## Cessna 172M, G-BHCC

AAIB Bulletin No: 10/2002 Ref: EW/G2002/07/22 Category: 1.3

Aircraft Type and Registration: Cessna 172M, G-BHCC

**No & Type of Engines:** 1 Lycoming O-320-E2D piston engine

Year of Manufacture: 1976

**Date & Time (UTC):** 13 July 2002 at 1640 hrs

**Location:** Goodwood Airfield, West Sussex

**Type of Flight:** Private

Persons on Board: Crew - 1 Passengers - 2

Injuries: Crew - None Passengers -

None None

**Nature of Damage:** Aft fuselage skin and rudder base damaged

Commander's Licence: Private Pilots Licence

Commander's Age: 42 years

**Commander's Flying** 

Experience: 108 hours (of which 12 were on type)

Last 90 days - 19 hours

Last 28 days - 19 hours

**Information Source:** Aircraft Accident Report Form submitted by the

pilot

The aircraft was departing from Runway 32 at Goodwood, for a cross country flight to Gloucestershire Airport. Following completion of the pre-takeoff checks, the pilot lined the aircraft up on the runway. There are no centreline markings on this grass runway and he realised, before he started the takeoff, that the aircraft was two or three metres to the left of centre. Believing that he would be able to correct this during the ground roll, he commenced the takeoff. However, the aircraft did not straighten up, despite the pilot's application of right rudder pedal, but continued to track further to the left. The airspeed was now indicating 45 to 50 kt and, although he was still not correcting the direction, the pilot thought that he had sufficient room to get airborne clear of the edge marker boards. At 55 kt, he rotated the aircraft and, as it lifted off the ground, he heard and felt a bump, which he believed to be a wheel hitting a marker board. He continued the climb out, proceeded with the onward flight to Gloucestershire and landed there without observing any problems with the aircraft.

A subsequent examination of the aircraft showed that the impact with the marker board had damaged the fin rudder post assembly causing the rudder to jam, with between two to five degrees of left rudder applied. The rudder pedals would have been able to move a small amount, but the rudder could not move.

The pilot commented that he was less familiar with this type of aircraft than the PA28 on which he had originally trained and did not appreciate the amount of rudder input that would be required to correct a yaw to the left during a takeoff. He also commented that he should have abandoned the takeoff when he realised that he was not correcting the direction of the ground roll.