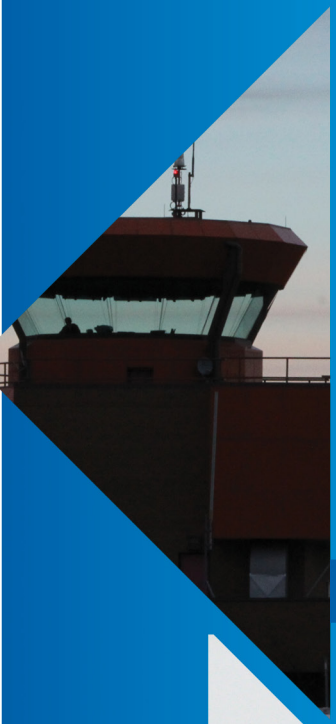
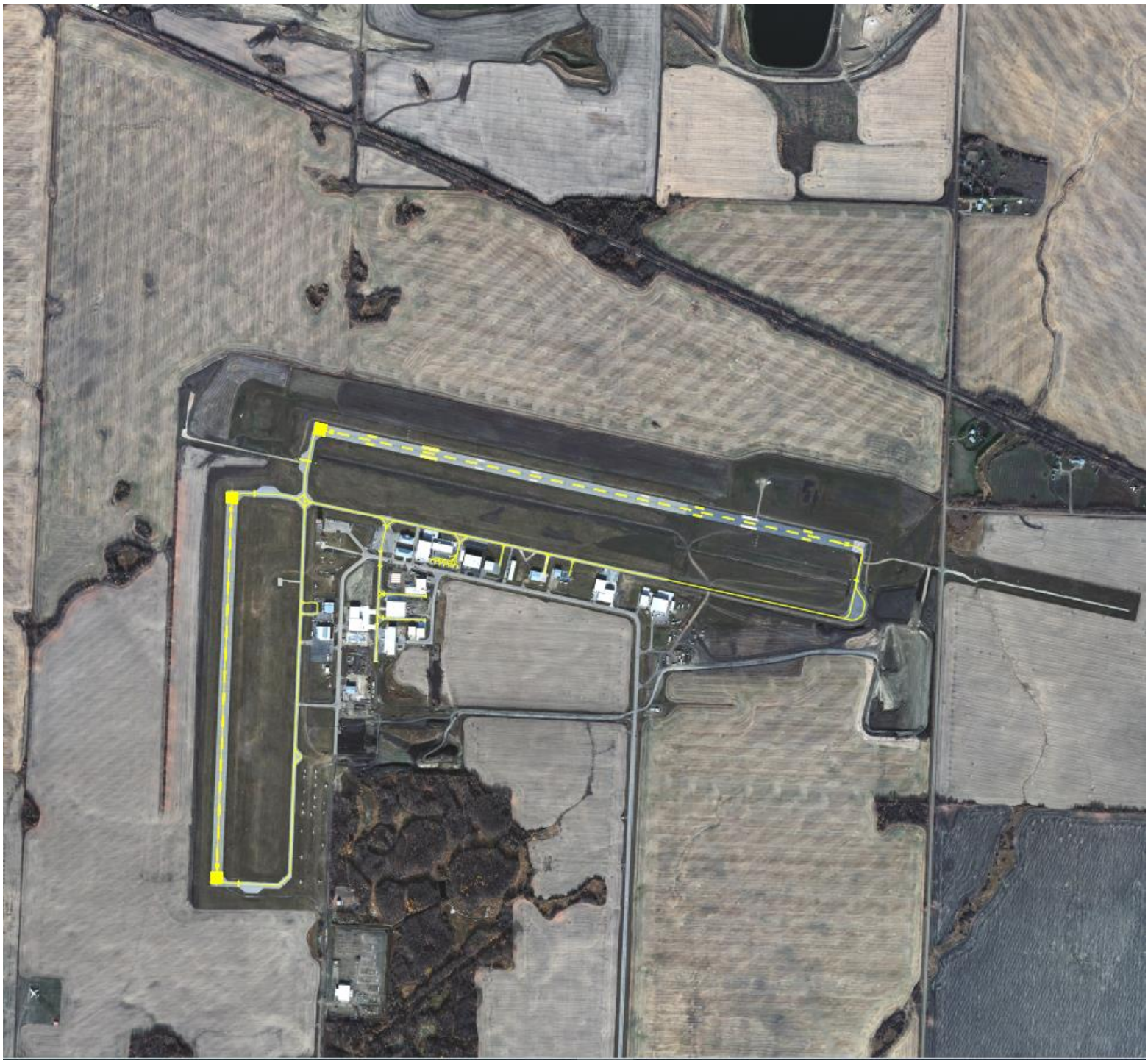


CZVL

Winter Operations Program

2021/2022

VILLENEUVE
AIRPORT



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

Distribution

Edmonton Airports	Vice President, Operations & Infrastructure	Steve Maybee
Edmonton Airports	Director, Aerodrome Operations & Compliance	Dean Ervin
Edmonton Airports	Manager, Airside Operations	Gary Lamb
Edmonton Airports	Superintendent, Regulatory Operations & Compliance	Dave Kuny
Edmonton Airports	ZVL – Supervisor	Rod Marshall
NAV CANADA	Villeneuve Control Tower	
Stakeholders	EIA Website: flyeia.com/winterops	

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.
- Transport Canada Advisory Circular AC 302-013: Airport Winter Maintenance and Planning.

1.3 Contacts

Title	Phone	Cell
Vice President, Operations & Infrastructure (Steve Maybee)	780-890-8597	780-887-9716
Director, Operations & Maintenance (Dean Ervin)	780-890-8479	780-934-6889
Manager, Airside Operations (Gary Lamb)	780-890-8586	780-908-6894
ZVL Supervisor (Rod Marshall)	780-458-4841	780-908-6892
Airport Operations Control Center (AOCC) Located at the Edmonton International Airport	**780-890-8327**	
Field Maintenance – Operator on site.	780-458-4841	780-994-1122
Superintendent, Regulatory Operations & Compliance (Dave Kuny)	780-890-8068	780-499-8789

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 Director Aerodrome Operations & Compliance has responsibility for winter operations; however, the Site Supervisor, 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 4th, 2020 to April 6th, 2021. The Airport personnel conduct daily runway and airfield checks during this time period. The Director, Aerodrome Operations & Compliance, Manager, Airside Operations and ZVL Site Supervisor are on duty during standard working hours. Airport personnel provide daily snow and ice control as well as standby coverage during the months of October and April.

3.2.1 Schedules

Airport personnel are on site 0600 – 18:00, 7 days per week to perform runway and airfield checks.

3.3 Ice Control Agents

The chemical used for ice control on airside surfaces is Potassium Acetate and Sodium Formate. 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.

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) Length 5001' Width 100'
- 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) Length 3496' Width 100'
- 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 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 ZVL Site Supervisor 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.

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 ZVL Site Supervisor 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 Potassium Acetate and Sodium Formate. Once ice has already formed; potassium acetate 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 Friction Testing

Friction testing Canadian Runway Friction Index (CRFI) is done on a runway, and the Canadian Runway Friction Index (CRFI) is included in the Surface Condition Report, if the runway surface has any patches of:

- ice;
- compacted snow;
- slush/ice combination;
- loose snow (less than 2.5 cm);
- chemical on ice.

Testing will be conducted between the hours of 06:00 – 18:00.

- For after hours testing call **780-994-1122.** There will be a 3 hour, plus mileage call out charge for after hour (CFRI) testing.
- **(Appendix B)**

Testing is not done if the runway surface is wet, with no indication of ice build-ups, or has loose snow exceeding 2.5 cm.
Airside Operations / Field Maintenance currently have a vehicle equipped with the Friction Testing technology.

6.2 Surface Condition Reports

During the winter months, Surface Condition Reports are issued daily via the TRACR NG-GRF System. If required a verbal report is given to the tower. A copy will be faxed to the Control Tower as well. An advisory of runway conditions is provided to the Control Tower after every runway check or change in runway conditions via TRACR NG-GRF.

6.3 Visual Inspections

Visual inspections of the runway surface are done in conjunction with regular airfield inspections on a daily basis. Any abnormalities are reported to the Control Tower and rectified, if possible.
(Appendix A).

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.

Appendix A

Daily Airfield Inspection Document

Villeneuve: Daily Airfield Inspection

Name (Print):	Signature:	Date:	Time:

RWY / Turnoffs

16/34	NTR (Nothing to Report)	OBSERVATION/LOCATION/ACTION TAKEN
PAVEMENT	☐	☐
LIGHTING	☐	☐
SIGNAGE	☐	☐
WILDLIFE	☐	☐
FOD	☐	☐

RWY / Turnoffs

08/26	NTR (Nothing to Report)	OBSERVATION/LOCATION/ACTION TAKEN
PAVEMENT	☐	☐
LIGHTING	☐	☐
SIGNAGE	☐	☐
WILDLIFE	☐	☐
FOD	☐	☐

TAXIWAY:

ALPHA	NTR (Nothing to Report)	OBSERVATION/LOCATION/ACTION TAKEN
PAVEMENT	☐	☐
LIGHTING	☐	☐
SIGNAGE	☐	☐
WILDLIFE	☐	☐
FOD	☐	☐

TAXIWAY:

BRAVO	NTR (Nothing to Report)	OBSERVATION/LOCATION/ACTION TAKEN
PAVEMENT	☐	☐
LIGHTING	☐	☐
SIGNAGE	☐	☐
WILDLIFE	☐	☐
FOD	☐	☐

APRON:

# 1	NTR (Nothing to Report)	APRON #	OBSERVATION/LOCATION/ACTION TAKEN
PAVEMENT	☐		☐
FOD	☐		☐

Primary Security Fence Line:

	NTR (Nothing to Report)	OBSERVATION/LOCATION/ACTION TAKEN
PSF	☐	☐
PSF Roadway	☐	☐

OTHER:_____.
_____.
_____.
_____.
_____.

Requirements:

- Inspections to be conducted start of each shift – Daily, No Exceptions (Airside Operations Staff).
- Major Airside issues are required to be reported to supervisor immediately upon discovery.
- Completed Form to be signed and submitted to EIA – Superintendent Airside Operations after each shift.
- Accuracy of DATA recorded will be verified.

Inspection Description / Requirements

PAVEMENT **RWY, TWY, Turnoffs, Apron, Roadways.**	• Inspect for any irregularities on all pavement structures: RWY, Turnoffs, TWY, Apron Areas and secondary pavement areas (**e.g**. delimitation, heaving, spalling, evident damage and paint marking issues). • **Record Observations / Action Taken**.
LIGHTING **RWY, TWY, Turnoffs, Aprons,**	• Inspect for light fixture damage or obstructions on all airfield substrates: RWY's, Turnoffs, TWY's and Apron Areas. (**e.g.** light out, missing, damaged, obstructed by snow or weeds). • Ensure light damage is reported **"only"**. Only qualified electricians are to repair. • **Record Observations / Action Taken**.
SIGNAGE	• Inspect for any damage or obstructions at all signage locations (**e.g.** light out, damaged, obstructed by snow or weeds). • **Record Observations / Action taken.**
WILDLIFE	• Inspect for any wildlife present (**e.g.** rabbits, birds and deer, other - description/location/time). • **Record Observation / Action Taken.**
FOD	• Inspect for any FOD present (**e.g.** FOD picked up – description/location/time recorded). • **Record Observations / Action Taken.**
Primary Security Fence Line	• Inspect Integrity of Primary Security Fence Line (**e.g.** Fence line, gates, barbed wire topping). • Record condition of PSF roadway. • **Record Observations / Action Taken.**
OTHER	• Record any other pertinent information or observation during Inspection (**e.g.** snow levels - ILS/Glides, grass length, weeds etc.) • **Record Observations / Actions Taken.**

Appendix B

Airfield Condition Report.

TRACR-NG GRF - Runway Condition Report

Airport Name: **Villeneuve Airport**
Airport Code: **CZVL**
Report #: **f1627243**
Operator: **Robb Allen (rallen)**
Date: **2021-09-21 12:27:49Z**

Condition Report

Surface	Summary	Submitted
08-26	Reported Width 100’ (Full) Contaminants: 100% DRY	2021-09-21 12:27:35Z
16-34	Reported Width 100’ (Full) Contaminants: 100% DRY	2021-09-21 12:27:00Z

Private and Confidential

Powered by Tradewind Scientific

NOTAM
CZVL

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(A2656/21 NOTAMR A2610/21
A) CZVL B) 2109211227 C) 2109221227
E) RSC 08/26 DRY. VALID SEP 21 1227 - SEP 21 2027.

RSC 16/34 DRY. VALID SEP 21 1227 - SEP 21 2027.

ADDN NON-GRF/TALPA INFO:
CRFI 08/26 NR.
CRFI 16/34 NR.)
```

Information available by NOTAM