ACCIDENT

Aircraft Type and Registration: Fokker 50, OO-VLQ

No & Type of Engines: 2 Pratt and Whitney 125B turboprop engines

Year of Manufacture: 1989

Date & Time (UTC): 25 August 2005 at 2058 hrs

Location: Cardiff Airport, South Glamorgan

Type of Flight: Public Transport (Passenger)

Persons on Board: Crew - 3 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Port wingtip and three feet of leading edge damaged

Commander's Licence: Dutch Air Transports Pilot's Licence

Commander's Age: 39 years

Commander's Flying Experience: 9,000 hours (of which 5,500 were on type)

Last 90 days - 180 hours Last 28 days - 50 hours

Information Source: Aircraft Accident Report Form submitted by the pilot,

reports submitted by the handling agent and further

enquiries by the AAIB

Synopsis

Having landed on Cardiff Airport's Runway 30 and vacated the runway at E1, the empty aircraft was being taxied onto Stand 3, under the guidance of a marshaller, when its left wing tip collided with the end of West Pier on the Domestic Passenger Terminal. It was dark at the time and the taxiway surface was wet. This was the only stand available due to airport congestion.

History of events

The aircraft could not be parked nose-in on a stand because the handling agent did not possess a tow bar for this type of aircraft to enable a normal push back to be carried out. The marshaller stated that he was asked, by the apron controller, to marshal the aircraft onto Stand 3 facing out, 180° from the normal nose-in alignment. The marshaller added that he would normally have another colleague to assist him in monitoring the aircraft's wing tip however; there were no other members of staff available at the time.

As the marshaller brought the aircraft towards the West Pier, in an easterly direction, he signalled to the aircraft to turn to the right in order to manoeuvre the aircraft onto the stand's yellow line. The aircraft then continued forward before starting the right turn and its right wing tip then hit the end of the West Pier (see Figure 1).



Figure 1
Aircraft position immediately after impact

The apron controller stated that he asked the marshaller to park the aircraft through the stand with the wings over the yellow line, 90° off the norm. He added that he was not aware that a tow bar might be available from another handling agent and that he did not enquire to see if one might be available. A tow bar for this type of aircraft was available from another handling agent at Cardiff Airport.

The aircraft dispatcher was standing at the end of the West Pier to wait for the aircraft to come onto Stand 3 (see Figure 2 for a plan of the stands). As the aircraft was being brought along the edge of adjacent Stand 2, he was not unduly alarmed by the approaching aircraft as he thought the marshaller was going to turn the aircraft quite late in order to line it up with the line on Stand 3, as this was common practise. When the aircraft was

about 10 ft away he realised that there was a problem. He shouted "Stop" and crossed his arms to indicate stop to the marshaller but the aircraft's wing tip then hit the pier near to where he was standing. He was struck on the head by a small piece of plastic from the left wing tip navigation light covering, sustaining no injury.

The dispatcher and the marshaller both stated that they felt the speed of the aircraft may have been excessive for an empty aircraft. They also felt that the pilot may have been unaware of the apron layout because the aircraft operator is not a regular user of Cardiff Airport.

The aircraft commander stated that he was taxiing at normal speed. He reported that he thought he was going to park on Stand 3 facing out, as indicated by the marshaller.

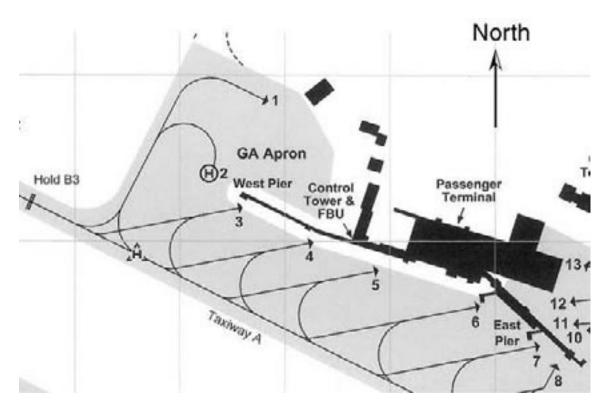


Figure 2Extract from Cardiff Airport AIP chart

When instructed by the marshaller he immediately initiated a right turn, following the marshaller's instructions precisely. The aircraft's left wing tip then hit the building. He added that due to spotlights on top of the West Pier shining towards him, he found it hard to determine his distance from the building.

The resulting damage was a broken wing tip light and a three foot long dent to the leading edge of the left wing.

INCIDENT

Aircraft Type and Registration: Jetstream 4100, G-MAJA

No & Type of Engines: 2 Garrett Airesearch (Honeywell) TPE331-14HR-802H

Turboprop engines

Year of Manufacture: 1994

Date & Time (UTC): 29 June 2005 at 1523 hrs

Location: Manchester Airport, Manchester

Type of Flight: Public Transport (Passenger)

Persons on Board: Crew - 3 Passengers - 10

Injuries: Crew - None Passengers - None

Nature of Damage: Nil

Commander's Licence: Airline Transport Pilot's Licence

Commander's Age: 50 years

Commander's Flying Experience: 3,270 hours (of which 1,310 were on type)

Last 90 days - 275 hours Last 28 days - 52 hours

Information Source: AAIB Field Investigation

Synopsis

The aircraft departed from Hamburg Airport with an overloaded baggage compartment and with the centre of gravity outside the aft limit of the operating company's approved aircraft flight envelope, although it was within the manufacturer's less restrictive envelope. On landing at Manchester Airport in benign weather conditions, an oscillation in yaw developed which the pilot was unable to correct through use of the rudder or nose wheel steering (NWS). After several cycles the oscillations rapidly became divergent and the aircraft veered off the runway, coming to a halt on the grass approximately 80 m from the runway centreline.

History of the flight

On the morning of the incident, the commander and first officer flew the aircraft from Humberside Airport to Hamburg Airport with a cabin attendant on board, but with no passengers or cargo. Whilst taxiing prior to departure the commander noted that the aircraft had a tendency to meander about the taxiway centreline without any associated crew NWS input. The aircraft arrived at 1029 hrs and was scheduled to depart with 10 passengers and their associated luggage at 1200 hrs, for a chartered flight to Manchester. After the aircraft had been catered and refuelled, the passenger baggage arrived at the aircraft. The commander noted that there were several large and heavy bags and enquired as to whether they had been weighed. He was told by the handling agent they