Cessna F172M Skyhawk, G-BEMB

AAIB Bulletin No: 6/2004	Ref: EW/G2004/03/21	Category: 1.3
Aircraft Type and Registration:	Cessna F172M Skyhawk, G- BEMB	
No & Type of Engines:	1 Lycoming O-320-E2D piston engine	
Year of Manufacture:	1976	
Date & Time (UTC):	30 March 2004 at 1240 hrs	
Location:	Chichester (Goodwood) Airport, West Sussex	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Nose landing gear damaged	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	56 years	
Commander's Flying Experience:	380 hours (of which 69 were on type)	
	Last 90 days - 2 hours	
	Last 28 days - 2 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

History of the flight

The pilot carried out a pre-flight inspection of the aircraft for a planned two-hour local VFR flight and it was found to be serviceable. Following engine start the aircraft was taxied to the fuel pumps where both tanks were refuelled to full. After refuelling the pilot was given clearance by ATC to taxi along a grass taxiway to the holding point of Runway 06. The taxiing proceeded normally until upon reaching the west side of the runway intersection with Runway 14, the nose of the aircraft dipped and did not return to its normal horizontal position. At the same time the pilot noticed that the rudder pedals had moved rearwards in the cockpit and that they had become locked. The aircraft was brought to a halt, the engine shut down and the electrical master switch turned off. Both occupants vacated the aircraft without difficulty through the normal exit doors.

Engineering examination

Inspection of the aircraft by the pilot revealed that part of the lower nose-landing-gear oleo outer cylinder retaining clamp was missing. Further inspection found the missing part of the retaining clamp lodged in the engine bay. This piece of the retaining clamp had the clamp bolt in place but the stiffnut was missing. The head of a local aircraft maintenance organisation observed that the threads of the clamp bolt were undamaged. The clamp bolt stiffnut was not found.

The aircraft's maintenance organisation, which is not located at the airfield where the accident occurred, had not disturbed the nose landing gear attachments during the time that they had been responsible for maintaining the aircraft, which has been for a number of years.