



**2008/2009
Airside Winter
Operations Program**



**AIRSIDE WINTER OPERATIONS PROGRAM (AER-002P)
DISTRIBUTION/REVISION LIST**

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Table of Contents

1 GENERAL INFORMATION.....1

 1.1 INTRODUCTION.....1

 1.2 REGULATIONS / STANDARDS.....1

 1.3 CONTACTS.....1

2 RESPONSIBILITIES.....1

 2.1 FIELD MAINTENANCE1

3 RESOURCES.....2

 3.1 EQUIPMENT2

 3.2 PERSONNEL2

 3.2.1 Schedules2

 3.3 ICE CONTROL AGENTS.....2

 3.4 SAND.....2

4 SNOW REMOVAL PROCEDURES.....3

 4.1 PRIORITIES.....3

 4.2 ALLOWABLE ACCUMULATIONS4

 4.3 RUNWAY4

 4.4 APRON.....5

 4.5 EDGE LIGHTS, GLIDE PATH AREAS & PRE-THRESHOLD AREAS5

 4.6 VISUAL AIDS5

 4.7 WINDROWS.....5

5 ICE CONTROL.....5

 5.1 CHEMICAL ICE CONTROL.....5

6 SURFACE CONDITION REPORTING.....6

 6.1 SURFACE CONDITION REPORTS6

 6.2 VISUAL INSPECTIONS.....6

7 COMMUNICATION6

1 GENERAL INFORMATION

1.1 Introduction

Airside Winter Operations at Villeneuve Airport maintain and monitor all runways, taxiways, aprons and airside roads to ensure safe and continuous operation of the airport during winter conditions. Operations include snow removal, ice control and surface condition reporting on all airside surfaces.

1.2 Regulations / Standards

The following standards and procedures were used, in conjunction with historic experience at Villeneuve Airport, in the development of these procedures:

TP312: Aerodrome Standards and Recommended Practices, Versions 3 and 4

TP659: Airports Winter Surface Maintenance Manual

1.3 Contacts

Title	Phone		Cell
Airport Manager (Steve Maybee)	780-477-1992	ext 227	780-887-9716
Superintendent of Airport Operations (Gary Lamb)	780-477-1992	ext 222	780-908-6894
Duty Manager Edmonton International Airport	780-890-8327		
Field Maintenance (Travis Jespersen)	780-458-4841		780-220-4121

2 RESPONSIBILITIES

2.1 Field Maintenance

Field Maintenance is responsible for ensuring the safe operation of airside activities during the winter season. This includes the regular monitoring and reporting of runway conditions, snow removal and ice control. The Airport Manager has responsibility for winter operations; however, the Field Maintenance personnel direct daily activities.

3 RESOURCES

3.1 Equipment

The use of all equipment by Edmonton Airports personnel must follow Standard Operating Procedures.

3.2 Personnel

The winter season runs from November 1 to March 31. The Airport personnel conduct daily runway and airfield checks during this time period. The Superintendent of Airport Operations is on duty during standard working hours. Airport personnel provide standby coverage during the months of October and April.

3.2.1 Schedules

Airport personnel are on site 0700 – 16:30 7 days per week to perform runway and airfield checks, If there is NO snow removal to be done they will go to City Centre Airport to assist with maintenance duties there.

3.3 Ice Control Agents

The chemical used for ice control on airside surfaces is urea. All de-icing chemicals in use have been approved by Transport Canada. **No salt** can be used on any airside surface since it is a potential hazard to aircraft.

3.4 Sand

To minimise damage to aircraft, all sand used by Edmonton Airports on airside meets the Transport Canada specifications outlined in *TP659, Appendix A*.

4 SNOW REMOVAL PROCEDURES

Snow removal will be done on an as required basis, depending on the type of snow, expected duration of the storm and snow accumulations. A standard for allowable accumulations for each area has been established.(see “snow accumulations below”). Accumulations under this standard will be removed after the storm. Accumulations over this standard may be removed, depending on the nature of the snow, expected duration, type of snow and wind drifting. The standards are as follows.

Standard	Accumulation
Runways, Taxiways and Apron	5 - 7 cm
Parking areas and roads	8 - 10 cm
25' behind Runway and Taxiway Lights	15 cm

4.1 Priorities

Priorities are determined to ensure the safe operation of the airport and meet Transport Canada's Airport Regulation requirements for operations at the airport.

Priority I: The following areas are cleared to maintain the operational capability of the airport:

- Active Runway (Generally Runway 08-26)
- Active Taxiways (Bravo)
- Main Apron

Priority II: Other operational areas on the airside are to be cleared after Priority I areas have been cleared and accumulations are within tolerable levels. This is to ensure that airport operations may switch to the alternate runway, should conditions warrant.

- Alternate Runway (Generally Runway 16-34)
- Secondary Taxiways (Alpha)

Priority III: The remainder of airside areas are to be cleared after the snowfall:

- Remaining Apron areas, as required;
- Remaining Airside Access Roads;
- Edge lights, VASIS and Runway End Identification lighting, as required;
- Pre-threshold areas, as required;
- Tenant Areas, as contracted.

Priorities may be altered, if conditions warrant, by the Superintendent of Airport Operations or Airfield Personnel. As mentioned, the Priority 1 runway is generally Runway (08-26); however, Runway 16-34, and associated taxiways, may be used if conditions such as prevailing winds warrant.

Snow is also removed from several service routes and areas used by Edmonton Airports staff, but not by the public.

4.2 Allowable Accumulations

Generally, snow removal on the active (Priority I) runway begins when snow depths reach 5 -7 cm. Clearing begins on the alternate (Priority II) runway when clearing of the Priority I areas is complete, regardless of snowfall. Priority III areas are cleared after the snowfall has ceased, unless immediate access is required (as determined by the Field Maintenance Personnel).

4.3 Runway

Whenever possible, runways are cleared to a bare and dry surface for their full width. The Priority II runway is cleared after the snowstorm, after all Priority I areas have been cleared. If at any time the cleared width falls below full width, Field Maintenance advises the Control Tower. If possible, clearing takes place in a manner that allows for the continuous operation of the runway during snow removal.

4.4 Apron

Snow is removed from the Apron area in a manner that reflects the amount of accumulation. If light snow conditions exist,

4.5 Edge Lights & Pre-Threshold Areas

These areas are cleared to Transport Canada standards to provide for safe winter operations at the airport.

4.6 Visual Aids

Snow is removed from these areas when it provides an obstacle to a correct approach slope reading. Removal is usually done during clean-up operations.

4.7 Windrows

Windrows may be permitted on manoeuvring areas to a maximum height of 30 cm. All efforts will be made to limit the time frame windrows will be on manoeuvring areas. Airfield Maintenance Personnel will advise the control tower when windrows are created on manoeuvring areas. Windrows may be permitted on airside roads, at the discretion of the Superintendent of Airport Operations or the Airfield Maintenance Personnel.

5 ICE CONTROL

It is preferable to control the formation of ice rather than try to remove ice that has already formed. To do this, careful monitoring of weather and runway conditions is required. Once ice has formed, it is vital that it is removed as quickly as possible.

5.1 Chemical Ice Control

The chemical used for runway ice control is urea. Once ice has already formed; urea is used to soften the ice so it can be easily removed by either plows or sweepers. The effectiveness of these chemicals depends on temperature and wind conditions. Their application is at the discretion of the Field Maintenance Personnel.

6 SURFACE CONDITION REPORTING

6.1 Surface Condition Reports

During the winter months, Surface Condition Reports are issued daily. Surface condition reports are filled out manually and a verbal report is given to NAV-CANADA(Villeneuve Tower) a copy is also maintained in the Airfield Maintenance office.

6.2 Visual Inspections

Visual inspections of the runway surface are done in conjunction with regular airfield inspections. Any abnormalities are reported to the Control Tower and rectified, if possible.

7 COMMUNICATION

The Field Maintenance Personnel co-ordinates the communication processes. They are responsible for the completion of Surface Condition Reports and for the co-ordination of snow removal and ice control activities. When snow removal is necessary, the Airfield Maintenance Personnel contacts the Control Tower to determine which runway is active, given the weather and wind conditions. In conjunction with the Control Tower, the Airfield Maintenance Personnel determines an appropriate action plan for snow removal/ice control, to ensure the safe, continuous operation of the airport during the winter season.