Cessna 310R, G-BWYE

AAIB Bulletin No: 11/98 Ref: EW/G98/06/22 Category: 1.2

Aircraft Type and Registration: Cessna 310R, G-BWYE

No & Type of Engines: 2 Continental IO-520-MB piston engines

Year of Manufacture: 1979

Date & Time (UTC): 17 June 1998 at 2330 hrs

Location: Luton Airport

Type of Flight: Public Transport (Cargo)

Persons on Board: Crew - 1 - Passengers - None

Injuries: Crew - None - Passengers - N/A

Nature of Damage: Damage to instrument panel, smoke damage behind control

quadrant, several melted wires and overheated invertor

Commander's Licence: Commercial Pilot's Licence with Instrument Rating

Commander's Age: 47 years

Commander's Flying Experience: 3,649 hours (of which 1,267 were on type)

Last 90 days - 106 hours

Last 28 days - 41 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The aircraft, with only the pilot on-board, was in the cruise at Flight Level (FL) 100 on a flight from Brussels to Glasgow when a loud 'bang' was heard and acrid smoke began to appear from behind the radio stack in the instrument panel. The aircraft was under the control of London ATC at the time who advised the pilot that he was only some 10 to 15 nm from Luton Airport, and that the cloudbase there was 3,000 feet. As the pilot was concerned that the fault might cause loss of his radios, he asked for an immediate approach and was given a descent and transfer to Luton. In case of navigational radio failure the aircraft was vectored for an Surveillance Radar Approach (SRA) approach but, once below cloud, the pilot was able to continue visually to a successful landing. Subsequently he found that the circuit breaker (CB) for the radio stack lighting had tripped and upon resetting, with the Airport Fire Service in attendance, smoke once again appeared and the CB tripped again.

The aircraft was subsequently examined by an engineer from the operator who established that heat damage was present behind the instrument panel, in the region of the throttle quadrant. This appeared to be associated with a small encapsulated static inverter, adjacent wiring and associated wiring connections. The inverter was examined by the AAIB and, although from an external examination it appeared to have suffered an internal failure, when sectioned no evidence of internal overheating or burning was evident. Following replacement of the inverter and repairs to the local wiring the aircraft performed normally.