AAIB Bulletin No: 2/94 Ref: EW/G93/11/14 Category: 1.1

**INCIDENT** 

Aircraft Type and Registration: Boeing 767-204, G-BYAA

No & Type of Engines: 2 General Electric CF6-80C2 turbofan engines

Year of Manufacture: 1991

Date & Time (UTC): 26 November 1993 at 0640 hrs

Location: Glasgow International Airport

Type of Flight: Ferry flight

Persons on Board: Crew - 2 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Moderate to lower forward fuselage skin

Commander's Licence: Airline Transport Pilot's Licence

Commander's Age: 56 years

Commander's Flying Experience: 14,398 hours (of which 1,850 were on type)

Last 90 days - 155 hours Last 28 days - 57 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The aircraft was positioned on Stand 9 at Glasgow International Airport prior to a ferry flight to London Gatwick. The air temperature was minus 5°C. There were no passengers or freight on board and the aircraft weighed 90,933 kg some 67,800 kg below MTWA. After both engines had been started during pushback, the aircraft slowed to a halt and then began to move forward. The commander assumed that the aircraft was being towed forward and consequently queried the marshaller's instruction to apply the aircraft's brakes. When he received no reply to his query the commander applied the brakes. After a short pause, the commander was informed by the marshaller that the tug had skidded and was now jammed under the nose of the aircraft behind the nose landing gear. The aircraft was shut down and, on leaving the flight deck, the commander observed that the ground to the rear on the main landing gear was covered in ice and was very slippery. During the incident a marshaller and the tug driver had leapt clear of the tow bar and tug but suffered no serious injury. The tug had been serviced recently and was found to be in good order after the accident.

De-icing operations had taken place at 1810 hrs and 2135 hrs on the previous evening and again at 0200 hrs and 0620 hrs on the morning of the accident. The apron parking areas and airside roads had been de-iced twice during the 12 hours preceding the accident. However, the de-icing procedures in force at the time of the accident allowed a 33 metre strip between the apron taxiway and the aircraft parking stands to remain untreated and it was in this area that the accident occurred. The procedures for de-icing the manoeuvring areas adjacent to the parking stands have now been amended to ensure that all aircraft manoeuvring areas are de-iced.

The commander considered that the cause of the accident was the high idling thrust of the aircraft engines combined with the low weight of the aircraft combining to overcome the driving force that the tug could generate on the ice covered surface.

At 0734 hrs on the same day a tug which was pushing back an ATP on a nearby stand skidded on the ice covered surface and was damaged when it collided with the aircraft. The ATP was undamaged.