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AIRPORTS AUTHORITY

# SWIFT

SEPT 25-28 2023 WINNIPEG



## YOUR AIRPORT | YOUR CHALLENGE

AIRPORT SNOW REMOVAL DISCUSSION



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# YOUR AIRPORT | YOUR CHALLENGE

Share business ideas between airports managers, operators and all people that are involved in snow removal operations

Create and encourage people to share issues, innovations, and procedures on their snow removal operations and winter maintenance



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## HOW WOULD YOU DESCRIBE YOUR AIRPORT?

# POLL



# WEATHER FORECASTING

- Managing Bad Forecast – Holding them accountable.
- Do you have weather briefings with the forecaster?
- Do you have forecast scales to establish your event?
- Weather Radar in the Inspection Vehicles?
- TAF / METARS – NavCanada?
- Old Farmer's Almanac since 1792?

## HOW IS YOUR FORECASTING?

**POLL**



# SNOW EVENT MANAGEMENT

- When do you declare a snow event over?
- Do you have pre-event conference calls and who do you involve?
- Who is in charge during the event I.e. Command Center, Snow Desk, Boss from home or the Foreman on the field?  
Advantages / Disadvantages
- Do you know what the airlines expect from you during a snow event?  
Are you meeting their expectation? Have you ever asked?  
Are we over delivering?



# EQUIPMENT READINESS

- Is the equipment being inspected well in advance of the snow event?
- Do you have a process to make sure all equipment operational?
- What issues have you had with your snow removal equipment?
- Do you have the right equipment for your airport?
- What is your equipment minimum equipment list?
- Do you have a MOU or KPI's with your fleet team for service availability?

## WHICH BEST DESCRIBES YOUR KIT?

**POLL**



# EQUIPMENT QUESTIONS

- Do you need a 7500 ton per hour (tph) blower or does two 5000 (tph) suffice?
- What is your safe and efficient working speed on runways?
- How do you proceed for refueling during the snow or ice event?
- Equipment stored outside??? Or in a heated facility?
- Who adjusts the broom pattern when required?



# CASSETTES **VS** WAFERS

- Do you get the same amount of broom hours
- Is there anybody changing wafer cores on the floor instead of vertically mounting the core
- Has there been any accidents as a result of changing wafers
- Does cassettes do as good of a job as wafers
- Is it worth paying more for cassettes for employee safety
- Poly or Steel – does steel brooms impact inset lights
- Brush pattern and durability in hours





# RUNWAY INSPECTIONS

- Do you provide an AMSCR after every runway or every loop?
- Do you have ATC upset because of the frequency of AMSCR's being sent?
- Do you inspect the runway right behind the snow team or are random inspections completed?
- Do you have 1 or 2 people in the inspection vehicle (Incursion Prevention) Or who is doing the inspections during an event?
- Do you send in taxiway and apron condition reports? How frequently?



# RUNWAY INSPECTIONS

- Process of Runway inspection and report (snowtam)
- Is there concerns with TALPA and reporting in thirds
- Is there concerns with TALPA and reporting in thirds and observables without friction values



# RUNWAY SNOW REMOVAL

- How long does it take to clean a runway
  - Sweep, chemically treat if required, friction test and inspection
- What is your snow removal formation
- ( One pass or two)
- How fast does your teams go
- How many sweepers in your team
  - YOW uses 7-8 truck/sweepers to prevent burying runway lights (200 feet runway)
- Any positive collaboration with ATC; do they help you be efficient
- Always work with wind direction or not?
- Do you chemically treat behind the sweepers or not
- What are your criteria to apply chemical Potassium or Sodium



# RUNWAY SNOW REMOVAL

- What is your snow removal formation
- How long to alternate from a runway to another in a normal precipitation
- Training program
  - Is everyone training their equipment operators every year on the equipment they will be using that winter?
- Do you commit to having Runway Condition Codes (RCC) of 5/5/5 on runways 7500 ft. or less?
- Does your airline share what RCC they need to land at your airport.



# APRON SNOW REMOVAL

- Do you have snow equipment maintaining the gate areas or just big blades and loaders?
- Is the apron given as much priority as the runway
- Do you have KPI's for Apron snow removal?  
What are they?
- Do you have problems with airlines/ground handlers not moving GSE – What did you do to fix it?



# APRON SNOW REMOVAL

- Is your apron positively controlled - CRA
- Do you have issues with CATSA during a snow event with staff and equipment transitioning in and out of the Critical Restricted Area ?
- Do you have issues with CATSA during when pretreating the apron prior to a FZRN event i.e. in and out of the Critical Restricted Area?
- Does your airport melt or haul the snow; tell us your method? Any issues...



# CHEMICAL APPLICATIONS - FZRN EVENT

- Type of de-icing product in use at your airport?
- In what type of situation are you using potassium acetate?
- Does Potassium Acetate prevent compact snow?
- If you are using both potassium acetate and sodium formate during an event what is your criteria?  
Is there ever a situation when you would use both?
- Accumulation Amounts – Which forecasters provide FZRN accumulation amounts?
- Stockpiling Chemicals or closing runways to preserve?
- What is the size of the chemical inventory at your airport?



# BURYING RUNWAY LIGHTS & SIGNS

- How do you clean runway edge lights that are buried?  
Who is monitoring that?  
What can we do to make it stop?
- Do airports have competitions between the crews to prevent lights from being buried?
- Who is cleaning edge lights after event?  
Do equipment operators or electricians clean the lights?





# TP 312 COMPLIANCE

- Snow banks on runway / taxiway edge:  
Snow grooming profiles
- Buried consecutive runway lights  
Do you clean the lights or close your eyes?
- Is your inspector checking for consecutive buried lights, snow covered signs, notam closing surfaces that are not suitable for aircraft?  
Do you have teams cleaning directional and hold signs during a snow event?
- How do you manage windrows and/or snowbanks on the apron edge?  
How do you know you if you are in regulatory compliance?



# HUMAN BEHAVIOURS

- What process do you have to prevent accidents in whiteout conditions?
- **Is fatigue an issue at your airport?**  
What do you do to prevent it and do you have any structure in place to accommodate?
- Does your airport clean runways in time to prevent impacts during a heavy departure or arrival bank?
- How do you manage shift change during peak periods
- **March Madness** – no snow (motivating staff)
- **February Exhaustion** (Winter holidays)  
Is this permitted at your airport?



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**THANK YOU**  
FOR PARTICIPATING