

Takeoff and Landing Performance Assessment (TALPA) Winter Season One Update

Presented to: FPAW

By: FAA Flight Standards

Date: October 12, 2017



**Federal Aviation
Administration**



Stakeholders Feedback Review

Presented to: TALPA Update Meeting

By: ARP, AFS, ATO, AIR, NATCA

Date: July 11, 2017



**Federal Aviation
Administration**

Feedback Collection & Review

- **Input at conferences, meetings, media, etc.**
- **Comments made to the TALPA email box**
- **Convened FAA TALPA Implementation Team to Review**
 - Aircraft Certification
 - Office of Airports
 - Flight Standards Service
 - Air Traffic Procedures
 - NOTAM Policy and NOTAM Manager Offices
 - NATCA
- **Team proposed resolution(s)**



“Patchy” or % for Taxiways & Aprons

- **REQUEST:** Add a capability for airports to report either “patchy” or % coverage on taxiways and aprons
- **DISCUSSION POINTS:**
 - Not a performance issue
- **RESOLUTION:** Agreement to add the capability to report “patchy” contaminants on taxiways & Aprons
 - “Patchy” would still mean 25% or less contamination



Mu

- **REQUEST:** Clarify the FAA position on reporting Mu
- **DISCUSSION POINTS:**
 - Mu recognized as a useful indicator for airports
 - Mu does not correlate to aircraft performance
 - Removal of Mu from RCAM would create other issues
 - Covered in Change 1 of Winter Ops AC
- **DECISION:** FAA maintains its position of not reporting or sharing Mu information with pilots/airlines



Reporting Contaminants by Thirds

- **CONCERN:** If the RwyCC of the last third of the runway is low (for example, 5-4-2), but the runway is long and the last third is not needed for landing and rollout, that one low code can keep the flight from landing.
- **DISCUSSION POINTS:**
 - It is carrier policy to determine how the RwyCC is used.
 - The airport is not deciding who can land, and who can't.
 - The RwyCC is a decision-support tool, not a decision-making tool
 - Other factors, such as a crosswind, also influence decision to land
- **RESOLUTION:** Carriers clearly define their policies in SOP(s) and educate pilots about it



Reporting Contaminants by Thirds

- **REQUEST:** Clarify how a displaced threshold is factored into the RwyCC .
- **DISCUSSION POINTS:**
 - The RwyCC describes the entire length of the runway, even when there is a displaced threshold.
 - It is up to the pilot to factor the displaced threshold into their landing decision.
- **RESOLUTION:** Educate pilots that the RwyCC describes the entire runway length, so they Must factor in any displaced threshold



Relaying the FICON NOTAM

- **REQUEST:** Add FICON to digital ATIS.
- **DISCUSSION POINT:** The NOTAM system and ATIS system are not electronically linked.
- **RESOLUTION:** We are unable to pursue this suggestion.



ATIS Information Inconsistency

- **ISSUE:** Information available on the ATIS is not consistent across the NAS as relates to FICON.
- **DISCUSSION POINTS:**
 - Aircraft operators seeks the same ATIS format and information across the NAS.
 - What perimeters are there for RwyCC only versus complete FICON read back of the NOTAM by controllers
- **RESOLUTION:** ATO and NATCA working to refine policy guidance and standardization of minimum ATIS requirement, and to address whole FICON read back.



Braking Action

- **QUESTION:** Can the RwyCC and vehicle braking action report be combined, especially for the first flight of the day?
- **DISCUSSION POINTS:**
 - Vehicle braking can be used by the airport as an indicator of runway condition trending.
 - Vehicle braking cannot be reported on runways.
 - Vehicle braking cannot be used to upgrade a RwyCC.
 - The airport must have the proper equipment in order to upgrade.
- **ANSWER:** RwyCC and vehicle braking cannot be combined



Braking Action

- **ISSUE:** Some airlines require a braking action of a certain level along with a RwyCC of a certain level. Not all ATC facilities are aware of this requirement and don't relay the pilot braking action reports.
- **DISCUSSION POINTS:**
 - It is airline policy to decide what indicators to use when making a landing decision.
 - Holding aircraft can monitor the tower frequency
 - Pilot braking is also available by request
 - ATC relays pilot braking as provided by aircraft operators
- **RESOLUTION:**
 - Ensure airline policy is clear and relayed to pilots



Runway Assessments

- **ISSUE:** Airport is conducting such frequent runway inspections that aircraft Must be sent around, sometimes into icing conditions.
- **DISCUSSION POINTS:**
 - There is danger is landing on an unsafe runway.
 - There should be an LOA between the airport and the tower regarding how they will conduct runway inspections.
 - This may have been a “growing pains” situation
- **RESOLUTION:** Tower and airport review their LOA to insure it accurately represents how they are operating with TALPA in place.



Runway Assessments

- **ISSUE:** A large change in RwyCC (3/3/3 to 5/5/5) in 3 minutes leads a dispatcher to ask about FAA guidance on timing of runway assessments.
- **DISCUSSION POINTS:**
 - Each airport establishes via their ACM and LOAs what their processes will be for assessing and reporting runway conditions.
 - The FAA does not advise any set time interval for runway assessments
 - This may have been a “growing pains” situation
- **RESOLUTION:** Airline discuss with airport what their SOP is for conducting runway assessments and reporting on runway conditions.



Conditions Not Monitored/Reported

- **CONCERN:** Does not address infrequently maintained airfields that do not have set operational hours
- **DISCUSSION POINTS:**
 - Airports can put their recurring schedule information in the 5010/ or AF/D
- **RESOLUTION:**
 - Stakeholder feedback will determine additional guidance needed to be added to AC



RCAM Versions

- **ISSUE:** Since there are two versions of the RCAM (Airport and Pilot) it is confusing.
- **RESOLUTION:** ARP and AFS will make sure they specify Airport or Pilot RCAM in publications
 - AFS: AC 91-79A



RCAM Contaminant Codes

- **COMMENTS:** Multiple comments that the RCAM is either too conservative, or not conservative enough.
- **DISCUSSION POINT:**
 - Comments provided are usually very general, lacking any specifics as to Airport, Time of Day, Weather, Runway Conditions, etc.
 - Without specific information, the FAA is unable to evaluate input related to accuracy of the RCAM
- **RESOLUTION:**
 - When providing comments on correctness of RCAM, share as many details as possible so we can evaluate RCAM accuracy
 - This is also why submitting relative pilot braking observations in a FICON is so important.



RwyCC Upgrades

- **COMMENT:** *Airport Field Condition Assessments and Winter Operations Safety AC* doesn't explain the rationale for RwyCC upgrades correctly.
- **RESPONSE:** The FAA believes that the information in the AC accurately describes the upgrade process.



Alaska-Specific Issues

- **ISSUE:** There are several issues that are specific to the state of Alaska.
- **RESOLUTION:** There is a separate working group working on Alaska-Specific Issues, which includes FSS and NATCA.



Training (Topics for Pilots)

- **COMMENTS:** Multiple reports of pilots being unfamiliar with TALPA and how it works.
- **DISCUSSION POINTS:**
 - How a carrier decides to apply TALPA should be part of their SOP
 - The RCAM doesn't restrict operations except for NIL
 - The RwyCC is a contaminant-driven value
 - If their manufacturer never provided performance data for their aircraft, then pilots/carriers can use generic factors
 - Pilots should give words (Braking Action Reports); get numbers (RwyCC)
 - TALPA is a decision support tool, not a decision making tool
- **RESOLUTION:**
 - AFS working with NBAA to provide a PowerPoint briefing on TALPA similar to "Climb via"



One-Direction Reporting

- **COMMENTS:** Several comments either in favor of or opposed to reporting only in one runway direction.
- **DISCUSSION POINTS:**
 - We intentionally restrict reporting to one runway end.
 - There may be a software way to restrict reporting to one runway end.
 - If necessary, a pilot should be able to reverse the codes until the airport is able to issue a revised NOTAM
- **RESOLUTION:**
 - Airports need to be aware that they should only issue a FICON for the runway direction in use. ATC will not reverse RwyCCs for opposite direction landings.
 - Pilots should be aware that they will be getting a NOTAM for only one runway direction, which can be reversed
 - Add information into AC 91-79, on applying LDA RwyCCs only.
 - NOTAM Manager to explore restricting reporting to one runway end



Wet Reporting

- **COMMENT:** Several comments that reporting of WET conditions should be required
- **DISCUSSION POINTS:**
 - There is a performance impact
 - ***Pilots don't know if the airport they are flying into reports Wet conditions, so don't know if they should expect a Wet or Dry runway***
- **RESOLUTIONS:**
 - FAA will continue to encourage all airports to report Wet via outreach.
 - Carriers can “encourage” the airports they fly into to report Wet conditions and make airports aware of the impact to their operations.
 - Investigate publishing a list of airports that Do/Do Not report Wet
 - Investigate “one button” to NOTAM the entire airport as Wet
 - Investigate ability to NOTAM Multiple runways as Wet instead of via individual NOTAMs.



Wet Reporting

- **REQUEST:** Provide the ability to report both “short-duration” wet runways and “long-duration” wet runways.
- **DISCUSSION POINT:**
 - In some locations, rainstorms are of short duration and dry quickly
 - Performance impact is the same
- **RESOLUTION:**
 - We are not going to distinguish short-duration Wet conditions from long-duration Wet.
 - Proposed NOTAM Manager solutions on previous slide would make it easier to report Wet conditions.



Slippery When Wet, then Wet

- **COMMENTS:** Several comments opposed to the current procedure for reporting runways that fail their friction test (Slippery When Wet) and then becomes Wet
- **DISCUSSION POINTS:**
 - Reporting of Slippery When Wet runway is already required in Part 139.339(c)(2)
 - If a NOTAM is not issued to report “Slippery When Wet” for failed friction test; some pilots will not know that a Slippery When Wet is a possibility
- **PROPOSED SOLUTION FOR AUDIENCE:**
 - When a runway fails a friction test, issue a NOTAM saying “Slippery When Wet” without a code
 - If it rains on a runway already NOTAMed as “Slippery When Wet”, when the airport issues a Wet NOTAM, NOTAM Manager would recognize the runway as already below the friction level, and issue a 3/3/3 instead of a 5/5/5



NIL Conditions

- **ISSUE:** Confusion over whether a NIL taxiway or apron should be closed
- **DISCUSSION POINTS:**
 - TALPA did not change this
 - NIL on a Taxiway or Ramp is unsafe, therefore should be closed, not reported as NIL
- **RESOLUTION:**
 - This will be clarified in the NOTAMs for Airport Operators AC and Airport Field Condition Assessments and Winter Operations Safety AC



NIL Conditions & Remainder

- **ISSUE:** There is confusion about whether remainder contaminants, especially ice, affect the RwyCC.
- **DISCUSSION POINTS:**
 - For reporting purposes, the remainder is not considered part of the primary portion or “majority” of the runway, but Must not present a hazardous situation because it is still available for use.
- **RESOLUTION:** NOTAM Manager Office will be asked to cover this topic with a demonstration on their monthly conference calls.



Less than or equal to 25% Contaminated

- **ISSUE:** It is confusing to some that in some conditions there is a code with a contaminant description, and other times just a contaminant description.
- **DISCUSSION POINTS:**
 - ARC felt that there was not a performance impact unless over 25% of the runway was contaminated
 - We have briefed that if you have a RwyCC, then an aircraft operator may have to take a performance penalty
 - Practical implementation may be too confusing
- **PROPOSAL FOR AUDIENCE:**
 - Should we have a RwyCC whenever reporting contaminants?



Less than or equal to 25% Contaminated

- **COMMENT:** It would be more accurate to have the RwyCC “trigger” be any third of the runway over 25%, not the entire runway over 25% contaminated.
- **DISCUSSION POINTS:**
 - With a revised “trigger”, a pilot would not be surprised by a third that seems worse than the RwyCC
 - Would require retraining
- **QUESTION FOR AUDIENCE:** Should the 25% rule apply to any third, not the entire runway?



NOTAM Manager

- **REQUESTS:** Several requests for changes to the NOTAM Manager user interface
- **DISCUSSION POINTS:**
 - Potential to add some checks and error messages to prevent mistakes and violations of RCAM operating rules
 - Several NOTAM system items are in the queue to be fixed
- **RESOLUTIONS:**
 - Will request that process issues be discussed and demonstrated during the monthly NOTAM Manager conference calls.
 - Will investigate added checks and error message where possible



Conclusion

- **Many improvements possible**
- **Must maintain our link to the science of airplane performance**
- **Use data as a basis for decisions**



Questions?

