AAIB Bulletin No: 7/95

Ref: EW/G95/04/19

Category: 1.1

Aircraft Type and Registration:

Fokker F28-4000, PH-CHF

No & Type of Engines:

2 Rolls-Royce Spey 555-15 turbofan engines

Year of Manufacture:

1978

Date & Time (UTC):

21 April 1995 at approximately 0937 hrs

Location:

Birmingham Airport

Type of Flight:

Public Transport

Persons on Board:

Crew - 5

Passengers - 76

Injuries:

Crew - None

Passengers - 1 Serious

Nature of Damage:

None

Commander's Licence:

Airline Transport Pilot's Licence (Netherlands)

Commander's Age:

45 years

Commander's Flying Experience:

11,430 hours (of which 687 were on type)

Last 90 days - 132 hours Last 28 days - 37 hours

Information Source:

Aircraft Accident Report Form submitted by the pilot,

and further enquiries by the AAIB

The aircraft had parked on Stand 41 at 0927 hrs after a flight from Amsterdam. The passenger door was opened on arrival with the upper parts of the handrails disconnected in preparation for the attachment of the passenger loading bridge. The handling agency's ramp agent allocated to meet this arriving aircraft was detained on another assignment. The absence of any ramp agents was reported to the handling control centre, and another ramp agent was detailed to put the loading bridge onto the aircraft.

On arriving at the stand, the agent found the loading bridge set at too high a position for the F28, and assessed that it would cause further delay to the passenger disembarkation if the airbridge was to be lowered. He therefore asked the cabin attendant to disembark the passengers using the aircraft's integral stairs. These were deployed, but the cabin attendant requested assistance from the ramp agent in order to reach the left handrail. She then apparently secured it into position. Passenger disembarkation proceeded normally until the last two passengers, a husband and wife, were about to disembark. The time was approximately 0937 hrs. The lady had some difficulty walking, and was aided by a walking stick. Before assistance could be offered to negotiate the stairs, the lady transferred her walking stick into her right hand and leaned upon the left handrail, which collapsed on application of her weight. The lady fell about two metres onto the ramp surface, sustaining several serious chest, neck and head injuries.

The handling agency was informed that urgent medical assistance and an ambulance was required, and informed the Airport Switchboard Operator at around 0940 hrs. The duty nurse arrived from the terminal at 0947 hrs. The ambulance was at the airport access road at 0954 hrs, and was escorted to the scene shortly afterwards.

On 24 April, after being treated in hospital, the injured lady and her husband were flown home on the same aircraft. Prior to boarding, the commander tested the handrails whilst carrying out his pre-departure inspection. On checking the left handrail, it again collapsed when weight was applied. The handrail was then correctly latched in position. Subsequent attempts to dislodge it had no success.

The handrail is normally locked into position by two retaining spigots, one above and one below. Each work independently, so that in the event of a single failure, the other should retain the handrail in the locked position. To the front of the spigots is a quick release device. Subsequent engineering inspection of the handrail on this aircraft revealed no unserviceabilities which could account for its collapse, despite several cycles of operation.

To prevent any repetition of this situation, the introduction of alignment stripes, or equivalent, on the handrail is being considered by the operator. Additionally, crew members have been briefed on the inspection for correct locking of the handrail.