



**AIRPORT SERVICES:
WINTER OPERATIONS PROGRAM
FOR OLDS / DIDSBURY REGIONAL
AIRPORT - CEA3 + SUNDRE
AIRPORT CFN7**



Winter Operations Manual

1. General Information

1.1 Periodic Review

The Airport Manager and Director – Airports KS2 Management Ltd (KS2) will review and amended accordingly the Winter Operations Manual as follows.

- Prior to November 1st of each year
- When implementing new processes or procedural changes
- Upon issuance of an Advisory Circular by Transport Canada in relation to Winter Operations
- After each incident, or near miss whereby snow removal was a contributing factor
- Upon request of Mountain View County
- Upon reasonable request by a key airport stakeholder

1.2 Introduction

This manual outlines KS2 response to snow and ice control at the Olds / Didsbury Airport (CEA3) to ensure safe aircraft operation during winter conditions.

Olds / Didsbury Airport is owned by Mountain View County.

1.3 Standards

KS2 Winter Operations Program have been designed around the following standards:

- CARs – Canadian Aviation Regulations
- TP 312 – Aerodrome Standards and Recommended Practices, 5th edition
- TP 659 – Airport Winter Surface Maintenance Manual
- Advisory Circular (AC 302-013): Airport Winter Maintenance and Planning
- Advisory Circular (AC 300-019): Global Reporting Format (GRF) for Runway Surface Condition Reporting
- Advisory Circular (AC 700-057): Global Reporting Format (GRF) for Runway Surface Conditions

1.4 Contacts

Name and Title	Phone	Cell
Mountain View County	403-335-3311	
Kent Milley – KS2L Director Airports	403-764-0969	403-829-8105
KS2L Airport Manager		825-994-4815

1.4 Definitions:

Aircraft: Any machine capable of deriving support in the atmosphere from the reactions of the air.

Airport: An aerodrome in respect of which a Canadian aviation document issued pursuant to the Aeronautics Act is in force

Apron: Areas of the airport, other than the manoeuvring area, where aircraft load and unload passengers / cargo, perform refueling, servicing, maintenance, and parking.

Apron Taxi Line: Lines to provide for the taxiing of aircraft on continuous marked routes through and around the apron.

Equipment: Any motor vehicle or mobile device, either self-propelled or towed, or of a specialized nature, used for runway and airfield maintenance or in the maintenance, repair, and servicing of aircraft, including test equipment and cargo and passenger-handling equipment.

Foreign Object Debris (FOD): Any foreign material in the manoeuvring area, such as mud, gravel, glass, nails, tacks, scraps of metal, garbage, paper, plastic, tools, or other materials that may cause damage to an aircraft or vehicle.

Hold Line: Two solid and two broken yellow lines across the width of a taxiway with the broken lines closest to the runway, behind which a vehicle or an aircraft must hold while awaiting permission to proceed.

Manoeuvring Area: The portion of an airport intended to be used for the takeoff, landing, and taxiing of aircraft, excluding aprons.

Off the runway: Indicates the vehicles and / or aircraft are at least 60 feet (18.3 meters) to the side of the nearest edge of the runway.

Restricted Area: An area of an airport restricted to people who have a need and right to be in that part of the airport.

Restricted Operator Certificate Aeronautical Qualification (ROC-A): A document issued by Industry Canada certifying that the holder may act as an operator on any aeronautical-land radio station fitted with radiotelephone equipment only, transmitting on fixed frequencies and not open to the public.

Runway: A rectangular area of the manoeuvring area used for aircraft takeoff and landing. It where aircraft land and takeoff of and are numbered to the direction they face based on a compass heading.

Taxiway: Part of the airport used for manoeuvring aircraft and Airport equipment between the apron and the runway. A taxiway includes the actual paved or gravel surface area plus an additional protected area of a specified distance on either side of the surface edge intended for aircraft wing-tip clearance. Taxiways are always referred to with the phonetic alphabet (ie A = Alpha, B = Bravo, C = Charlie...) "Taxiway Delta"

2.0 Responsibilities:

Airport Director: Has responsibility for the overall management of the snow removal and ice control program. Acts as the Chair of the Snow Committee supervises the equipment maintenance program and oversees the Airport Manager.

Airport Manager: Has responsibility for ensuring the safe operation of airside activities including the implementation of the Winter Operations Program. This includes the regular monitoring and reporting of runway conditions and performing snow removal and ice control. Operates a variety of equipment during periods of adverse weather.

3.0 Resources

3.1 Equipment:

The use of all equipment by KS2 must follow Standard Operating Procedures

3.2 Personnel:

The winter season runs from November 1 to March 31 Annually. The Airport Personnel conduct daily runway and airfield inspections during this time. Standby coverage is provided during the months of September and April.

3.3 Levels of Service:

The procedures outlined in this manual are in effect during the published winter maintenance operational hours, regardless of the existence of winter contaminants. Winter contaminants that occur outside of the published winter maintenance times will be addressed as reasonably practical the following day. Should conditions require immediate services outside of the published operating times it will require two hours prior notice. For emergencies, response times will be as soon as reasonably possible.

Published Winter Maintenance Hours: Airport personnel are available 0800 – 1600 Local Monday to Friday to perform runway and airfield inspections, snow removal, and ice control during the Winter Season.

After published winter maintenance hours KS2 can be contacted to perform ad-hoc services. The on-call duty individual can be contacted at 825-994-4815.

3.5 Ice Control Agents:

Ice control agents are presently not utilized at Olds / Didsbury or Sundre airport.

3.6 Weather Monitoring:

Current weather condition reports and forecasts are continuously monitored through various weather services to prepare for snow removal activities based on the information these provide. These sources include NAV Canada Aviation Weather, Environment Canada, Aerodrome Routine Meteorological Reports (METAR's) at neighboring airports, and third party provided services such as The Weather Network. Where there is contradictory information, erring on the side of caution will always occur such that the worst case will be assumed as the more probable.

Critical Information which will be monitored includes:

- Air temperatures
- Wind speed and gusts, particularly > 30 knots
- Crosswind speed and gusts > 15 knots perpendicular to the runway
- Rapid pavement temperature changes rising above 0 or dropping below 0

- Any forecasted snow, freezing precipitation or freezing rain

3.7 Snow Committee

Meets once annually in October and for ad-hoc meetings as special problems or circumstances arise. The snow committee reviews the following:

- Snow removal plan and procedures for the upcoming winter season
- Previous winter season operational issues
- Customer feedback on the level of service
- Communication procedures
- Published winter hours, and service level
- Any other issues or items of concern

Members of the Snow Committee shall include:

- MVC Aviation Advisory Committee
- Airport Director
- Mountain View County – Director, Legislative, Community and Agricultural Services or delegate

4.0 Snow Removal Procedures

4.1 Priorities

Priorities are established to ensure the continuous safe operation of the airport and meet Transport Canada's Airport Regulatory requirements for airport winter operations.

Olds / Didsbury Airport:

Priority 1 Area:

This is the primary airside system that is cleared during adverse weather to maintain the operational capability of the Olds / Didsbury Airport. Priority 1 Areas are to be maintained in such a condition that snow, slush, ice, standing water, and other contaminants are removed as rapidly as possible to minimize accumulation.

- 1) The full length (4,000 feet) of the primary runway 10/28
- 2) The full width (75 feet) of the primary runway 10/28

- 3) Primary Taxiways A, and B
- 4) Lights used as visual aids
- 5) Access roads - groundside, and airside, to accommodate the movement of emergency vehicles to the runway and taxiways.
- 6) Main Apron

Priority 2 Area:

Other operational areas on the airside are to be cleared after Priority 1 areas have been cleared and accumulations are within the tolerable levels. This is to ensure that critical airport operations can continue.

- 1) Inter-hanger taxiways
- 2) Inter-hanger access roads

Priority 3 Area:

The remainder of the airside areas are to be cleared after the winter event has concluded

- 1) Runway and taxiway shoulder areas
- 2) Groundside access roads
- 3) Apron shoulder areas
- 4) Remaining airside signage and lights
- 5) Runway 04/22

Sundre Airport:

Priority 1 Area:

This is the primary airside system that is cleared during adverse weather to maintain the operational capability of the Sundre Airport. Priority 1 Areas are to be maintained in such a condition that snow, slush, ice, standing water, and other contaminants are removed as rapidly as possible to minimize accumulation.

- 1) The full length (4,346 feet) of the primary runway 15/33
- 2) The full width (75 feet) of the primary runway 15/33
- 3) Primary Taxiways A, and B
- 4) Lights used as visual aids

- 5) Access roads - groundside, and airside, to accommodate the movement of emergency vehicles to the runway and taxiways.
- 6) Main Apron

Priority 2 Area:

Other operational areas on the airside are to be cleared after Priority 1 areas have been cleared and accumulations are within the tolerable levels. This is to ensure that critical airport operations can continue.

- 1) The full length (2,439 feet) and full width (75 feet) of the secondary runway 06/24
- 2) Inter-hanger taxiways
- 3) Inter-hanger access roads

Priority 3 Area:

The remainder of the airside areas are to be cleared after the winter event has concluded

- 1) Runway and taxiway shoulder areas
- 2) Groundside access roads
- 3) Apron shoulder areas
- 4) Remaining airside signage and lights

A standard for the maximum allowable accumulations before clearing is required, during published operational hours, for each area has been established as per below:

Area	Accumulation
Priority 1 Areas	2.0 cm
Priority 2 Areas	2.0 cm
Priority 3 Area	5.0 cm

The runway will always be cleared to a dry condition for the full length and width whenever possible.

When a winter event occurs outside of published operational hours, snow removal will occur within 6 hours of the event ending, except for any event ending between 00:00 and 05:00 whereby services will commence by 08:00.

Note: It is the Airport Managers discretion to determine whether snow removal will occur once the accumulation reaches its maximum value as it isn't always the best strategy (i.e., often when temperatures are rising and close to zero with precipitation in the forecast it may be best to leave the snow down on the pavement to act as a blanket).

Aircraft parked on Apron

Equipment will not perform snow removal and / or ice control within 10 feet of any aircraft. Operations will endeavor to remove windrows within this radius but cannot be guaranteed. Snow removal services may have to be requested and will only be performed under the pilot's direct observation and an additional charge out fee may apply.

Windrows:

During snow removal operations windrows may be permitted on manoeuvring areas and will be maintained to less than 30cm. Windrow heights should not exceed 5cm in height across manoeuvring areas during active operations, due to the danger to aircraft wheel/brake freezing on impact.

Hanger Entrances:

The snow will be cleared to the edge / property line of the taxiway in front of each individual hanger lot.

4.2 Communication Procedures

All vehicles operating airside will monitor and operate on 123.2 MHz while on maneuvering areas and will broadcast their maintenance intentions (location, activities, duration)

4.3 Aircraft Manoeuvring Area Closure and Opening

The Airport has an established system of priorities to enable uninterrupted aircraft movements on the runway. Pilots will determine if the runway and other surfaces on the manoeuvring area are acceptable for their operation and their operating procedures.

However, should conditions deteriorate to such an extent that the Airport Manager believes it is in the best interest to close the runway and / or taxiway they shall make such decision. A NOTAM describing the closure must be issued. Once the Airport Manager determines that surfaces may be returned to service a NOTAM will be issued cancelling the closure notification.