Attachment 3

To Operations/Human Performance Group Factual Report

DCA11IA015

Braking Action Chart

While the table includes information published by ICAO correlating runway friction measurements to estimated braking actions, the FAA cautions that **no reliable correlation exists**. Runway Mu values **can vary significantly** for the same contaminant condition due to measuring techniques, equipment calibration, the effects of contamination on the friction measuring device and the time passage since the measurement. **Do not** base landing distance assessments solely on runway Mu friction reports. If Mu is the only information provided, attempt to ascertain the depth and type of runway contaminants to make a better assessment of actual conditions.

Braking Action Chart

Braking Action		Estimated Correlations		
Term	Definition	Runway Surface Condition	ICAO	
			Code	Mu (μ)
Good	Braking deceleration is normal for the wheel braking effort applied. Directional control is normal.	• Standing Water depth of 1/8" or less • Dry snow less than 3/4" in depth • Compacted snow with OAT at or colder than -15°C	5	40 & above
Medium (Fair)	Braking deceleration is noticeably reduced for the wheel braking effort applied. Directional control may be slightly reduced.	• Dry snow 3/4" or greater in depth • Sanded snow • Sanded ice • Compacted snow with OAT warmer than -15°C	3	30 - 39
Poor	Braking deceleration is significantly reduced for the wheel braking effort applied. Potential for hydroplaning exists. Directional control may be significantly reduced.	• Wet snow • Slush • Standing Water depth more than 1/8" • Ice (not melting)	1	21 - 29
Nil	Braking deceleration is minimal to non-existent for the wheel braking effort applied. Directional control may be uncertain.	• Ice (melting) • Wet Ice	-	20 & below