Boeing 747-436, G-BNLZ, 13 February 1996

AAIB Bulletin No: 5/96 Ref: EW/G96/02/05Category: 1.1

Aircraft Type and Registration: Boeing 747-436, G-BNLZ

No & Type of Engines: 4 Rolls-Royce RB211-524H turbofan engines

Year of Manufacture:1993

Date & Time (UTC):13 February 1996 at 1525 hrs

Location: In-flight, London Heathrow to Miami

Type of Flight: Public Transport

Persons on Board:Crew - 18 Passengers - 403

Injuries: Crew - None Passengers - None

Nature of Damage:None

First Officer's Licence:Airline Transport Pilot's Licence last routine medical examination29 January 1996

First Officer's Age:41 years

Commander's Flying Experience:17,100 hours (of which 2,000 were on type)

Last 90 days - 180 hours

Last 28 days - 70 hours

Information Source: Aircraft Accident Report Form submittedby the pilot

The aircraft, with a 'heavy' crew (the commander with two firstofficers) on board, departed from London Heathrow at 1239 hrson a scheduled flight to Miami. Shortly after reaching cruisealtitude the first officer, seated in the right hand seat, complained of an acute pain above his right eye. He believed that this painwas due to a sinus problem and took a couple of 'paracetamol'tablets for pain relief. He remained at the controls but wasmonitored by the commander and the other relief pilot. The medicationprovided some relief but approximately two hours later, during conversation with the commander, the first officer failed torespond to a question asked of him.

Almost immediately he began to 'fit' and became unconscious, withhis right leg stiffened so as to apply right rudder. The autopilot, which remained engaged, countered the yaw by applying aileron. Although the resulting sideslip was noticed by the cabin crew, the passengers apparently did not notice the event. The commanderattempted to move the first officer's seat rearwards but

encountereddifficulty because of the pressure of the first officer's leglocked between the seat and the rudder pedals.

The relief pilot and two members of the cabin crew were summoned to the flight deck to assist and a doctor, who was known to beseated on the upper deck, was also requested to attend. Withhis seat now to the rear of its travel a cabin crew member introduced a plastic 'airway 'into the first officer's mouth to aid his breathing. With some difficulty the first officer was removed from the seatand transferred to the bunk area where, after approximately 45minutes, he recovered.

On the doctor's advice, the commander declared a medical emergencywith the intention of landing at Gander which was just under twohours flying time away. The weather at Gander, Torbay, St Johnsand Halifax was very poor with freezing rain, vertical visibilityless than 100 feet and nil horizontal visibility. Gander ATC, on hearing of the emergency, advised the crew that Torbay wouldbe the better option as the first officer would have to be transferredfrom Gander to Torbay in order to receive appropriate medicaltreatment.

By now the first officer had recovered with no noticeable illeffects and it was decided to downgrade the emergency and continue to the planned destination, retaining the option of diverting to one of the US east coast airfields should the first officer's condition deteriorate. The aircraft landed at Miami at 2144 hrsafter being airborne for 9 hours and 5 minutes.

On landing, the first officer was attended by two paramedics and transferred to the nearby hospital. With medical advice and theoperator's approval, the first officer returned home as a passengeron the following evening's flight. He subsequently received medical treatment.