

DHC-8-311, G-BRYJ, 30 December 2001

AAIB Bulletin No: 11/2002	Ref: EW/G2001/12/21	Category: 1.1
Aircraft Type and Registration:	DHC-8-311, G-BRYJ	
No & Type of Engines:	2 Pratt & Whitney Canada PW-123 turboprop engines	
Year of Manufacture:	1991	
Date & Time (UTC):	30 December 2001 at 1540 hrs	
Location:	West of Aberdeen Airport	
Type of Flight:	Public Transport (Passenger)	
Persons on Board:	Crew - 4	Passengers - 45
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Lightning damage to the radome, cockpit windscreens, fuselage and left horizontal stabiliser	
Commander's Licence:	Airline Transport Pilots Licence	
Commander's Age:	31 years	
Commander's Flying Experience:	2,200 hours (of which 1,500 were on type)	
	Last 90 days - 70 hours	
	Last 28 days - 40 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and damage report from the operator's maintenance organisation	

The aircraft departed Aberdeen Airport's Runway 34 at 1529 hrs at dusk; sunset was at 1533 hrs. The airport weather conditions at the time were wind 330°/12kt with a visibility of 4,000 metres in light snow, air temperature +1°C with a few cumulo-nimbus clouds reported, base 1,500 feet.

Initially, the aircraft was radar vectored to the north-west and then to the west before it was allowed to resume its own navigation as it climbed through FL 80 (approximately 8,000 feet amsl). Shortly afterwards the aircraft was struck by lightning. The lightning strike caused both engine-driven DC generators to trip off-line. The flight crew informed ATC that the aircraft had suffered a lightning strike, levelled the aircraft and flew clear of the weather. The checklist detailed in the Quick Reference Handbook (QRH) was carried out which re-instated both DC generators. An emergency

(PAN) was declared and the aircraft returned to Aberdeen where a normal instrument approach and landing were performed.

Examination of the aircraft by the operator's maintenance organisation revealed lightning damage to the radome and both flight deck windscreens, all of which required replacement. Burn marks were found on the upper fuselage and left horizontal stabiliser that required repair in accordance with a manufacturer's repair scheme.