

INCIDENT

Aircraft Type and Registration:	Airbus A320-111, G-BUSC	
No & Type of Engines:	2 CFM56-5A1 turbofan engines	
Year of Manufacture:	1988	
Date & Time (UTC):	24 October 1995 at 2157 hrs	
Location:	On approach to London Heathrow Airport	
Type of Flight:	Public Transport	
Persons on Board:	Crew - 7	Passengers - 31
Injuries:	Crew - 1 Serious	Passengers - None
Nature of Damage:	None	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	44 years	
Commander's Flying Experience:	10,042 hours (of which 364 were on type) Last 90 days - 101 hours Last 28 days - 41 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and further enquiries by the AAIB	

The aircraft was inbound to London Heathrow on a scheduled passenger service from Newcastle. Because of the weather conditions and the amount of traffic in the Heathrow area at that time, the aircraft was required by ATC to hold at the Bovingdon holding fix.

An aftercast from the Meteorological Office indicated that there was a Cold Front moving quickly eastwards over the Heathrow area at the time of the incident, with the upper winds between 5,000 and 10,000 feet being generally from 200° at 55 to 60 kt. Several aircraft reported that they had encountered moderate turbulence during radar vectoring towards final approach. A SIGMET warning was in force for the London FIR warning of severe turbulence below FL60. Windshear forecasts had also been issued, and were included in the London Heathrow ATIS broadcasts. The commander reported that moderate turbulence had also been experienced whilst in the Bovingdon hold.

In the appropriate sequence, G-BUSC was given radar vectors towards final approach, but the crew requested a slight variation to the allocated heading in order to fly to the south of an area of probable turbulence that was indicated on the aircraft's weather radar. However, whilst initiating the descent from FL80 to FL70, airspeed 225 kt, flaps and landing gear up, a further period of moderate turbulence was experienced. During this, a member of the cabin staff, who was in the forward galley area, was lifted off the floor and then thrown back down with some force. She sustained a head injury which caused loss of consciousness after a short period.

The commander was informed of the situation in the forward galley and elected to go-around from about 2,000 feet on final approach because the remaining cabin staff had not secured the injured person into a seat by that time. The aircraft was then repositioned for a priority approach, subsequently making an uneventful approach and landing. An ambulance met the aircraft on arrival to convey the injured cabin crew member to hospital.

The aircraft's Digital Flight Data Recorder indicated that at about the time of the injury, the aircraft experienced turbulence such that the value of the normal acceleration parameter varied from a maximum of +1.58 g to a minimum of +0.16 g. The derived wind speed recorded by the DFDR increased from a mean of about 60 kt to a transient peak of 85 kt around the same time period.

The operator's Flight Crew Orders give adequate instruction to flight and cabin crew regarding the appropriate action to be taken in the event of forecast or experienced turbulence. In particular, the use of the aircraft's Public Address system is highlighted, to instruct the cabin crew to strap into their seats and so avoid ambiguity with the normal operation of the passenger 'Fasten Seat Belts' signs.

At the time of the incident, the seat belt signs had been switched on, but the cabin staff had not been given any instruction to be seated.