AAIB Bulletin No: 10/93 Ref: EW/G93/07/38 Category: 1.1

Aircraft Type and Registration: BAe 146-300, G-UKSC

No & Type of Engines: 4 Lycoming ALF 502-R5 turbofan engines

Year of Manufacture: 1989

Date & Time (UTC): 31 July 1993 at 1215 hrs

Location: London Gatwick Airport

Type of Flight: Public Transport

Persons on Board: Crew - 6 Passengers - Approx. 20

Injuries: Crew - None Passengers - None

Nature of Damage: Substantial to nose section forward of front pressure

bulkhead

Commander's Licence: Airline Transport Pilot Licence

Commander's Age: 46 years

Commander's Flying Experience: 6,516 hours (of which 3,386 were on type)

Last 90 days - 118 hours Last 28 days - 33 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The aircraft was parked on stand No 10 with the crew at their designated positions and with passengers boarding the aircraft for their flight to Edinburgh. The pilot who was seated in the right-hand seat, a qualified captain on type acting as a co-pilot, looked out of the right hand window of the flight deck and saw a driverless baggage tractor, travelling at walking pace, approaching the nose of the aircraft at 90° to the aircraft's centreline. As it approached a member of the ground staff was seen to make a spirited but unsuccessful attempt to prevent the vehicle from hitting the aircraft just forward of the nose landing gear. After the impact, which caused no injuries among the passengers or crew, further boarding was stopped and all passengers returned to the departure lounge.

Various airport services attended the scene and an initial visual inspection revealed that the engine of the tractor was still running and the automatic gear selector was in the 'DRIVE' position. The commander reported that the tractor's handbrake appeared to be in the applied position although he could not determine whether it had been applied before the tractor started to move or after the collision.

The commander reported that his assessment of the cause of the accident was gross negligence on the part of the tractor driver who had deserted his vehicle with the engine running, in gear and pointing towards an aircraft, with or without the parking brake applied. He further reported that if passengers had actually been ascending the airstairs at the time of impact they would have probably been dislodged and suffered serious injury.

An investigation carried out by the ground handling company confirmed the commander's assessment in that the driver of the vehicle had repeatedly failed to observe the recognised operating practises concerning the safe operation of this ground equipment. On this occasion had left the vehicle unattended pointing towards the aircraft with the engine running, in gear and with the handbrake applied.

Tests conducted on the vehicle by the company showed that after a period of between 4 to 5 minutes sufficient pressure accumulated within the automatic transmission, with the vehicle in gear, to overcome the handbrake.

As a result of this accident the ground handling company has fitted to vehicles of this type, a 'dead-man's pedal', operated by the driver's left foot, which cuts off the fuel supply to the engine when pressure to the pedal is released.

