

Montgomerie-Bensen B8MR, G-BTFW

AAIB Bulletin No: 9/2003	Ref: EW/G2003/07/24	Category: 2.3
Aircraft Type and Registration:	Montgomerie-Bensen B8MR, G-BTFW	
No & Type of Engines:	1 Rotax 532 piston engine	
Year of Manufacture:	1991	
Date & Time (UTC):	16 July 2003 at 1808 hrs	
Location:	North Coates, Grimsby, Lincolnshire	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Main rotor blades & propeller destroyed. Rotor mast and control rods bent. Two support stays bent	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	64 years	
Commander's Flying Experience:	58 hours (of which 46 were on type)	
	Last 90 days - 6 hours	
	Last 28 days - 4 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

History of flight

Prior to the flight the owner/pilot had carried out some maintenance to the aircraft which included draining the engine coolant and refilling with a fresh anti-freeze mixture. After completing the pre-flight checks the pilot taxied the aircraft to the runway and engaged the pre-rotator to spin up the rotor. The takeoff was normal but the pilot noticed that the engine coolant temperature had risen above its normal operating limit (60 - 80° C). The pilot, thinking that an air-lock had occurred in the cooling system, reduced the power and initiated an abbreviated circuit to land back at the airfield. On the downwind leg the engine lost power and the aircraft began to descend. The rate of descent increased during the final turn onto Runway 05 and a heavy landing into a cross-wind (approximately 080/05) resulted in the aircraft rolling over.

Examination of the aircraft

The owner/pilot examined the aircraft and found that the bottom hose of the engine cooling system had pulled away from the radiator connection. In retrospect the pilot recalled that when he refitted the bottom hose following the draining of the cooling system he concentrated on ensuring that it did not chafe on the propeller gearbox and in doing so feels that he inadequately tightened the jubilee clip that held the hose onto the radiator.