

INCIDENT

Aircraft Type and Registration: Boeing 757, 4X-EBR

No & Type of Engines: 2 turbofan engines

Year of Manufacture: 1988

Date & Time (UTC): 12 May 1994 at 0558 hrs

Location: Stand B23, London Heathrow Airport

Type of Flight: Public Transport

Persons on Board: Crew - 9 Passengers - 197

Injuries: Crew - None Passengers - None

Nature of Damage: One window displaced

Commander's Licence: N/A

Commander's Age: N/A

Commander's Flying Experience: N/A

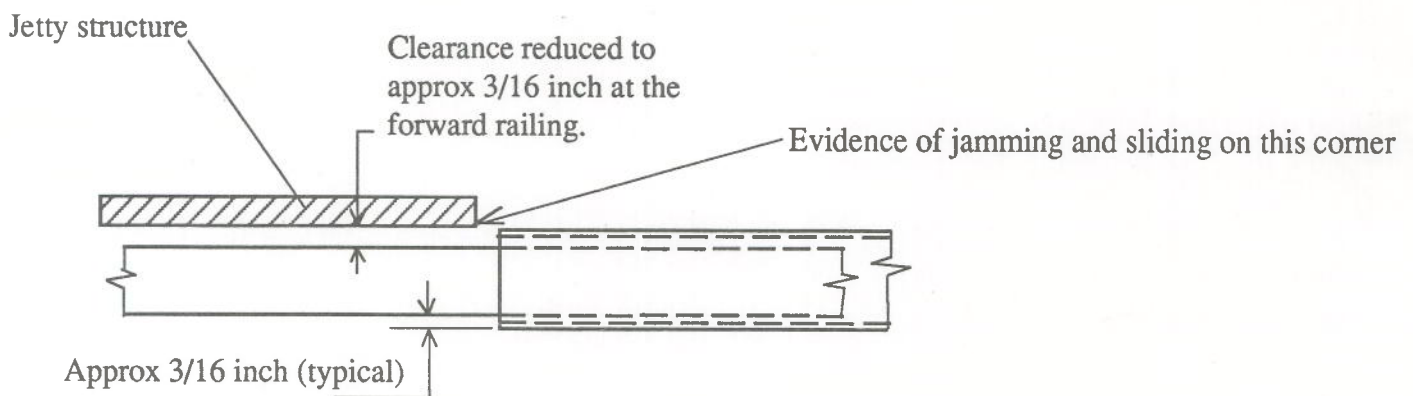
Information Source: Aircraft Accident Report Form and AAIB examination of the stand and jetty

The aircraft was inbound from Tel Aviv and had arrived on Stand B23 at about 0555 hours. The jetty was positioned against Door 2L and disembarkation had begun when one window, just ahead of the door, was pushed in. The disembarkation was completed, the jetty was reported unserviceable and the aircraft was delayed while the window was repaired. To achieve this, it was necessary to remove the adjacent row of seats and the trim panel. It was then observed that a replacement clip was required for the window. A replacement was obtained and the window re-fitted. There was no other damage. By the time the aircraft was serviceable it had missed its allocated ATC slot and so a further delay was incurred. The aircraft had been scheduled to depart at 0850 but did not leave until 0938 hrs. Apron Control arranged for the jetty to be examined, but found it to be fully serviceable. No further action was taken and the jetty remained in use.

AAIB examination of the jetty showed that it had been modified by the fitting of telescopic railings which extended out to the aircraft skin. These were fitted to prevent persons falling between the aircraft and the jetty at each side, where the canopy provides a weather seal. The photographs show

the forward railing (shown fully extended) on the subject jetty which damaged the aircraft and the rear railing in a typical position. The airline now use the jetty at Door 1L where the compound curvature of the nose precludes contact between the forward idle wheel and the aircraft. The idler wheel normally contacts the fuselage skin at window height and is held in contact by a telescopic actuator. The telescopic rail, made of rectangular section stainless steel, can be clearly seen in the photographs. The end of the larger telescopic tube is normally very close to the jetty structure. In plan view (see diagram), the clearance between the telescopic rail and the jetty structure was adequate on the rear railing, but marginal on the forward railing where the damage occurred. There was clear evidence on the jetty structure that the forward railing had jammed against the structure while trying to retract, and had been therefore unable to move away from the fuselage. There was also evidence that the railing had frequently rubbed against the structure. The accompanying diagram shows the clearances available.

The process by which the damage occurred was probably as follows: On initial contact between the jetty and the aircraft, the railings had moved out until the idler wheels contacted the skin, at which point the end of the larger rectangular section tube had passed beyond the structure. During disembarkation, the aircraft had moved upwards and the auto leveller had attempted to compensate, however the fuselage geometry required the railings to retract rapidly and during this process the forward railing jammed on the jetty structure. The upwards movement of the aircraft then pushed the window, with which the forward idler wheel was in contact, out of place.



PLAN VIEW OF FORWARD TELESCOPIC RAILING SHOWING REDUCTION OF CLEARANCE



Forwards railing and idler wheel at full extension (not in contact with skin).



Rearwards railing and idler wheel contacting skin. Note telescopic rail and proximity of rectangular section outer tube end to adjacent structure.