

AAIB Bulletin No: 4/94

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Category: 1.1

INCIDENT

Aircraft Type and Registration: BAe ATP, G-LOGF

No & Type of Engines: 2 Pratt & Whitney PW-126 turboprop engines

Year of Manufacture: 1992

Date & Time (UTC): 30 January 1994 at 1500 hrs

Location: Manchester Airport

Type of Flight: Public Transport

Persons on Board: Crew - 4 Passengers - 22

Injuries: Crew - None Passengers - None

Nature of Damage: Radome punctured

Commander's Licence: Airline Transport Pilot's Licence with Instrument and Flying Instructor's Ratings

Commander's Age: 36 years

Commander's Flying Experience: 3,259 hours (of which 2,047 were on type)
Last 90 days - 155 hours
Last 28 days - 52 hours

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

The aircraft was pushed back from Stand 1 at Manchester Airport by a handling agent's tug driven by a trainee driver under the supervision of an experienced driver. This stand is located next to the terminal building on a pier extending out from the building and it is desirable for the pushback to be in the form of an S-manoeuve in order to increase the aircraft's separation from the building. After pushing back from this stand it is then necessary for the aircraft to be pulled forwards away from the building before engine start. A similar situation exists for the two adjacent stands.

Communication between the flight crew and the ground crew was by hand signals throughout because of a problem with the aircraft external communications socket. The pushback manoeuvre, with the towbar hitched to the front of the tug, was completed successfully, with the aircraft positioned at an angle of approximately 45° to the taxiway centreline and with its nose landing gear just beyond the centreline. As the tug started to reverse to pull the aircraft forward it was turned sharply in order to

align the aircraft on the taxiway centreline. This brought the roof of the tug into very close proximity to the aircraft's radome. The supervisor instructed the tug driver to stop; as he did so the aircraft radome was punctured by the roof of the tug.

The aircraft commander noted that the flight crew noticed nothing unusual during the pushback and did not feel or hear an impact. The tug crew requested the aircraft crew to shutdown the aircraft's engines and indicated that there was a problem at the nose of the aircraft. The engines were shut down, the commander disembarked to investigate and the aircraft was towed back onto the stand and the passengers disembarked.

Similar cases have reportedly occurred before in these circumstances. The ground handling company has now instituted a procedure whereby the towbar must be hitched to the rear of the tug for a pushback where a subsequent pull forward is necessary; the rear part of the tug is lower and can pass under the aircraft's nose. In addition, the company has ruled that a trainee driver will not conduct a pushback if headset voice communication with the flight crew is not available. The ground handling company is also investigating the possibility of using a longer towbar.