

# Takeoff And Landing Performance Assessment (TALPA)

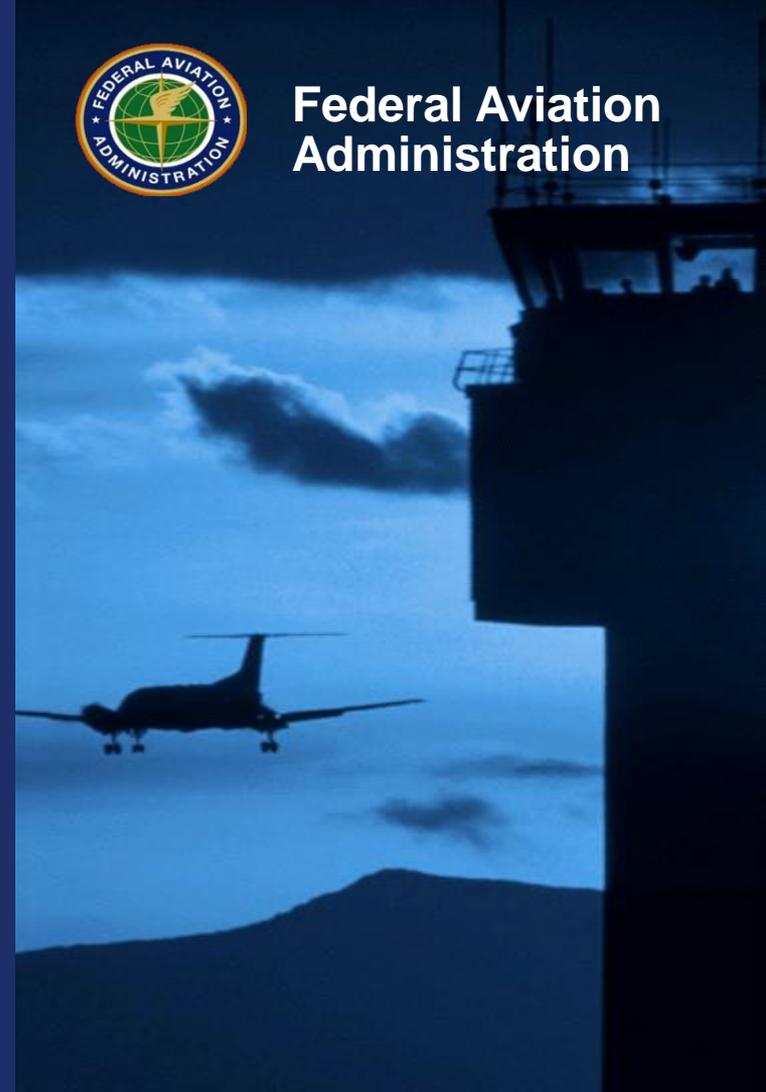
Presented to: TALPA Update Meeting

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Federal Aviation  
Administration



# TALPA

- **TALPA Origin**
- **Runway Condition Assessment Matrix (RCAM) first season analysis**
- **Resources available**
- **Expectations**



# TALPA Origin

- **Excursion Accident from Dec 2005**
- **Deficiencies addressed included:**
  - Landing distance assessment at time of arrival
  - Accounting for contaminated runways at the time of takeoff
  - Reporting standardization and tools for the operators
- **FAA Aviation Rulemaking Committee (Oct 2007 – Oct 2009)**
  - Airplane Manufacturers - Airplane Operators - Other Organizations
  - Regulatory Authorities - Airport Operators
- **Recommendations provided to FAA in 2009**
- **Assessment tool mechanics and field testing 2009-2011**
- **TALPA implemented Oct 2016**



# RCAM first season analysis

Table 5-2. Runway Condition Assessment Matrix (RCAM) (for Airport Operators' Use Only)

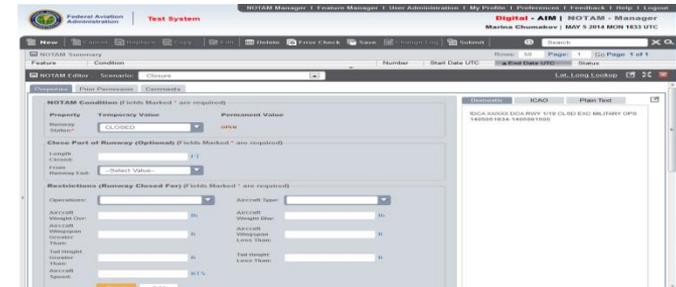
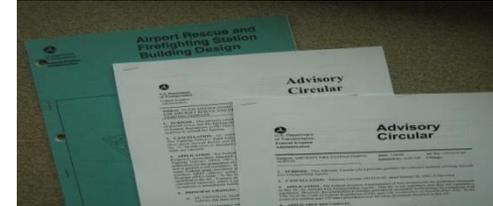
- Review of Field Condition NOTAMs Oct 2016 – Apr 2017
- Comparison of limited Pilot Reports (PIREPs) & airport operators assessment using the RCAM
- Meteorological data and airport operator RCAM assessment
- Reporting of Wet Runway(s) in the NOTAM system
- Snapshot use of the RCAM in National Airspace System

Assessment Criteria		Downgrade Assessment Criteria		
Runway Condition Description	Code	Mu ( $\mu$ ) <sup>1</sup>	Vehicle Deceleration or Directional Control Observation	Pilot Reported Braking Action
<ul style="list-style-type: none"> <li>• Dry</li> </ul>	6	40 or Higher	---	---
<ul style="list-style-type: none"> <li>• Frost</li> <li>• Wet (Includes Damp and 1/8 inch depth or less of water)</li> </ul> <p><i>1/8 inch (3mm) depth or less of:</i></p> <ul style="list-style-type: none"> <li>• Slush</li> <li>• Dry Snow</li> <li>• Wet Snow</li> </ul>	5		Braking deceleration is normal for the wheel braking effort applied AND directional control is normal.	Good
<p><i>5° F (-15°C) and Colder outside air temperature:</i></p> <ul style="list-style-type: none"> <li>• Compacted Snow</li> </ul>	4	39	Braking deceleration OR directional control is between Good and Medium.	Good to Medium
<ul style="list-style-type: none"> <li>• Slippery When Wet (wet runway)</li> <li>• Dry Snow or Wet Snow (Any depth) over Compacted Snow</li> </ul> <p><i>Greater than 1/8 inch (3mm) depth of:</i></p> <ul style="list-style-type: none"> <li>• Dry Snow</li> <li>• Wet Snow</li> </ul> <p><i>Warmer than 5° F (-15°C) outside air temperature:</i></p> <ul style="list-style-type: none"> <li>• Compacted Snow</li> </ul>	3		Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced.	Medium
<p><i>Greater than 1/8 (3mm) inch depth of:</i></p> <ul style="list-style-type: none"> <li>• Water</li> <li>• Slush</li> </ul>	2	29 to 30	Braking deceleration OR directional control is between Medium and Poor.	Medium to Poor
<ul style="list-style-type: none"> <li>• Ice<sup>2</sup></li> </ul>	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"> <li>• Wet Ice<sup>2</sup></li> <li>• Slush over Ice<sup>2</sup></li> <li>• Water over Compacted Snow<sup>2</sup></li> <li>• Dry Snow or Wet Snow over Ice<sup>2</sup></li> </ul>	0	20 or Lower	Braking deceleration is minimal to non-existent for the wheel braking effort applied OR directional control is uncertain.	Nil



# Resources Still Available

- Updated Advisory Circulars on Winter Operations and NOTAMs
- Recorded Webinars posted to the website
- Narrated PowerPoint on the RCAM & NOTAM Manager features
- Collaborative FAA TALPA team Subject Matter Experts meets monthly
- Ongoing Outreach Efforts



# Expectations

- **Stakeholders feedback on the first season use of the RCAM**
- **What are some new best practices**
- **Potential changes to the process**
- **Continued feedback from stakeholders moving forward**
- **ICAO adoption in 2020**



# Thank You! Questions?

