AAIB Bulletin No: 4/94 Ref: EW/G94/01/16 Category: 1.1

Aircraft Type and Registration: Airbus A320-211, G-BUSK

No & Type of Engines: 2 CFM 56-5-A1 turbofan engines

Year of Manufacture: 1990

Date & Time (UTC): 28 January 1994 at 1840 hrs

Location: Near Turin, Italy

Type of Flight: Public Transport

Persons on Board: Crew - 7 Passengers - 46

Injuries: Crew - 1 Serious Passengers - None

2 Minor

Nature of Damage: None

Commander's Licence: Airline Transport Pilot's Licence with Instrument Rating

Commander's Age: 53 years

Commander's Flying Experience: 10,962 hours (of which 1,956 were on type)

Last 90 days - 147 hours Last 28 days - 89 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The aircraft was operating a scheduled service from London Heathrow Airport to Turin, Italy, with 7 crew and 46 passengers on board. Moderate turbulence had been forecast for the entire route however none had been experienced during the cruise. During the descent an outbound aircraft warned the crew to expect rough conditions north of Turin. In preparation for the expected 'rough ride' the commander switched the seat belt signs 'ON', warned the passengers and called the Senior Cabin Crew Member (SSCM) to the flight deck and asked for the trolleys and loose equipment to be stowed as soon as possible.

Three to four minutes later at a position 60 nm north of Turin as the aircraft descended through FL170 violent turbulence causing +2.33g to -0.05g accelerations were encountered. Weather conditions at the time were IMC with a wind of 360°/90 kt. The commander reported that "the shaking was so bad he could not see the instruments".

The aircraft reached calmer conditions at FL080. At this point the SCCM reported to the commander that one of the cabin crew at the rear of the aircraft had been injured and was suffering from a

suspected broken leg. First Aid was administered and an ambulance was organised to meet the aircraft on arrival. Two other crew members, also positioned in the rear galley during the encounter, were slightly injured one receiving a sprained ankle and one a sprained neck.

The company issue Flight Crew Orders concerning flight in turbulence. These state that 'The captain is the best person to decide what level of service should be given to the passengers when approaching an area of known or predicted turbulence or during a turbulence encounter and he must instruct the cabin crew accordingly. His instructions must be clear and unambiguous especially where he requires the cabin crew to cease service and strap in to their seats. In this latter event use of the cabin address will ensure that a clear undiluted message reaches all cabin crew members in the shortest possible time'.