

INCIDENT

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 October 2007 at 1000 hrs	
Location:	South of Shoreham Airport	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	None	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	64 years	
Commander's Flying Experience:	385 hours (of which 290 were on type) Last 90 days - 12 hours Last 28 days - 0 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

The pilot diverted and undertook a precautionary landing after experiencing an aileron control restriction in flight. It is believed that the restriction was caused by the engagement of the autopilot.

History of the flight

The pilot and his passenger departed Goodwood for a flight to Lydd. Shortly after informing Shoreham Approach that he was south of Shoreham at 3,100 feet, the pilot began to experience a problem with the ailerons, which he described as freezing and trying to fight back. He had to use increasing amounts of right rudder and had to apply considerable pressure to the yoke to keep it from moving to the left. At this stage the pilot believed that a loose object was partially jamming the controls.

He informed Shoreham Approach of his problem and the controller suggested a descent and right base join for Runway 02. The pilot did not want to fly over Shoreham town and therefore declared a 'MAYDAY' and told the controller that he had severe control problems and was unable to land on Runway 02. The controller therefore cleared him for an approach for Runway 20, which would entail a downwind landing. The aircraft made an uneventful landing and during the taxi to the parking area the pilot noted that when he relaxed his grip on the yoke it moved fully to the left. After the aircraft was shut down and the electrical power turned off, the ailerons operated normally.

Engineering investigation

Two days after the incident, an engineering organisation based at Shoreham was asked to inspect the aircraft and an engineer carried out a functional check of the controls, which operated satisfactorily. The aircraft was equipped with a basic autopilot that had wing levelling and heading facilities that were activated by two separate rocker switches. The engineer engaged the wing levelling function and reproduced the symptoms which the pilot experienced on the ground. Because the engineer was unable to verify the integrity of the autopilot, he pulled and gagged the autopilot circuit breaker. The aircraft has since flown satisfactorily with the system inhibited.

Comment

The pilot's and engineer's reports indicate that at some point during the flight the autopilot wing levelling function became engaged. The engineer informed the AAIB that unless there is a fault in the autopilot, it de-latches when power is turned off and is turned on by moving the rocker switches after the electrical power is turned on. The pilot said that he visually checked that the autopilot was switched off during his pre-flight check and that neither he nor his passenger touched the autopilot controls during the flight.