

PILOT'S RUNWAY CONDITION ASSESSMENT MATRIX

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

<i>Assessment Criteria</i>		<i>Control/Braking Assessment Criteria</i>	
Runway Condition Description	RwyCC	Deceleration or Directional Control Observation	Pilot Reported Braking Action
<ul style="list-style-type: none"> Dry 	6	---	---
<ul style="list-style-type: none"> Frost Wet (Includes damp and 1/8 inch depth or less of water) 1/8 Inch (3mm) Depth or Less of: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> Compacted Snow 	4	Braking deceleration OR directional control is between Good and Medium.	Good to Medium
<ul style="list-style-type: none"> Slippery When Wet (wet runway) Dry Snow or Wet Snow (any depth) over Compacted Snow Greater Than 1/8 Inch (3 mm) Depth of: <ul style="list-style-type: none"> Dry Snow Wet Snow Warmer Than -15 °C Outside Air Temperature: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> Water Slush 	2	Braking deceleration OR directional control is between Medium and Poor.	Medium to Poor
<ul style="list-style-type: none"> Ice 	1	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced.	Poor
<ul style="list-style-type: none"> 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 with 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:

Runway Condition Code	6	5	4	3	2	1
Braking Action	Dry	Good	Good to Medium	Medium	Medium to Poor	Poor
Runway Description	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1
Turbojet, No Reverse	1.67	2.6	2.8	3.2	4.0	5.1
Turbojet, With Reverse	1.67	2.2	2.3	2.5	2.9	3.4
Turboprop Note 2	1.67	2.0	2.2	2.4	2.7	2.9

Note 1: Runway Descriptions may be found in the RCAM for each runway condition code (RCC) or Braking Action (refer to AC 91-79).

Note 2: These LDFs apply only to modern turboprops with efficient disk drag. For older turboprops without adequate disk drag use the Turbojet, No Reverse LDFs.

Note 3: The LDFs can apply to any type of anti-skid system (e.g., fully-modulating, quasi-modulating, or on-off system). A description of anti-skid systems can be found in the current edition of AC 25-7, Flight Test Guide for Certification of Transport Category Airplane. This note applies to the whole table.