AAIB Bulletin No: 4/94 **Ref: EW/G94/01/03** **Category: 1.1**

INCIDENT

Aircraft Type and Registration:	BAe ATP, G-BTPL	
No & Type of Engines:	2 Pratt & Whitney 126 turboprop engines	
Year of Manufacture:	1991	
Date & Time (UTC):	17 January 1994 at 1650 hrs	
Location:	Glasgow Airport	
Type of Flight:	Public Transport	
Persons on Board:	Crew - 4	Passengers - 15
Injuries:	Crew - None	Passengers - None
Nature of Damage:	None	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	39 years	
Commander's Flying Experience:	6,300 hours (of which 1,700 were on type) Last 90 days - 120 hours Last 28 days - 35 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Whilst taxiing towards the holding point, the crew selected the Environmental Conditioning System (ECS) 'pack No 1' to 'ON', as was normal. After travelling approximately 100 yards, the 'SMOKE' warning on the central warning panel illuminated. The commander brought the aircraft to a stop and, after establishing with the cabin crew that there was smoke in the rear cabin but that it did not seem to be coming from the rear baggage hold, he decided to shut down both engines. The first officer informed ATC of their situation, and five fire appliances attended the aircraft within one minute. After the front passenger door had been opened and the steps deployed, the smoke cleared and a controlled disembarkation of the passengers was carried out.

The aircraft was withdrawn from service and subjected to an engineering examination by the operator's maintenance personnel. A fault isolation procedure for smoke in the cabin identified no fault with the No 1 engine but a valve, known as the P2.5 and P3 air switching valve, was replaced on this engine due to evidence of unusual wear between a guide pin and its locating slot in a valve seat. The aircraft

was returned to service for a short period without futher incident, but with the No 1 ECS pack isolated as a precaution. When the aircraft returned to its maintenance base, a more detailed examination of the No 1 engine revealed oil to be present internally in the region of the high pressure compressor impeller and the No 4 bearing housing, as well as inside the body of the replacement P2.5/P3 switching valve. This engine was subsequently removed and sent for test/examination at the manufacturer's facility in the UK. A report on the examination of this engine has yet to be compiled, but any significant findings will be reported in a future edition of AAIB Monthly Bulletin.