# Attachment 5

To Operations Group Factual Report

# **DCA15FA085**

MD88 Runway Condition – Braking Action Chart

### **OPERATIONAL LANDING DISTANCES**

#### **RUNWAY CONDITION/BRAKING ACTION**

For additional guidance regarding the classification of the braking action based on existing contaminant types and the ICAO/Runway Condition Code values, please refer to Airway Manual, Supplemental, 4 – Weather, Braking Action.

Reported Braking Action		Reported Runway Surface Conditions				
PIREP	Definition	Runway Contaminant	ICAO/ Runway Condition Code	<b>M</b> u <sup>(2)</sup>	RCR	
		• Dry	6			
Good	Braking deceleration is normal for the wheel braking effort applied AND directional control is normal	<ul> <li>Frost</li> <li>Wet or Damp</li> <li>1/8" or less depth of:</li> <li>Water</li> <li>Slush</li> <li>Dry Snow</li> <li>Wet Snow</li> </ul>	5	40 or higher	19 & above	
Good to Medium	Braking deceleration OR directional control is between Good and Medium.	-15°C and colder OAT:  Compacted Snow	4	39		
Medium (Fair)	Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced.	Wet ("slippery when wet" runway) Dry Snow or Wet Snow (any depth) over Compacted Snow Greater than 1/8" depth of: Dry Snow Wet Snow Warmer than -15°C OAT: Compacted Snow	3	to 30	13 – 18	
Medium to Poor	Braking deceleration OR directional control is between Medium and Poor.	Greater than 1/8" depth of:  Water Slush	2	to T		
Poor	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced.	• Ice	1	21 20 or lower	6 – 12	
Nil <sup>(1)</sup>	Braking deceleration is minimal to non-existent for the wheel braking effort applied OR directional control is uncertain.	Wet Ice     Water on top of Compacted Snow     Dry Snow or Wet Snow over Ice	0		5 & below	
(1) -		Unreliable	9 (ICAO only)	N/A	N/A	

<sup>(1)</sup> Operations on any runway with a PIREP or runway contaminant of nil are prohibited.

Braking actions "GOOD TO MEDIUM (4)" and "MEDIUM TO POOR (2)" are not displayed on the following pages. It is acceptable to interpolate between the provided data to calculate the desired landing performance when these conditions are present.

### **CROSSWIND**

On slippery runways, crosswind guidelines are a function of runway surface condition, airplane loading and assume proper pilot technique. The following crosswind guidelines are applicable to all Delta aircraft for takeoff and landing.

	DRY	GOOD	MEDIUM / FAIR	POOR
Crosswind Limit	Aircraft Limits	Aircraft Limits	20KTS	10KTS
Tailwind Limit	10KTS*	10KTS*	5KTS	0KTS

<sup>\*</sup>Or as permitted by Delta 10-0 special pages.



<sup>(2)</sup> The overlapping Mu scales reflect the inherent inaccuracies of ground based Mu devices. Do not base the calculation of a landing distance solely on runway friction meter readings.