

AAIB Bulletin No: 12/96

Ref: EW/G96/05/23

Category: 1.1

Aircraft Type and Registration:	Boeing 737-3L9, D-ADBC	
No & Type of Engines:	2 CFM56-3B-2 turbofan engines	
Year of Manufacture:	1992	
Date & Time (UTC):	18 October 1996 at 0825 hrs	
Location:	Stand 56L at London Gatwick Airport	
Type of Flight:	Public Transport	
Persons on Board:	Crew - 6	Passengers - Approximately 80
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Substantial damage to left outer wing	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	Not relevant	
Commander's Flying Experience:	Not relevant	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

At the time of the accident the aircraft was parked on Stand 56L at the London Gatwick's North Terminal with approximately 80 passengers on board the aircraft and a further 40 passengers standing within the boarding jetty waiting to board. The cabin crew were in their boarding positions and the commander and first officer were on the flight deck. The aircraft had already been cleaned and catered and the refuelling bowser, having just completed the refuelling, was in the process of disconnecting its refuelling hose from beneath the aircraft's right wing. A Boeing 737-200 was parked on Stand 57R adjacent to and slightly forward of the subject aircraft's left wing.

The driver of a supply truck, having completed his work delivering passenger blankets to aircraft on Stands 63, 61 and 60, was returning to his company stores situated adjacent to Stand 51. He drove to the rear of aircraft parked on Stands 59 and 58 before turning to pass between the aircraft parked on Stands 57R and 56L. As he approached both aircraft he moved to the right in order to keep the right wing tip of the aircraft parked on Stand 57R in view. In doing so his vehicle proceeded outside the painted white guidance lines and collided with the left wing of the 737-300. The aircraft commander felt the impact, pushed passed the boarding passengers in the jetty, and viewed the scene from the jetty's external steps. As there was no immediate danger the passengers were instructed to deplane and

return to the lounge via the jetty. After the incident the fire service cut the vehicle's body work to release it from the aircraft and moved it clear pending AAIB investigations. Photographs, however were taken of the vehicle's position after impact before it was moved. The weather at the time of the accident was continuous moderate rain beneath overcast skies.

Apron markings

Stands 56 and 57 are marked to cater for the parking of two Boeing 747s or four Boeing 737s. When 737s are parked on these stands they are aligned with the 56L, 56R, 57L and 57R markings. Boeing 737s parked on 56L and 57R stop at different distances from the terminal so as to provide a stagger between wing tips and hence provide greater wing tip clearances. Solid white lines, 4 metres apart are painted between the stands to guide vehicles clear of the parked aircraft. When aligned correctly on their respective stands the wing tips of 737s are 0.5 of a metre outside the lines.

The vehicle

The vehicle involved in the collision was inspected after the accident by the AAIB and airport police. The vehicle, which was 2.3 metres wide and approximately 3.3 metres high, held a current MOT certificate and apron certificate with legal tyres and fully functioning brakes. At the time of the accident the windscreen wipers were selected ON and serviceable. The Tachograph indicated that at the time of the collision the vehicle had been travelling at 18.6 mph (ramp speed limit is 20 mph). The vehicle had struck the aircraft's left wing some 8 inches below the vehicle's roof line causing a gash some 10 feet in length. The side of the vehicle had struck the aircraft wing from the rear in line with the aileron/wing tip interface.

The driver

The driver had been employed by the cleaning company since March 1996, initially as a 'driver's mate' and subsequently as the stores driver. He had been trained to operate vehicles on the apron in accordance with the airport authority instructions and held a full driving licence with no endorsements. His training and testing had included an eye test for colour blindness; a verbal briefing on the rules, apron speed limits and crossing points (both marked and unmarked); an observed drive on public roads and 'on the job' supervision.

He had commenced work on the day of the accident at 0730 hrs and was alone in the vehicle at the time. He had been driving the accident vehicle for 3 months and was aware of its height although the placard in the cab, detailing the vehicle's dimensions, was unreadable.

Airport regulations

Gatwick Airport Limited issue Managing Director's Instructions (MDIs) concerning Airside Safety and Operations. MDI 28/96 concerns Airside Driver Competence, Airside Driving Permits and Apron Driving and Discipline. The relevant paragraphs from the section on Airside Driving and Discipline is reproduced below:

2 DEFINITIONS...

2.2 Airside Roads - Airside roads are defined by single parallel white lines. Drivers must keep to the left on these roads. The boundary between a road which runs to the rear of an aircraft stand and the adjacent taxiway is marked with a continuous, double white line. Apart from aircraft tugs engaged in push back operations, vehicles are not permitted to cross this double white line without prior permission from ATC....

4 RULES FOR DRIVERS...

4.6 Vehicles must be driven in accordance with roads signs and markings which have the same meaning as public roads. Surface markings in white have significance for drivers and pedestrians (SINGLE YELLOW markings have significance for aircraft)...

4.8 Aircraft stands and equipment areas must not be used as thoroughfares regardless of whether they are vacated or not.

Follow-up action

As a result of this accident the cleaning company issued instructions re-emphasising to its drivers that the inter-stand areas are not to be used as roadways. Furthermore the airport authority will publicise the accident and highlight the apron driving rules during a 'driver training seminar' to be held in November 1996.