Reims Cessna F172M Skyhawk, G-BIIB

AAIB Bulletin No: 2/2004	Ref: EW/G2003/10/17	Category: 1.3
Aircraft Type and Registration:	Reims Cessna F172M Skyhawk, G-BIIB	
No & Type of Engines:	1 Lycoming O-320-E2D piston engine	
Year of Manufacture:	1974	
Date & Time (UTC):	31 October 2003 at 1515 hrs	
Location:	Rochester Aerodrome, Kent	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Nose landing gear attachment to main bulkhead damaged	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	43 years	
Commander's Flying Experience:	65 hours (of which 2 were on type)	
	Last 90 days - 53 hours	
	Last 28 days - 6 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

History of the flight

The pilot was on a local flight from Rochester, routing Gravesend, Sheerness and Maidstone before returning to Rochester. The weather for the flight was good with a light southerly wind, more than 10 km visibility and some isolated cumulonimbus clouds with the base generally above 2,500 feet. The flight was uneventful and the pilot rejoined the Rochester circuit downwind at 1,000 feet aal for Runway 20R, which is a grass runway 827 metres long and 32 metres wide. The pilot carried out a right-hand circuit with a Cessna 152 ahead, configuring his aircraft for landing with 20° of flap lowered on base leg and the aircraft trimmed for 70 KIAS. As the pilot turned onto the final approach at 600 feet, he saw that the PAPI indicators, which are set to 3.5°, were showing two white lights. The other Cessna 152 cleared the runway and the pilot adjusted the engine power to regain the correct approach path, which was indicated by one red and one white PAPI light. The approach was then fully stabilised with no turbulence. At 300 feet the pilot selected 30° of flap and on passing over the runway threshold, he closed the throttle to idle. He estimated the aircraft height was between 20 to 30 feet above the runway number markings.

The nose of the aircraft appeared to be at the correct attitude during the flare and whilst holding-off but the aircraft touched down heavily, bouncing once from which the pilot executed a go-around. He flew a normal circuit and landed without incident. On returning to the flying club he told the staff that he had gone around because of the bounce and was subsequently notified of the damage to the nose landing gear.

Analysis

The pilot concluded that he did not think that airspeed was the cause of the accident as he had maintained a steady 70 KIAS throughout the approach although the stall warning did sound briefly at some point, probably during the bounce. He thought that it was more likely that he had misjudged the

height of the flare. This mistake was probably due to carrying out much of his training at Manston, which had a 2,752 metres long and 61 metres wide runway. The narrower runway at Rochester gave him the impression that he was higher than he actually was and he flared the aircraft too late. This caused the nose landing gear to contact the runway first with a positive rate of descent.