Morane Saulnier MS 892A-150, G-BTIU

AAIB Bulletin No: 8/2004	Ref: EW/G2004/06/01	Category: 1.3
Aircraft Type and Registration:	Morane Saulnier MS 892A-150, G-BTIU	
No & Type of Engines:	1 Lycoming O-320-E2A piston engine	
Year of Manufacture:	1968	
Date & Time (UTC):	2 June 2004 at 1645 hrs	
Location:	Spilsted Airstrip, near Hastings, East Sussex	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 2
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Severe to fuselage and left wing	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	45 years	
Commander's Flying Experience:	477 hours (of which 63 were on type)	
	Last 90 days - 27 hours	
	Last 28 days - 8 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The flight was to be a planned navigation route. The weather was good with a surface wind of $340^{\circ}/5$ to 10 kt and the runway direction to be used was 160° ; the runway surface was dry grass.

After a normal start, the pilot taxied the aircraft to the refuelling area to uplift some fuel, giving a total on board of 105 litres. During this movement, the brake system was checked and appeared to be fully serviceable. G-BTIU has differential wheel brakes operated by toe brakes for steering. A lever on each rudder pedal is used to apply the parking brake; each lever is rotated to a horizontal position to maintain the pressure applied by the toe brake on the respective wheel. The nosewheel is free to castor and is not connected to the rudder.

Following the fuel uplift, the pilot taxied towards the designated 'Run-up' area. Prior to stopping, he ensured that the nosewheel was straight. Then, following the normal engine checks he prepared for takeoff. With his calculated take-off weight, the pilot decided to use the 'Short field' technique used by the pilots operating at the airstrip. This involved holding the aircraft on the brakes, applying full power and then releasing the brakes. He held brake pressure on the toe brakes, released both brake levers and applied full power. Once he had achieved an indicated 2,500 RPM, he released both toe brakes. The aircraft immediately began to yaw to the left and the pilot applied some right brake. This

appeared to have no effect and, with the aircraft pointing approximately 40 to 45° left of the centre line, the pilot reached down to ensure that the left brake lever was in the off position. It was, but at about this time the left brake appeared to release and the pilot was able to align the aircraft on the runway direction but displaced well to the left of the centre-line. With G-BTIU close to a hedge on the left of the runway, the pilot closed the throttle but the left wing struck a tree in the hedge and the aircraft swung violently to the left.

Subsequent checks revealed no apparent defects with the brake system. The pilot was confident that the nose wheel was straight before he released the brakes. He also reviewed the area to determine if the left wheel could have been in a depression in the grass but this appeared unlikely. With the initial ground marks showing indications of the left wheel skidding, the pilot considered that the most likely cause of the accident was that some left brake was still applied at the start of the take-off run. However, he considered that retardation of the throttle at the first indication of a directional problem might have recovered the situation.