

# Reims Cessna F172M, G-GBLP

**AAIB Bulletin No:** 12/98      **Ref:** EW/G98/10/07      **Category:** 1.3

## INCIDENT

**Aircraft Type and Registration:** Reims Cessna F172M, G-GBLP

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

**Year of Manufacture:** 1973

**Date & Time (UTC):** 7 October 1998 at 1245 hrs

**Location:** Falgunzeon, Dumfriesshire

**Type of Flight:** Aerial Work

**Persons on Board:** Crew - 1 - Passengers - 1

**Injuries:** Crew - None - Passengers - None

**Nature of Damage:** Circuit breaker contacts 'welded'

**Commander's Licence:** Commercial Pilot's Licence

**Commander's Age:** 49 years

**Commander's Flying Experience:** 1,250 hours (of which 1000 were on type)  
Last 90 days - 52 hours  
Last 28 days - 15 hours

**Information Source:** Aircraft Accident Report Form submitted by pilot and enquiries with an aircraft maintenance organisation

Whilst orbiting to allow his passenger to take some aerial photographs, the pilot noticed that the radio transmissions he was receiving were 'breaking up'. He also observed that the ammeter was indicating an excessive current supply. This was followed by a circuit breaker tripping, a smell of burning, some smoke in the cockpit and the ammeter indicating an excessive current discharge. The pilot decided to make a precautionary landing and, after having advised ATC of his decision, made a successful landing at a nearby gliding site.

Subsequent examination of the aircraft by an aircraft engineering organisation revealed that the over-voltage sensor within the voltage regulator had malfunctioned and an associated circuit breaker had failed to trip as a result of its contacts having become electrically 'welded' together in the 'circuit-made' position. This 'welding' of the circuit breaker contacts and associated overheating of the circuit breaker unit due to excess current passage had caused the smoke and smell of burning within the cockpit.