

## ACCIDENT

<b>Aircraft Type and Registration:</b>	Boeing 737-8AS, EI-DCN
<b>No &amp; Type of Engines:</b>	2 CFM 56-7B26 turbofan engines
<b>Year of Manufacture:</b>	2004
<b>Date &amp; Time (UTC):</b>	6 November 2010 at 2028 hrs
<b>Location:</b>	Liverpool International Airport, Merseyside
<b>Type of Flight:</b>	Commercial Air Transport (Passenger)
<b>Persons on Board:</b>	Crew - 6                      Passengers - 139
<b>Injuries:</b>	Crew - None                      Passengers - None
<b>Nature of Damage:</b>	Minor damage to left horizontal stabiliser tip cap
<b>Commander's Licence:</b>	Airline Transport Pilot's Licence
<b>Commander's Age:</b>	37 years
<b>Commander's Flying Experience:</b>	6,149 hours (of which 1,918 were on type) Last 90 days - 240 hours Last 28 days - 70 hours
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot and additional enquiries by the AAIB

## Synopsis

The aircraft's horizontal stabiliser hit a lighting stanchion at the rear of the stand onto which it was being pushed. The stand was too small for the aircraft, and the required procedures were not followed.

## History of the flight

The aircraft was scheduled to fly from Liverpool International Airport, Merseyside to Dublin International Airport, Ireland. ATC cleared the aircraft to push back from Stand 3 onto Stand 33, directly behind the aircraft, due to airport congestion. The pushback crew consisted of a tug driver and a headset operator who was positioned to the right of the aircraft's nose during the pushback. An Airside Safety Officer (ASO) was also present at the rear of Stand 33.

Just before the pushback was completed ATC informed the pilots that the aircraft had hit a lighting stanchion at the rear of Stand 33. The aircraft was towed back onto Stand 3 where it was inspected by an engineer and found to have sustained minor damage to its left horizontal stabilizer. The passengers were transferred to another aircraft.

## Airport information

Airport Operational Instruction (AOI) 13 - *Apron Control and Marshalling Procedures*, stated the following in relation to daytime operating procedures:

*'Stands 33 to 37 Stands 33 to 37 are similar to Stands 2-10 and can accommodate all Code C aircraft except those longer than 34m.'*

There are no separate night-time procedures. The Boeing 737-800 is 39.48 m long.

The AOI also stated that all stands are designed for taxi-in pushback operations; it is not intended that aircraft should be pushed back into these stands.

#### **Airside Safety Officer's comments**

The ASO stated that she received a call from ATC asking if EI-DCN could push from Stand 3 and hold on Stand 33. She approved this and went to inspect Stand 33 before parking her vehicle on an adjacent stand to control the flow of airside traffic driving behind the positioning aircraft. She was not expecting the pushback crew to attempt to position the tug and the aircraft onto Stand 33.

The ASO added that when the aircraft started its pushback she monitored the road and, as the tail of the aircraft approached the rear of Stand 33, looked for a 'banksman'<sup>1</sup> but could not see one. The aircraft then collided with the lighting stanchion at the rear of the stand. She requested ATC, by radio, to stop the pushback and, having attracted the attention of the tug driver, signalled for him to stop. She then approached the ground crew to inform them that the aircraft had hit the lighting stanchion.

#### **ATCO's comments**

The ATCO commented that he was not aware of the limitations on the use of Stand 33 published in AOI 13.

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#### **Footnote**

<sup>1</sup> Member of the marshalling team assigned to monitor the aircraft's wingtip or tail.

He decided to give clearance for EI-DCN to perform a pushback to Stand 33 due to congestion on the apron. He added that as the ASO had approved the pushback and was present he assumed it was an appropriate clearance to issue, noting that he had issued such a clearance in the past without incident. He did not require the aircraft to be parked on the stand, but to be pushed back far enough to clear the taxiway.

#### **Pushback crew's comments**

The headset operator commented that he was unaware of the requirement for a banksman to be present. The tug driver stated that he believed the ASO was acting as a banksman. During the pushback he had concentrated on guiding the aircraft along the centreline and watching the headset operator.

#### **Liverpool International Airport's comments**

Liverpool International Airport commented that it was not common practice to pushback aircraft to a remote stand and that it was done on this occasion to facilitate ground movements. They added that the controller acted within the procedures which allow aircraft to pushback onto vacant remote stands. The procedure required the presence of a banksman for such a manoeuvre, but one was not provided on this occasion. The pushback crew attempted to push the aircraft back onto the stand, and clear the taxiway and rear-of-stand roadway with both aircraft and tug. However, the tug and aircraft combination exceeded the depth of the stand by 5 m. Also factors were the position of the light stanchion within the stand and the fact that the aircraft was pushed in tail first.

#### **Safety actions**

Liverpool International Airport has suspended similar pushback instructions and will review AOI 13 with the intention of ensuring clarity and understanding.