MCR-01 Club Banbi, G-RESG

AAIB Bulletin No: 7/2004	Ref: EW/G2004/05/15	Category: 1.3
Aircraft Type and Registration:	MCR-01 Club Banbi, G-RESG	
No & Type of Engines:	1 Rotax 912ULS piston engine	
Year of Manufacture:	2003	
Date & Time (UTC):	15 May 2004 at 1600 hrs	
Location:	Private strip at Parsonage Farm, Newmarket, Suffolk	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Damage to landing gear, right wing leading edge, wing tip and flaps. Slight damage to one propeller blade	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	64 years	
Commander's Flying Experience:	245 hours (of which 64 were on type)	
	Last 90 days - 27 hours	
	Last 28 days - 6 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

History of the flight

The pilot was conducting a private flight from Cambridge to Parsonage Farm where he collected his passenger and some personal belongings before continuing to a social engagement at Membury. Weather for the flight was good with no wind, scattered cloud at about 3,000 feet and surface temperature forecast at 19°C.

An uneventful transit was made from Cambridge at 2,000 feet joining right base for the 475 metre long grass Runway 24. The aircraft was configured with normal landing flap and a stable approach made at 60 kt crossing the threshold at 55 kt. The landing was normal and some braking applied with the aircraft stopping by the usual point on the runway.

The pilot calculated his take-off weight for the flight to Membury as 460 kg, 30 kg below the maximum permitted take-off weight of 490 kg and confirmed that the centre of gravity was within the operating limits. He boarded his passenger and loaded the baggage as per his load plan before carrying out a normal start and taxiing out to the runway. There was no windsock but the wind was calm with any drift across the runway from the north-west, an OAT of 23°C; the grass was dry and approximately four inches high. The pre-takeoff and engine power checks were completed with the

carburettor heat selected OFF. With 15° of take-off flap lowered the pilot applied full power and the aircraft accelerated along the runway. The acceleration seemed slightly slower than normal and this was confirmed to the pilot as he passed a marker, which he had placed at the mid-point of the runway at 55 kt, the airspeed and position by which he was normally airborne. He elected to abandon the takeoff, closed the throttle and applied maximum braking.

The wheel brakes appeared to lock and the aircraft skidded across the grass slowing gradually. Realising there was insufficient stopping distance available before the boundary hedge, the pilot yawed the aircraft to the right in order to try and perform a ground loop. With little directional control, the aircraft continued to skid, striking the hedge at about 10 kt with the right wing, propeller and main landing gear. The aircraft came to an abrupt halt with the left wing resting on the hedge. The pilot carried out the shut down checks and both persons vacated the aircraft uninjured.

Conclusion

The pilot concluded that whilst he could not account for the lack of acceleration other than the grass surface and unusually high temperature, he considered that he should have made his decision to abandon the takeoff earlier. In order to improve the aircraft's performance from his strip he intends to fit a variable pitch propeller.