

# United Airlines

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**UNITED** 

# United Airlines – A brief description of US Dispatcher responsibilities (additional slide)

- The Captain and Dispatcher are jointly responsible for the preflight planning, delay and dispatch release of a flight.
- A flight may begin only after both the Captain and Dispatcher agree the flight can be conducted safely and in accordance with Federal Aviation Regulations, Operations Specifications and company policies.
- Dispatchers are responsible for the following functions:
  - Monitor the progress of each flight
  - Provide instructions and information necessary for the continued safety of the flight
  - Briefing the Captain prior to departure and provide enroute updates on the following:
    - Safety related conditions such as: All available weather reports and forecasts; Adverse weather phenomena; Low altitude windshear; Airport conditions; Irregularities of navigation facilities; Irregularities of facilities and services; SIGMETs; Turbulence; Volcanic ash; Solar weather
  - Any changes to the operational environment such as: Weather falling below required minimums; Updated wind information; Alternate and destination airport weather; Terminal delays; Inoperative facilities; Field conditions

# Brief Background of RCAM/FAA FICON (Field Condition NOTAM)

- Previous method of Mu readings were subjective in nature, did not correlate to aircraft performance and were not tied to any specific data to determine adequate stopping distance.
- As of October 1, 2016:
  - FAA implemented a runway condition reporting process that provides field condition information (FICON) to airport users in order to safely assess takeoff and landing performance.
  - This new system automatically assigns runway condition codes based the new RCAM (Runway Condition Assessment Matrix).
  - RCAM runway condition codes have replaced Mu (braking co-efficient) friction readings in the United States.
  - RwyCC, based on RCAM Matrix, ties together runway contaminant descriptions, braking action, and airplane performance data.
  - FICON observation provides objective data. Ties type of contaminants to specific aircraft manufacturers braking performance data.
  - Pilots and Dispatchers are now able to consult with aircraft specific manufacturer data in order to determine stopping performance.
  - Braking action of “FAIR” has been replaced with “MEDIUM”.
  - Standardization of field condition terminology with ICAO.

**NOTE: The braking action term “FAIR” will be replaced with “MEDIUM,” effective October 1, 2016. Until October 1, 2016, the current use of the term “FAIR” applies.**

**TABLE 1-1. 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) <i>1/8 inch (3mm) depth or less of:</i> • Slush • Dry Snow • Wet Snow	5	Braking deceleration is normal for the wheel braking effort applied AND directional control is normal.	Good
<i>-15°C and Colder outside air temperature:</i> • 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 <i>Greater than 1/8 inch (3 mm) depth of:</i> • Dry Snow • Wet Snow <i>Warmer than -15°C outside air temperature:</i> • Compacted Snow	3	Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced.	Medium
<i>Greater than 1/8 inch(3 mm) depth of:</i> • 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 non-existent 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 Operational RCAM illustration will differ from the RCAM illustration used by Airport Operators.

Note: Runway condition codes, one for each third of the landing surface, for example 4/3/3, represent the runway condition description as reported by the airport operator. The reporting of codes by runway thirds is expected to begin in October of 2016.

# Dispatch FICON policy and requirements

- United bases all performance values on the lowest value in the FICON/RCAM report.
- The Dispatcher is required to actively monitor published NOTAMs for potential contamination concerns before, during, and after a weather event. Only approved sources are utilized when reviewing FICONs (\*FAA ICAO NOTAM format is used by United) and SNOWTAMs.
  - \* United utilizes an ICAO-based flight planning system. All government issued NOTAMs processed by the UA flight planner are in the ICAO format
- The Dispatcher also reviews weather conditions at the airport during the FICON review and analysis phase. Observing any changes in weather conditions which may have occurred after issuance of the active FICON.
- Continuously attempts to obtain latest FICON conditions and review with flight crew for potential impacts.
- If, during a weather event, FICONs are not reported or appear outdated. The Chief Dispatcher will attempt to obtain the missing/requested information from the Airport Authority.
- **Taxi, takeoffs, and landings are prohibited if braking action is reported as NIL or with a current FICON containing an RCAM RwyCC of 0.** However, A flight may be dispatched if restorative work is occurring (i.e., plowing, sanding, chemical treatment) to restore braking action.

# Dispatch FICON policy and requirements

- Pilot and Dispatcher must take into account possible crosswind impacts based on fleet type that may limit operations. Takeoff and landing crosswind guidelines in Flight Manual Limitations (all fleets) objectively correlate the FICON runway condition code to expected braking action.
- Most recent Dispatcher re-current training course included worldwide adoption of RCAM/RwyCC by November 2020.
- A domestic Dispatcher maintains responsibility for 20-40 flights. An international Dispatcher can be responsible for 10-20 flights.

# Dispatcher FICON Review: Departure Airport

- Both the Captain and Dispatcher are jointly responsible for reviewing and applying the latest runway condition reports (i.e. FICON NOTAMs, braking action reports, ATIS, etc.).
- The Dispatcher will select the performance penalty level which most closely approximates the conditions present for takeoff. If uncertainty concerning the safety of an operation on a cluttered runway. Takeoff will be delayed until the uncertainty has been resolved (e.g., the runway is cleaned).
- During conditions when runway contamination can be reasonably expected. The Dispatcher should make every attempt to obtain updated runway conditions and contact the flight crew to review the information prior to push-back.
- Ultimately, the Captain is the official onsite observer for assessing the condition of the local runway, taxiway and ramp.
- Takeoff prohibited with greater than 1/2 inch of water, slush, wet snow\*, or >4 inches of dry snow.  
\*787 wet snow limit is 1 inch.

# Dispatcher FICON Review: Destination or Alternate Airports

- Updated FICON information for the intended destination is **not required** prior to dispatch release or takeoff (applicable to flight times greater than 60 minutes).
- Consider runway contamination codes as a decision-support tool and not a decision-making tool.
- When the potential for runway contamination exists. The Dispatcher considers the operational impact to the planned runway and will apply the appropriate penalties.
- During conditions when runway contamination can be reasonably expected. The Dispatcher shall advise the Captain of the latest information, and if necessary, recommend the following actions:
  - Additional fuel for airborne holding (planned)
  - Slow the flight
  - Diversion
- The Dispatcher must attempt to make positive contact with the flight crew to verify receipt of the latest report.
- 14 CFR 121.197 (Airplane: Turbine engine powered: Landing limitations: Alternate Airports) require the ability to land within 60% of a “dry” runway to name an airport as an alternate **for planning** purposes.  
However, once the flight is en route. The Dispatcher is required to monitor field conditions for all listed alternate airports.



# Differences between FAA FICON and ICAO GRF

- RwyCC of 0:
  - FAA = NIL (Note: NIL in SNOWTAM currently indicates clear and dry)
  - ICAO = Less than Poor
- Runway direction reported from:
  - FAA = Direction of landing runway
  - ICAO = Direction of the lower runway designation
- RCAM matrix:
  - FAA = Single RCAM matrix for all airports
  - ICAO = Two separate RCAM matrices. Dependent upon if airport experiences snow and ice or not.

# Notes

- FAA ICAO FICON issued as ICAO NOTAM series “A”.
- Transmission delay of domestic FICON NOTAM into ICAO FICON/RCAM NOTAM attributed to the ICAO conversion process.
- 24 hour validity times. Unless a new observation has been issued or NOTAM has been cancelled. FICONS will remain in system until self-cancellation (24 hours later).
- Lack of Airport Authority contact details (phone or email) provided in NOTAM.
- ATIS remarks may not always updated with latest FICON observation data.