Reims Cessna FRA150L Aerobat, G-BANE

AAIB Bulletin No: 10/98 Ref: EW/G98/06/18 Category: 1.3

Aircraft Type and Registration: Reims Cessna FRA150L Aerobat, G-BANE

No & Type of Engines: 1 Continental O-240-A piston engine

Year of Manufacture: 1972

Date & Time (UTC): 15 June 1998 at 1825 hrs

Location: Near Aghagallon, County Armagh, Northern Ireland

Type of Flight: Private

Persons on Board: Crew - 1 - Passengers - None **Injuries:** Crew - None - Passengers - N/A

Nature of Damage: None

Commander's Licence: Private Pilot's Licence

Commander's Age: 29 years

Commander's Flying Experience: 53 hours (of which 25 were on type)

Last 90 days - 7 hours

Last 28 days - 4 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

A local flight was planned from Belfast Aldergrove International Airport, routing via Londonderry, Enniskillen, and Lurgan before returning to Aldergrove with a total planned flight time of 1.6 hours. The weather conditions were good. Prior to flight, the pilot had checked the fuel contents visually and with a dip stick. These checks confirmed the fuel gauge indications of about 60 litres on board, providing a total endurance of some 2.5 hours flying. The aircraft had been airborne for about one hour and twenty minutes and had about 8.5 nm to run to its destination when the engine began to lose power. Suspecting the presence of carburettor icing, the pilot applied the carburettor heat. This restored power for a short time, but then the engine began to run very roughly.

The pilot transmitted a Mayday call to Aldergrove Approach control, and then he carried out a successful precautionary landing in a large field. The engine continued to run roughly until after landing. The pilot completed the shutdown checks and secured the aircraft.

The Chief Flying Instructor (CFI) of the flying club visited the aircraft at the landing site. Some 20 litres of fuel were drained from the tanks, leaving some undrainable residual fuel on board. The tanks were then replenished with 40 litres of fresh fuel. An uneventful 20 minute engine ground run was then carried out during which the engine operated normally. Fuel caps, drains and vents were all checked and satisfactory, apart from a small defect on the left wing drain. The carburettor heat system was found to operate normally. The aircraft was then flown on a six minute positioning flight to Aldergrove with no abnormalities apparent.

Further engineering investigation did not find any abnormalities with the engine. The CFI's conclusion was that the most likely cause of the loss of power was from carburettor icing and the possibility of the method of use of carburettor heat exacerbating the problem, at least temporarily.