



**FAA  
Great Lakes Region, Airports Division  
Safety Standards Branch**

## **Airport Certification Information Bulletin (ACIB) 2014-02**



### **Subject: Operational Winter Challenges**

This winter season we are seeing many instances where the rapid fluctuations in temperature have led to several incidents involving an aircraft excursion and/or pavement closures. In several cases, the closure of the entire airport was necessary to limit aircraft from operating on unsafe surfaces.

The circumstances of each event have varied however; the common thread has been a *rapid* change in conditions and condition indicators (temperature, precipitation, contaminants, etc.) The operational state of the airfield had gone from “good” or “acceptable” to “less than acceptable” or “unsafe”, within a very short period of time. These types of changes are difficult to stay ahead of without an airport’s constant vigilance and inspection oversight. While Pilot Braking Action Reports are important, airport operators cannot solely rely on the next pilot report as a means to monitor and assess conditions. This in many cases has proven to be ineffective in the prevention of accidents and incidents.

To best manage these challenges airports should:

- Increase focus and frequency of airfield monitoring procedures.
- Acquire reliable weather forecasts and utilize multiple forecasting sources for comparative analysis.
- Utilize pavement temperature sensing equipment (widely available in both portable and in-pavement forms)
- Maintain constant airfield vigilance and oversight. In particular when paved surfaces are other than dry and temperatures are hovering around the freezing point (regardless of whether active snow removal activities are taking place).
- Initiate proactive contaminant removal and assessment procedures.
- Conduct preventative treatment of pavement surfaces with approved products.
- Preemptively close runways and taxiways which are not being actively maintained. This includes those connector taxiways along the primary use runway.
- Ensure appropriate levels of staffing are maintained for those individuals tasked in the Snow and Ice Control Plan.

The absolute best practice to ensure a safe operating environment for any and all maintenance activities is to close the affected surface via NOTAM issuance. This practice is even more crucial at uncontrolled airports, due to the lack of the additional safety benefit provided by an ATCT.

14 CFR Part 139.339 requires the airport to provide for the collection and dissemination of airport condition information that may affect the safe operations of air carriers. Construction or maintenance activity (i.e., snow removal) on the movement area, safety area, or loading ramps and parking areas are a required reporting element. If the airport is not disseminating notification of snow removal activities via the local Airport Traffic Control Tower, a NOTAM must be issued advising of such maintenance operations. The following is an example of a NOTAM advising of maintenance activities:

*!ICT ICT AD ALL SURFACES WORK IN PROGRESS SNOW REMOVAL 1312070700-1312101500EST.*

The purpose of this notice is to heighten the pilot's awareness of the persons and equipment *actively* working on the airfield (a function typically accomplished by an ATC). At controlled airports, this type of NOTAM may also prove to be beneficial and serve as an additional safety layer.

Last but not certainly not least, is the challenge posed by the issue of low visibility and whiteout conditions. Given the potential for a severe accident, it is of the utmost importance to maintain visual contact with your surroundings during snow removal operations. An airport must establish clear procedures to follow if visibility suddenly drops to near zero or whiteout conditions exist while clearing operations are in progress. Established communication procedures are the key. Coordination of such procedures with the local ATCT (where applicable) will further assist airports in minimizing risk.