

Canadian Implementation - Global Reporting Format / Takeoff and Landing Performance Assessment (GRF/TALPA)









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AIM

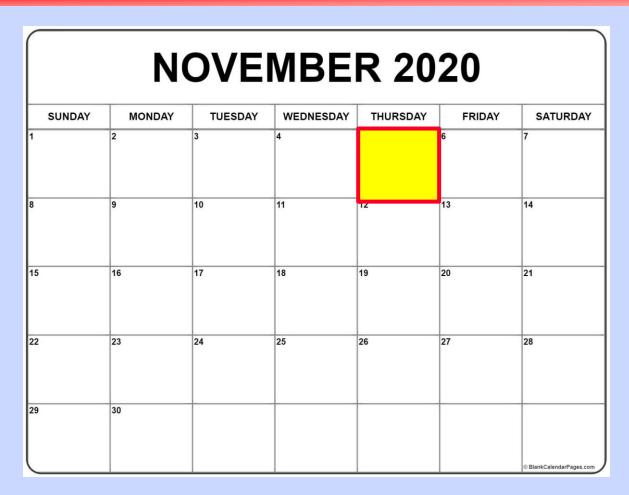
- To share the Transport Canada Civil Aviation (TCCA) perspective on the implementation of Global Reporting Format / Takeoff and Landing Performance Assessment (GRF/TALPA) for runway condition assessment and reporting.
- To discuss the steps that we've taken and the steps that we will be taking – as a regulator, to work with our stakeholders.
- To share the lessons learned... so far.







Background: International Context (ICAO/FAA)



Transport Canada and our stakeholders are striving to meet the ICAO implementation date for GRF.







Background: Canadian Context

CHALLENGES

- A single reporting system for Canada will need to address a wide variety of airports – from large international airports (CYYZ, CYUL, CYVR, etc.) to small airports with gravel runways.
- The system will need to address the needs of air operators that utilize TALPA-based performance information – as well as those that do not.
- Nav Canada software needs to be developed with suitable business rules.







STEPS TAKEN

- **Communications**
 - Meetings with industry stakeholders
 - Consultation on our guidance material
- **Guidance Material:**
 - Civil Aviation Safety Alerts
 - Advisory Circular
- Study

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 Correlated CRFI to RCAM RWYCCs – to allow airport operators to downgrade or upgrade RWYCCs

Robert Kostecka, Flight Standards







COMMUNICATION

- Meetings with the Major Airport Associations in Canada
- GRF/TALPA Working Group Meetings with representatives of:
 - Airports, and
 - Air Operators
- TCCA Discussions with stakeholders as we finalize the report format
- Summer Winter Integrated Field Technologies (SWIFT)
 Conference and Trade Shows



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SOFTWARE DEVELOLPMENT

We have an ongoing series of discussions with Nav Canada for their development of software which will work for:

- a wide variety of airports from large international airports (CYYZ, CYUL, CYVR, etc.) to small airports with gravel runways – and everything in-between.
- airplanes using TALPA performance information as well as those that do not

Robert Kostecka, Flight Standards







ADVISORY CIRCULAR

TCCA has developed an Advisory Circular (AC) 300-000-XX – Global Reporting Format for Runway Surface Condition Reporting.

- The purpose of this AC is to provide Canadian airport operators with the necessary information for the forthcoming implementation of GRF/TALPA.
- The draft AC was shared with stakeholders for their comments.
- This valuable feedback has been reviewed and we are currently making our the final revisions prior to publication – which is expected in the near future.



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ADVISORY CIRCULAR

- As we move forward with finalizing the AC, we have considered the United States' methodology of reporting runway surface conditions – and have looked at the lessons that they've learned.
- We have open and direct communication with FAA and Transport Aircraft Performance Planning (TAPP) Working Group.









- TCCA's intent is to meet the important safety goals and intent of the Global Reporting Format.
- We have also made some enhancements.







- One of the main enhancements is the ability to report two contaminants per runway third. The reporting of two contaminants:
 - allows pilots to more accurately determine the maximum allowable take-off weight - since the limiting contaminant is not the same for all airplanes; and
 - harmonizes the reporting in North America, since the US FICON also lists two contaminants.
- We will also continue to publish CRFI as tool for airport operators to upgrade or downgrade RWYCCs.





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OTHER GUIDANCE INFORMATION

TCCA published two *Civil Aviation Safety Alerts* (CASA) to let stakeholders know about the implementation of GRF/TALPA:

- 1. CASA 2016-06 United States Implementation of Takeoff and Landing Performance Assessment (TALPA)
- 2. CASA 2018-08 Operations with Aeroplanes Utilizing TALPA-Based Performance Information to Calculate Landing Distance



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CASA 2018-08

- TALPA-based performance information is already in use:
 - Large Transport category aircraft have been using this TALPA-based performance information for several years.
 - The transition to this TALPA-based performance information has required an adjustment.



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LESSONS LEARNED...

- The significant safety enhancements that are achieved by utilizing TALPA-based performance information also result in greater conservativism.
- The net result is that runway conditions that had, in the past, allowed operations – may not longer be acceptable to flight crews.



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RESPONSE TO FEEDBACK FROM AIR OPERATORS...

 As we move towards GRF/TALPA implementation, based on feedback from our air operators, we made some changes to the types of contamination that are reported – so that they would conform to the Runway Condition Assessment Matrix (RCAM).

LESSONS LEARNED...

 This, in turn, led us to a reconsideration of how "snow drifts" would be reported.



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Implementation: Next Steps



- NAV CANADA is updating their technology and software to meet the new TCCA requirements.
- A trial will be conducted at select airports during the winter of 2019/20 with concurrent reporting using both the existing SNOWiz software and the new Canadian GRF/TALPA software.
- Full implementation is anticipated by the target date of November 5, 2020.







Implementation: Next Steps

OTHER INITIATIVES

- Braking Availability Tester (BAT)
 - TCCA together with other partners is involved with the testing of the BAT
 - Objective is to expand friction measurement to include a number of runway surface conditions that previously couldn't be measured (e.g. slush and wet snow)



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