PILOT'S RUNWAY **CONDITION ASSESSMENT MATRIX**

PILOT/AIRCRAFT OPERATOR OPERATIONAL RUNWAY CONDITION ASSESSMENT MATRIX (RCAM) BRAKING ACTION CODES AND DEFINITIONS

Assessment Criteria		***Control/Braking Assessment Criteria***	
Runway Condition Description	RwyCC	Deceleration or Directional Control Observation	Pilot Reported Braking Action
• Dry	6	---	---
• Frost • Wet (Includes damp and 1/8 inch depth or less of water) 1/8 Inch (3mm) Depth or Less of: • Slush • Dry Snow • Wet Snow	5	Braking deceleration is normal for the wheel braking effort applied AND directional control is normal.	Good
-15 °C and Colder Outside Air Temperature: • Compacted Snow	4	Braking deceleration OR directional control is between Good and Medium.	Good to Medium
• Slippery When Wet (wet runway) • Dry Snow or Wet Snow (any depth) over Compacted Snow Greater Than 1/8 Inch (3 mm) Depth of: • Dry Snow • Wet Snow Warmer Than -15 °C Outside Air Temperature: • Compacted Snow	3	Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced	Medium
Greater Than 1/8 Inch (3 mm) Depth of: • Water • Slush	2	Braking deceleration OR directional control is between Medium and Poor.	Medium to Poor
• Ice	1	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced.	Poor
• Wet Ice • Slush over Ice • Water over Compacted Snow • Dry Snow or Wet Snow over Ice	0	Braking deceleration is minimal to nonexistent for the wheel braking effort applied OR directional control is uncertain.	Nil

Note: The unshaded portion of the RCAM is associated with how an airport operator conducts a runway condition assessment.

Note: The shaded portion of the RCAM is associated with the pilot's experience with braking action.

Note: The Pilot/Aircraft Operator Operational RCAM illustration will differ from the RCAM illustration used by airport operators. The RCAM illustration used by Airport Operators is not intended for use by pilots and/or aircraft operators.

Note: Runway Condition Codes (RwyCC), one for each third of the landing surface, (e.g., 4/3/3), represent the runway condition description as reported by the airport operator. The reporting of codes by runway thirds began October 2016.

TIME OF ARRIVAL **LANDING DISTANCE ASSESSMENT**

- When a grooved or PFC surfaced runway is wet, the assessment may be based on using the AFM dry runway, unfactored landing distance x 1.92.
- Otherwise, the assessment should use landing distance data based on the reported Runway Condition Code (RwyCC) or braking action.
- If landing distance data based on the RwyCC/braking action is not available, FAA's Landing Distance Factors may be used ith the AFM dry runway, unfactored landing distance to determine the Landing Distance Required. These factors incorporate a 15% safety margin.

THE FOLLOWING FACTORS ARE MULTIPLIERS TO THE UNFACTORED AFM DEMONSTRATED LANDING DISTANCES:

Braking Action	Runway Condition Code						
	6 (Dry)	5 Grooved/ PFC Good	5 Smooth Good	4 Good to Medium	3 Medium	2 Medium To Poor	1 Poor
Turbojet, No Reverse	1.67	2.3	2.6	2.8	3.2	4.0	5.1
Turbojet, With Reverse	1.67	1.92	2.2	2.3	2.5	2.9	3.4
Turboprop Note 1	1.67	1.92	2.0	2.2	2.4	2.7	2.9
Reciprocating	1.67	2.3	2.6	2.8	3.2	4.0	5.1

Note: These LDFs apply only to turboprops where the AFM provides for a landing distance credit for the use of ground idle power level position. Turboprops without this credit should use the Turbojet, No Reverse LDFs.

Compiled by NBAA Access Committee

NBAA