

AAIB Bulletin No: 12/93

Ref: EW/G93/10/03

Category: 1.1

Aircraft Type and Registration: Airbus A320-211, G-BUSJ

No & Type of Engines: 2 CFM 56-5-A1 turbofan engines

Year of Manufacture: 1990

Date & Time (UTC): 3 October 1993 at about 1900 hrs

Location: En route from London Heathrow Airport to Copenhagen Airport

Type of Flight: Public Transport

Persons on Board: Crew - 7 Passengers - N/K

Injuries: Crew - None Passengers - None

Nature of Damage: The outer skin from the starboard overwing exit escape slide door panel detached

Commander's Licence: Airline Transport Pilot's Licence

Commander's Age: 44 years

Commander's Flying Experience: 12,700 hours (of which 1,700 were on type)
Last 90 days - 88 hours
Last 28 days - 49 hours

Information Source: Aircraft Accident Report Form submitted by the pilot and further enquiries by the AAIB

After arrival at Copenhagen a ground engineer found that the outer skin from the right overwing exit escape slide door panel was missing (see figure). The skin had detached en route and was not recovered.

The door panel, part number D36153-102, was removed from the aircraft and subjected to metallurgical examination. It was concluded that the detachment of the outer skin from the door panel was the result of progressive ingress of water into the outer skin/frame interface and that this process was assisted by 'ice-jacking' at sub-zero temperatures in flight. Skin separation appeared to have taken place by continuous peeling which probably resulted from lifting of the detached edge of the skin by aerodynamic forces around the area identified on the figure. The operator has stated that a number of these panels have delaminated, but this is the first where the outer skin has become detached.

As a result of this investigation, the following Safety Recommendations are made:

93-64 In order to prevent separation of the outer skins of overwing exit escape slide door panels on Airbus A320 aircraft the CAA, DGAC and the aircraft manufacturer should introduce a regular

inspection requirement to detect delamination of outer skins from associated door panels, part numbers D36153-101 and D36153-102. (Issued 23 November 1993)

93-65 The manufacturer of the Airbus A320 aircraft should examine the construction of the overwing exit escape slide door panels, part numbers D36153-101 and D36153-102, with a view to preventing water ingress between the outer skins and the door panel frames. (Issued 23 November 1993)

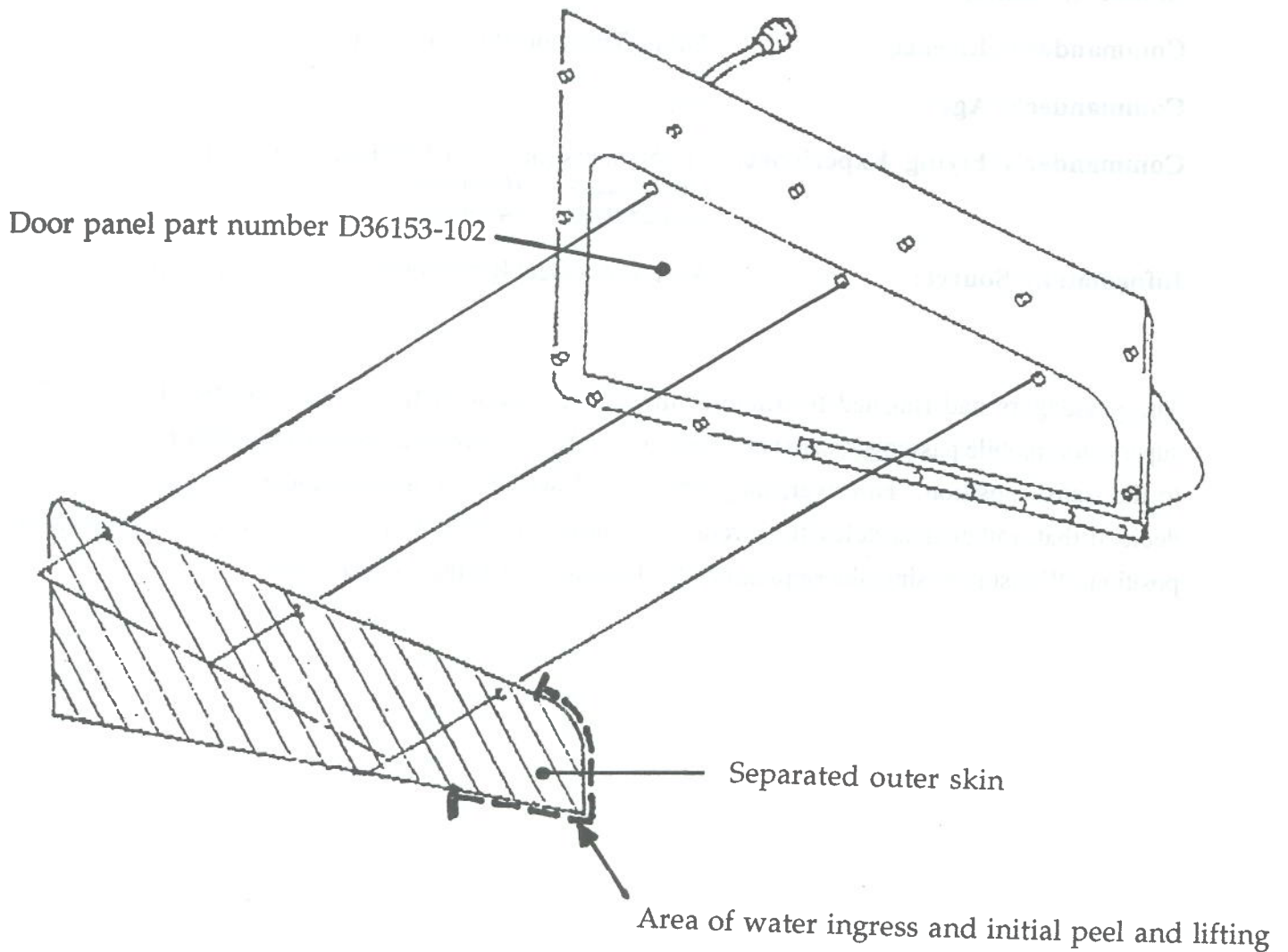
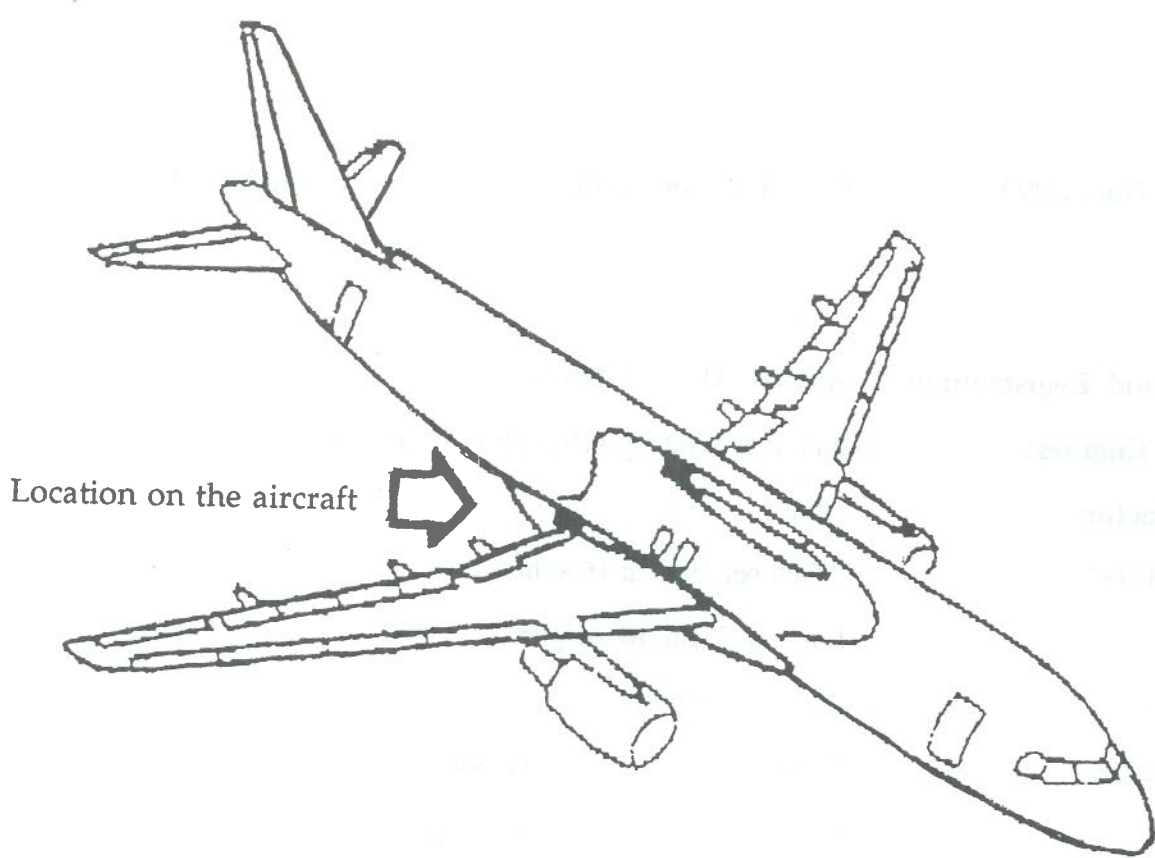


Figure Starboard overwing exit escape slide door panel