**INCIDENT**

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| **Aircraft Type and Registration:** | Boeing 767, C-GEOU |
| **No & Type of Engines:** | 2 General Electric CF6-80C turbofan engines |
| **Year of Manufacture:** | 1999 |
| **Date & Time (UTC):** | 11 October 2006 at 1345 hrs |
| **Location:** | Stand 329, London Heathrow Airport |
| **Type of Flight:** | Commercial Air Transport (Passenger) |
| **Persons on Board:** | Crew - 10 Passengers - 90 |
| **Injuries:** | Crew - None Passengers - None |
| **Nature of Damage:** | Dent on top of engine cowling |
| **Commander's Licence:** | Airline Transport Pilot's Licence |
| **Commander's Age:** | 52 years |
| **Commander's Flying Experience:** | 19,800 hours (of which 5,100 were on type)<br>Last 90 days - 184 hours<br>Last 28 days - 89 hours |
| **Information Source:** | Aircraft Accident Report Form submitted by the pilot and further enquiries by the AAIB |

**Synopsis**

Shortly after parking on Stand 329 at London Heathrow Airport, the aircraft rolled forward and collided with a pier damaging the left engine nose cowl. The parking brake had been incorrectly set.

**History of the flight**

The aircraft had flown from Calgary, Canada with three operating crew. After landing and taxiing onto Taxiway Golf at London Heathrow Airport, the aircraft was unable to taxi onto Stand 329 because there was no handling agent present to switch on the stand guidance system and monitor the aircraft onto stand. As the aircraft was blocking the taxiway a member of the airport's airside staff was dispatched to marshal the aircraft onto stand; this he did without event. Once the aircraft was on the stand the marshaller left the area without placing any chocks in front of its wheels. At the time the pier was correctly parked.

The aircraft commander reported that having been marshalled onto the stand and signalled to stop by the marshaller, he believed he set the parking brake correctly. This is done by depressing the toe brakes on top of the rudder pedals, then simultaneously pulling up the parking brake T-handle on the left side of the centre console, before releasing the pressure on the pedals. This leaves the T-handle extended on the centre console. The aircraft's engines were then shut

down and the aircraft shutdown checklist completed; this included turning off the hydraulic pumps. The handling agent had still not arrived by that time so an attempt was made to contact him by radio. Because the passengers were unable to disembark an announcement was made to them, over the aircraft's Personal Address system, to remain in their seats.

After approximately 10 to 15 minutes the aircraft started to roll forward slowly. At first the pilots thought the pier was being moved into position but soon the commander realised that the aircraft was moving forward and gathering speed quite rapidly. He applied the toe brakes and noticed the parking brake T-handle was retracted. Noticing the accumulator pressure was low, the co-pilot immediately turned on the hydraulic pumps. The aircraft stopped just as the left engine made contact with the pier. There was no abrupt stop and no impact was felt by the cabin crew or passengers.

The aircraft was subsequently pushed back, the damage inspected and the passengers disembarked.

**Stand gradient**

The airfield operating company stated that their design standards stipulate that the slope of aircraft movement surfaces should not exceed 1% in any direction. It was found that the gradient on Stand 329 was approximately 0.42 % towards the terminal over the length of the stand.

**Stand guidance systems**

Stand 329 at London Heathrow Airport is equipped with a Parallax Aircraft Parking Aid (PAPA) board and Azimuth Guidance for Nose-In Stands (AGNIS). When established on the AGNIS centreline, the pilot in the left seat looks through the right windshield, to identify the correct stopping position for his particular type of aircraft. There is no STOP sign or any form of light on the PAPA board indicating when to stop, nor is there any requirement for there to be such a light. However, a flashing red STOP sign is fixed to the terminal fascia directly ahead of the centreline. This stop sign is not intended for routine use; its purpose is to signal an emergency stop at any time during the parking manoeuvre. Consequently, activating the STOP sign also switches off the PAPA and AGNIS lights but if the guidance is not switched on, the STOP sign will still illuminate.

**Engineers' comments**

The operating company's engineering personnel arrived at Stand 329 before the handling agent and started their visual inspection of the exterior of the aircraft. Approximately three minutes later the aircraft started to move forward slowly towards the terminal. In a bid to alert the operating crew, an engineer ran to and hit the STOP sign activation button just as the pier was struck. The aircraft had rolled forward 12 ft before the aircraft's left engine nose cowl hit the pier.

**Commander's comments**

In an open and frank report the commander admitted that the cause of the accident was his failure to set the parking brake correctly.

**Damage assessment**

The maintenance organisation measured the dent and found it to be 7 inches across and approximately 1 inch deep. As a result the left engine nose cowl was changed before the aircraft's next flight. The braking and hydraulic systems were also checked and found to be serviceable.

**Discussion**

Because the parking brake was not correctly set and chocks had not been placed under the wheels, the

aircraft rolled forward and its left engine intake cowl was damaged. Chocks are not normally visible from the flight deck so it is imperative that all members of an operating crew monitor important flight deck actions, such as applying parking brakes, to ensure they are carried out properly.