

**SERIOUS INCIDENT**

<b>Aircraft Type and Registration:</b>	DHC-8-402 Dash 8, G-JEDM	
<b>No &amp; Type of Engines:</b>	2 Pratt & Whitney Canada PW150A turboprop engines	
<b>Year of Manufacture:</b>	2003 (Serial no: 4077)	
<b>Date &amp; Time (UTC):</b>	19 January 2015 at 1014 hrs	
<b>Location:</b>	Inverness Airport	
<b>Type of Flight:</b>	Commercial Air Transport (Passenger)	
<b>Persons on Board:</b>	Crew - 4	Passengers - 47
<b>Injuries:</b>	Crew - None	Passengers - None
<b>Nature of Damage:</b>	None	
<b>Commander's Licence:</b>	Airline Transport Pilot's Licence	
<b>Commander's Age:</b>	58 years	
<b>Commander's Flying Experience:</b>	13,800 hours (of which 3,300 were on type) Last 90 days - 180 hours Last 28 days - 50 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

**Synopsis**

The aircraft had landed and was instructed by Air traffic Control (ATC) to continue rolling to the end of the runway and take the exit to the right. As the crew turned the aircraft onto the taxiway, it entered an uncontrollable slide to the left and came to rest with all three landing gears on the grass. The aircraft's groundspeed was considered to have been a major factor in the loss of control.

**History of the flight**

The aircraft had landed on Runway 23 at Inverness following a flight from Manchester. ATC asked the crew to roll to the end of the runway and vacate at exit A1 (Figure 1); thereafter they were to taxi to the South Apron. The commander reported that the aircraft slowed with minimal braking required but, as he commenced the right turn at A1, he lost control of the aircraft. It slid sideways to the left, coming to rest on the grass, pointing parallel to the taxiway centreline, but with all three landing gears partly sunk into the soft ground. After requesting help from the rescue services, the crew shut down the engines and, after inspection of the landing gear by the Airport Fire Service, it was deemed safe to allow the passengers to disembark.

An Airport Operations Assistant, who was preparing to marshal the aircraft onto its stand on the South Apron, watched the aircraft land. He stated that he would normally have turned

away and returned to his marshalling position, but said that he continued to watch because he felt that the aircraft was travelling unusually fast as it reached the end of the runway. He observed it turning right at A1 and heard the tyres squeal as it did so, raising the alarm when he realised it had gone onto the grass.



**Figure 1**

Aerial view of Inverness Airport showing location of exit A1

### Analysis

The commander reported that he felt the paved surface was very wet with de-icing fluid, but there were still some icy patches and the fluid had made some of the white painted markings slippery. He conceded that he had been taxiing “slightly higher than normal taxi speed”, but had been eager to vacate the runway.

The airport authority produced a detailed report on the incident, which was made available to the AAIB. It states that the runway and taxiways were de-iced between 0745 and 0847 hrs on the morning of the incident and that a subsequent inspection found no evidence of icy patches being present. A test of the applied fluid using a refractometer gave it a freezing point of  $-24^{\circ}\text{C}$ . In addition, the painted markings were not judged to be ‘slippy’ and tyre marks were visible on the paved surface as the aircraft had turned onto the taxiway. The report concluded that the presence of these marks and the witness evidence that the tyres squealed as the aircraft cornered indicated that there should have been adequate friction between the tyres and the runway/taxiway surface.

A download of the aircraft's Flight Data Recorder indicated that there was minimal braking action applied during the landing roll and that, as the aircraft turned into exit A1, it had a groundspeed of 29 kt. No anomalies were found with the braking system.