AAIB Bulletin No: 10/94 Ref: EW/C94/9/1 Category: 1.1

**INCIDENT** 

Aircraft Type and Registration: Boeing 737-59D, G-BVKC

No & Type of Engines: 2 CFM56 turbofan engines

Year of Manufacture: 1990

Date & Time (UTC): 1 September 1994 at 0628 hrs

Location: Stand B19, London Heathrow Airport

Type of Flight: Public Transport

Persons on Board: Crew - 7 Passengers - 52

Injuries: Crew - None Passengers - None

Nature of Damage: Slight damage to left engine cowling

Commander's Licence: Airline Transport Pilot's Licence

Commander's Age: 54 years

Commander's Flying Experience: 8,000 hours (of which 3,000 were on type)

Last 90 days - 230 hours Last 28 days - 75 hours

Information Source: AAIB Field Investigation

The aircraft arrived at London Heathrow Airport from Amsterdam with 7 crew and 52 passengers on board and taxied to park on Stand B19. As the aircraft approached the 'B' cul-de-sac the commander, in accordance with normal practice, shut down the left engine. Turning to line-up with the stand entry line the commander saw that the Azimuth Guidance Nose in Stands (AGNIS) and the Parallax Aircraft Parking Aid (PAPA) lights were not illuminated. Furthermore there was no marshaller available to assist with parking. The commander checked that all the ground servicing vehicles were parked behind the white guidelines and that the movable passenger jetty was parked with its manoeuvring wheels inside the designated painted yellow box marks.

The commander decided to continue taxiing at about 1 kt using extreme caution. For azimuth guidance he used the yellow painted stand centreline and, looking at the PAPA, he reported that he could clearly see the non-illuminated fluorescent tube behind the marker board and stopped when this was in-line with the one and only white painted line marked with the title '737'. He set the parking brake and

completed the shutdown checks. A ground engineer, who had been in his vehicle parked near the jetty as the aircraft arrived on stand, approached the aircraft and pointed towards the left engine. The commander opened the Direct-Vision (DV) window and saw the left engine cowling just resting beneath the rubber sill of the jetty. He contacted the cabin crew and made a PA to the passengers instructing them to remain on board. Meanwhile the ground engineer had organised a tug and the aircraft was pushed back clear of the jetty. It was then that the commander realised that the left engine cowling had suffered minor damage. The passengers were disembarked via the forward airstairs.

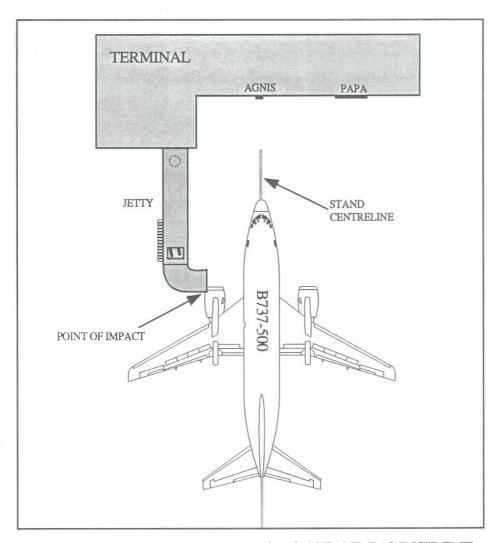
The aircraft dispatcher had arrived at the stand 5 minutes before the aircraft arrived. He checked that the stand was clear and that the jetty was correctly parked. He also noticed that the marshaller had not yet arrived. The dispatcher knew from previous experience that the AGNIS and PAPA lights were unserviceable, nevertheless he checked the lights control box. Taped to the AGNIS controls, obstructing the switches, was a note from Airfield Operations to the effect that, pending calibration of the stand entry guidance, all aircraft were to be marshalled. The AGNIS and PAPA lights were therefore not to be switched on. Whilst the dispatcher was 'logging on' to the computer terminal at the top of the jetty the aircraft arrived. As the aircraft engines were shut down the dispatcher arrived at the jetty entrance to see that the aircraft had struck the underside of the jetty sill. He called 'Apron Safety' who arrived some time later.

Marshallers are provided and allocated by the apron safety unit for stands where marshalling assistance is required. Notification of inbound movements are received at the apron safety control room via a computer screen information display. Subject to manpower availability, a marshaller is allocated and dispatched to meet the inbound aircraft as it arrives on stand. On the day and, at the time in question, all on duty marshallers were busy on other tasks. No one was therefore allocated to deal with the inbound B737 on Stand B19.

Aircraft entering a stand with unserviceable AGNIS and PAPA systems and no marshaller would normally call on the ground movement control frequency to request marshalling assistance. This frequency is monitored by the apron safety control room who would, subject to marshaller availability, allocated the next available marshaller for the task.

## Follow-up action

Airfield Operations Standards Officers, in discussion with the AAIB after the incident, were considering publication of an Operational Safety Instruction, in the near future, to re-emphasise the fact that aircraft commanders are not to self-position on stands when the automatic stand entry guidance system is unserviceable.



DIAGRAMATIC REPRESENTATION OF STAND B19 INCIDENT