Collision with passenger terminal, Fokker 50, OO-VLQ

Micro-summary: The wing of this Fokker 50 collided with the passenger terminal while being taxiied.

Event Date: 2005-08-25 at 2058 UTC

Investigative Body: Aircraft Accident Investigation Board (AAIB), United Kingdom

Investigative Body's Web Site: http://www.aaib.dft.gov/uk/

Note: Reprinted by kind permission of the AAIB.

Cautions:

1. Accident reports can be and sometimes are revised. Be sure to consult the investigative agency for the latest version before basing anything significant on content (e.g., thesis, research, etc).

2. Readers are advised that each report is a glimpse of events at specific points in time. While broad themes permeate the causal events leading up to crashes, and we can learn from those, the specific regulatory and technological environments can and do change. Your company's flight operations manual is the final authority as to the safe operation of your aircraft!

3. Reports may or may not represent reality. Many many non-scientific factors go into an investigation, including the magnitude of the event, the experience of the investigator, the political climate, relationship with the regulatory authority, technological and recovery capabilities, etc. It is recommended that the reader review all reports analytically. Even a "bad" report can be a very useful launching point for learning.

4. Contact us before reproducing or redistributing a report from this anthology. Individual countries have very differing views on copyright! We can advise you on the steps to follow.

Aircraft Accident Reports on DVD, Copyright © 2006 by Flight Simulation Systems, LLC www.fss.aero All rights reserved.

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.

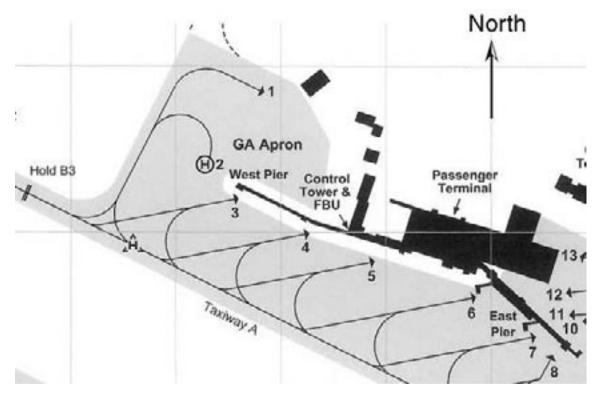


Figure 2 Extract from Cardiff Airport AIP chart

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.