

ATR72-202, G-BVTJ

AAIB Bulletin No: 5/97 Ref: EW/G97/02/06 Category: 1.1

Aircraft Type and Registration:	ATR72-202, G-BVTJ
No & Type of Engines:	2 Pratt & Whitney PW-124 turboprop engines
Year of Manufacture:	1993
Date & Time (UTC):	16 February 1997 at 1350 hrs
Location:	In cruise from Dublin, Eire
Type of Flight:	Public Transport
Persons on Board:	Crew - 4 - Passengers - 66
Injuries:	Crew - None - Passengers - None
Nature of Damage:	Component damage, air conditioning system
Commander's Licence:	Airline Transport Pilot's Licence
Commander's Age:	61 years
Commander's Flying Experience:	21,678 hours (of which 1,758 were on type) Last 90 days - 131 hours Last 28 days - 36 hours
Information Source:	Aircraft Accident Report Form submitted by the Commander

During a previous flight on 19 December 1996 and whilst in thecruise, acrid smoke and fumes affected the flight deck causingthe crew to transmit a 'Pan' call before making a precautionarydescent and diversion into Bristol Airport. The smoke drill wasactioned by the crew and, during the descent, the fumes dissipatedand the aircraft landed safely. Subsequent engineering inspectionof the air conditioning system failed to find any evidence ofoil ingress, burning or smoke damage. Since level 2 anti-icinghad been in use at the time of the incident, the engines wererground run at 80% torque for some 2 minutes. However, no signsof overheating or smoke were observed and the aircraft was thereforereleased back to service, with no attendant recurrence of thefault.

However, on 16 February 1997 the aircraft was returning from Dublin to London Gatwick when traces of smoke, accompanied by pungentfumes, again appeared on the flight deck. At about this time,the cabin staff reported that there was smoke in the centre areaof the cabin, around seat row 6, and that the cabin walls in thisarea were 'hot'. The commander declared an emergency and divertedinto Liverpool. After subsequent inspection the aircraft wascleared for a flight to Gatwick Airport where more detailed engineeringchecks could be carried out. Following arrival at Gatwick

a problem was identified with the No 1 air conditioning recirculation fan/control circuit where a relay, positioned beneath row 6 in the passenger cabin, was found to show evidence of electrical arcing and overheating. Overheating damage was also evident on the cabin air recirculation fan motor. This unit was removed from the aircraft and sent to the manufacturer for inspection and rectification, and a report has been requested by the AAIB. Any significant findings will be reported in a future issue of the AAIB Bulletin.