## Marquart MA5 Charger, G-BHBT

## AAIB Bulletin No: 1/2001

## Ref: EW/G2000/08/37 - Category: 1.3

Aircraft Type and Registration:	Marquart MA5 Charger, G-BHBT
No & Type of Engines:	1 Lycoming O-320-E2A piston engine
Year of Manufacture:	1999
Date & Time (UTC):	11 August 2000 at 1600 hrs
Location:	Jackerell's Farm, Horsham, Sussex
Type of Flight:	Private
Persons on Board:	Crew - 1 - Passengers - None
Injuries:	Crew - None - Passengers - N/A
Nature of Damage:	Damage to propeller, top wing spar and rudder
Commander's Licence:	Private Pilot's Licence
Commander's Age:	36 years
Commander's Flying Experience:	208 hours (of which 34 were on type)
	Last 90 days - 16 hours
	Last 28 days - 3 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

The aircraft, a light tail-wheeled biplane, was planned to fly from Deanlands in Sussex to Jackerell's Farm near Horsham, Sussex. The grass airstrip at Jackerell's Farm is orientated 03/21 and is approximately 550 metres long; the mown area of the strip is about 10 metres wide. There is a marked down-slope on Runway 21, and landings are therefore routinely made on Runway 03 accepting tailwinds of up to 7 kt. The aircraft had been refuelled before the previous flight and the upper wing fuel tank remained nearly full.

The short flight from Deanlands proceeded uneventfully and on arrival at Jackerell's Farm the wind appeared to be from a southerly direction but within limits for landing on Runway 03. The pilot, who was seated in the rear cockpit, carried out a circuit to land. Airspeed and height over the runway threshold were correct but the aircraft was not accurately lined up with the mown area of the strip, and the pilot took some time to adjust the aircraft's lateral position. The aircraft eventually touched down over half way along the runway with about 215 metres of runway remaining.

In common with other similar types, forward visibility from the rear cockpit of the Charger in the landing attitude is obstructed by the aircraft nose, and the pilot was not immediately aware of how little runway remained. By the time the pilot appreciated the situation fully, he judged that there was insufficient runway remaining to carry out a go-around and he therefore commenced heavy braking. The tail lifted and shortly thereafter the propeller struck the ground. The aircraft rotated forward about the nose and came to rest inverted with the tail pointing in the approach direction about 90 metres from the end of the runway. The pilot turned off the fuel and electrics, released his four point harness and slid out of the open cockpit uninjured.

In his report the pilot considered the primary cause of the accident to be his late appreciation of the need for a go-around. In the pilot's opinion the heavy braking combined with a higher than normal centre of gravity due to the fuel in the upper wing tanks caused the aircraft to somersault .