

Saab-Scania SF34DA, G-GNTB, 1 May 1996

AAIB Bulletin No: 8/96 Ref: EW/G96/05/13 Category: 1.1

Aircraft Type and Registration: Saab-Scania SF34DA, G-GNTB

No & Type of Engines: 2 CT7-5A2 turboprop engines

Year of Manufacture: 1987

Date & Time (UTC): 1 May 1996 at 1900 hrs

Location: Stand B4, Manchester Airport

Type of Flight: Public Transport

Persons on Board: Crew - 3 Passengers - None

Injuries: Crew - 1 Passengers - N/A

Nature of Damage: 500mm x 300mm hole in rear fuselage

Commander's Licence: Airline Transport Pilot's Licence

Commander's Age: 34 years

Commander's Flying Experience: 3,010 hours (of which 2,100 were on type)

Last 90 days - 193 hours

Last 28 days - 57 hours

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

The aircraft had just arrived ON stand B4 at Manchester and had been refuelled and catered for a flight to Glasgow; the crew was on board the aircraft carrying out pre-flight preparation. The passengers had not boarded and the crew was awaiting the arrival of a Ground Power Unit (GPU) from their handling agent.

The crew heard a loud bang and the aircraft was shaken violently as the GPU impacted the rear fuselage. The crew evacuated the aircraft immediately to investigate and the fire and ambulance services were advised. No injuries were reported at the time of the accident, but the following day the cabin attendant was found to have suffered whiplash injuries to her neck. The aircraft was repaired by technicians provided by the manufacturer, and was out of service for 7 days.

The commander reported that the tug end of the towbar was significantly lower than the GPU end, and that this arrangement resulted in the pin rising out of the tug receptacle and releasing the towbar. He also understood that this was the second such occurrence involving this GPU/tug combination within a 12 hour period.

Manchester Airport staff did not recall the prior incident, however the documentation produced by the handling agent confirmed that two similar events had taken place. The tug tow hitch had an additional feature which allowed the lower end of the pin to be restrained by a bolt to prevent the pin from moving upwards. An investigation by the handling agent indicated that the lower end of the pin had become bent stopping it passing through the tug fitting sufficiently far for it to be 'locked', and that this allowed the pin to rise sufficiently to release the GPU. The tow hitches are being replaced with an alternative design to prevent a recurrence.