Last 90 days - 5 hours Last 28 days - 0 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Synopsis

The aircraft failed to climb away after takeoff and in order to avoid colliding with a building, the pilot attempted to make a right turn. The aircraft then descended rapidly out of control and collided with a dry stone wall.

History of the flight

Prior to the accident flight, the pilot had completed an uneventful solo flight. On that occasion he had taken off to the west, accepting a slight tailwind, as the airstrip slopes downhill in this direction. He noted that the climb performance had been poor, but attributed this to the tailwind.

The pilot then planned to undertake a further flight

with a passenger. Noting from the wind sock that the easterly wind had increased in strength, he decided to take off into wind this time, even though the strip sloped upwards, as it had been recently lengthened to give an increased margin of safety when taking off uphill. He ensured that his passenger was securely strapped in and briefed him prior to departure. The pilot then taxied the aircraft to the beginning of the strip, checked that the trim and hang point were correctly set and applied full power for takeoff. The aircraft lifted off at 50 mph and climbed to a height of 50 ft, but failed to climb any higher. Realising that they were in danger of colliding with one of the buildings beyond the eastern end of the strip, he attempted to make a right turn. The aircraft then

descended rapidly out of control and struck a dry stone wall, causing severe injuries to the pilot and passenger and severely damaging the trike. A local landowner assisted in their evacuation.

The weather conditions at the time of the accident were good, with an easterly wind of approximately 8 kt and an ambient temperature of around +30°C.

In the pilot's assessment, contributory factors to the accident were the reduced climb performance due to the high ambient temperature and the possibility of a down draft or rotor effect from the buildings and trees located near the eastern end of the strip.