Regina Airport Authority
Airport Traffic Directives (ATDs)

September 2020

Version 2.0

Page Left Blank Intentionally

Contents

DEFINITIONS **6**

RECORD OF AMENDMENTS/REVIEWS **9**

INTRODUCTION TO AIRPORT TRAFFIC DIRECTIVES **10**

1. AIRSIDE VEHICLE OPERATOR'S PERMIT PROGRAM **12**

1.1. Introduction to AVOP Program 12
1.2. Administration 12
1.3. AVOP Terms and Conditions of Issue 12
1.4. Driver Responsibilities 13
1.5. Employer Responsibilities 13
1.6. AVOP Permit Types 14
1.7. Application Process 15
1.8. AVOP Exam and Driving Tests 15
1.8.1. Study Material 15
1.8.2. Written Test 15
1.8.3. Practical Driving Test 15
1.8.4. Retesting Timelines 16
1.9. AVOP Renewal 16

2. VEHICLE REQUIREMENTS **17**

2.1. Vehicle Safety 17
2.2. Vehicle and Equipment Safety Requirements 17
2.2.1. Warning Beacons 17
2.2.2. Headlights (front running lights) and Taillights (rear lights) 17
2.2.3. Reflective Striping 17
2.2.4. Examples of Safety Equipment 17

3. AIRSIDE SAFETY AND PRACTICES **18**

3.1. Introduction 18
3.2. Accident, Incident, and Hazard Reporting 18
3.3. Handheld Devices 18
3.4. Smoking 18
3.5. Seat Belts 18
3.6. High-Visibility Safety Vests 19
3.7. Foreign Object Debris (FOD) 19
3.8. Snow Removal Operations 19
3.9. Emergency Response Operations 19

3.10. Escorting Vehicles 20
3.11. Safely Operating Vehicles in the Vicinity of Aircraft 20
3.11.1. Parked Aircraft 20
3.11.2. Aircraft Taxiing or being Towed 21
4. APRON I RULES & DIRECTIVES 22
4.1. Maximum Speed 22
4.2. Vehicle Corridors 22
4.3. Right of Way 22
4.4. Passenger Loading Bridges (PLBs) 23
4.5. Towed Carts 23
4.6. Tire Chains 23
4.7. Lightning Hazard Conditions 23
4.8. Apron Markings 24
4.9. Critical Restricted Area (CRA) / Non-Passenger Screening-Vehicles (NPSV) 25
4.10. Apron Edge Lighting 26
4.10.1. Blue Lights 26
4.10.2. Amber Lights 26
5. ENFORCEMENT, INFRACTIONS AND APPEALS 27
5.1. Enforcement and Infractions 27
5.2. Demerit Point System 27
5.2.1. Minor Infraction 27
5.2.1. Major Infraction 28
5.3. Appeals 29
6. "D" PERMIT 30
6.1. Vehicle Control on Manoeuvring Area (ATS Controlled Areas) 30
6.1.1. Manoeuvring Areas 30
6.1.2. Taxiways 31
6.1.3. Runways 32
6.1.4. Service Roads 32
6.2. Radio Communication Process 33
6.2.1. Radio Communication Tips 33
6.2.2. Radio Test Procedures 33
6.2.3 34
6.2.4. Call-up Procedure 34
6.2.5. Mandatory Read Back Instructions 34
6.2.6. Entering the Manoeuvring Area 34
6.2.7. Holding Short of Runways and Taxiways 35

6.2.8. Exiting the Runway 35
6.2.9. Review of Operations in the Manoeuvring Area 35
6.3. Standard Phraseology 36
6.4. Radio Communication Examples 38
6.5. Vehicle Radio Failure 40
6.5.1. Radio Failure 40
6.5.2. Vehicle Failure 40
6.5.3. Failure of Both Vehicle and Radio 40
6.6. Runway/Taxiway Paint Markings 41
6.7. Manoeuvring Area Signs 42
6.8. Manoeuvring Surfaces Edge Lighting 44
6.8.1. White Lights 44
6.8.2. Blue Lights 45
6.8.3. Red and Green Lights (Runway Threshold) 46
6.8.4. Runway Guard Lights 47
6.9. Aerodrome Beacon 47
6.10. Electronic Interference 47
6.11. Driving in Grassed Areas 48
6.12. Incursions 48
6.13. Hot Spot 49
6.14. Reduced Visibility Operations (RVOP) 49

Appendix A – AVOP Application

Appendix B – Reduced Visibility Operations Plan (RVOP)

Definitions

Term	Definition
Air Traffic Control (ATC)	A service provided by ground-based controllers who direct traffic, i.e., aircraft and ground-based equipment, on the ground and in the air.
Air Traffic Services (ATS)	Includes Air Traffic Control (ATC) and the Flight Service Station (FSS).
Airside	That area of an airport intended to be used for activities related to aircraft operations, including the movement area of an Aerodrome, adjacent terrain and buildings or portions thereof, and to which public access is normally restricted.
Anti-Collision Light	A warning light on an aircraft, indicating that an aircraft engine is running or is about to start.
Apron	That part of an aerodrome, other than the manoeuvring area, intended to accommodate the loading and unloading of passengers and cargo, the fueling, servicing, maintenance, and parking of aircraft, and any movement of aircraft, vehicles, and pedestrians to allow execution of those functions.
Apron Safety Lines	Lines that define the areas intended for use by ground vehicles and other aircraft servicing equipment, to provide safe separation from aircraft.
Emergency Response Services (ERS)	The title applied to the services provided by professional firefighters at an airport to respond to events such as, but not limited to, aircraft accidents/incidents.
Flight Service Station (FSS)	A Nav Canada operated facility from which aeronautical information and related aviation support services are provided to aircraft, including airport and vehicle advisory services for designated controlled and uncontrolled airports.
Foreign Object Debris (FOD)	Any debris, (tools, equipment, aircraft parts, ice chunks, corrosive salt, sand, earth, stones, etc.) around an aircraft operating surface that may cause damage to an aircraft either by being ingested into an aircraft engine, or other means causing damage or injury.
Groundside	That area of an airport not intended to be used for activities related to aircraft operations and to which the public normally has unrestricted access.
Runway Guard Lights	A light system intended to caution pilots or vehicle drivers that they are about to enter an active runway.

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 cross or proceed.
Holding Short	Indicates a vehicle is at least 67.5 metres (225 feet) to the side of the nearest edge of the runway in use.
Light Signal	A light used by the Air Traffic Control tower to control airport traffic when there is no radio communication.
Mandatory Read Back	A requirement that drivers repeat, also known as "reading back," the directions given by ATS when the instruction is to hold or hold short of any surface, of if there is a change in the direction previously given.
Manoeuvring Area	The part of an aerodrome intended to be used for the takeoff and landing of aircraft and the movement of aircraft associated with takeoff or landing, excluding aprons.
Marshaller	The person directing the control of an aircraft on an apron.
Movement Area	The part of an aerodrome intended to be used for the surface movement of aircraft, including manoeuvring areas and aprons.
Nav Canada	Owner and operator of Canada's civil air navigation service (ANS), as well as the sole controller of all movements on operational airside manoeuvring areas (runways and taxiways) at the Regina International Airport.
Regina Ground	The operating position in the Air Traffic Control tower that provides clearances and instructions for the ground movement of airport traffic. The radio frequency is 121.9.
Regina Radio	The operating position in the Flight Service Station that provides authorization and instructions for the movement of airport traffic during those hours when the Air Traffic Control tower is closed. The radio frequency is 121.9.
Restricted Area	An area where commercial air-carrier operations take place. Anyone who enters must have security clearance or be screened. A valid RAIC must also be displayed on outer clothing at all times when in a Restricted Area.
Restricted Area Identity Card (RAIC)	A permanent pass that incorporates unique human characteristics, such as fingerprints and iris patterns, and leading-edge technology to accurately identify individuals accessing Restricted Areas at the airport.

Restricted Operator Certificate with Aeronautical Qualification	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. (ROC-A)
Runway	The portion of the manoeuvring area used for aircraft takeoff and landing.
Runway Incursion	Any occurrence at an airport involving the unauthorized or unplanned presence of an aircraft, vehicle, or person on the protected area of a surface designated for aircraft takeoff or landing.
Security Checkpoints	Defined reporting points through which access is gained to the airport Restricted Area from other airside surfaces, from groundside, or from public areas.
Security Operations Centre (SOC)	A single contact location for all airport operational concerns 24 hours a day via telephone. The SOC phone number is (306) 761-7550.
Taxiway	The part of an aerodrome used for manoeuvring aircraft and airport equipment transiting between the apron and the runway. A taxiway is considered to be the actual paved surface plus an additional protected area of a specified distance on either side of the surface edge, intended for aircraft wing-tip clearance.
Threshold	The beginning of the portion of the runway that is usable for landing.
Uncontrolled Area	An area on the airside that does not require permission from ATS to enter (aprons and service roads).

Record of Amendments/Reviews

The following table records the history of the successive amendments and/or annual review of the present document.

	AMD Date	Review Date	Section/Element	Page(s)	Entered / Reviewed by (Initials)
		Sept 2020	Rewrite	All	CK, JN, ES

Introduction to Airport Traffic Directives

The Regina Airport Authority (RAA) has issued the Airport Traffic Directives (ATDs) manual as a reference source to combine all applicable regulations, rules, policies, and procedures related to safe vehicle operation and pedestrian activity on the airside. These requirements along with various administrative processes, form the RAA's Airside Vehicle Operators Permit (AVOP) Program. A copy of this manual can be obtained on the Tenant section of the Vortex Portal or YQR's website.

This manual is the study guide to be used to prepare for the written and practical exams to obtain an AVOP "D/A" or "D" permit and should be used as a reference tool during the life of an employee's AVOP certification. RAA reserves the right to develop, amend, and enforce the AVOP program which may include the requirement of additional testing and training as deemed necessary.

In the case of a conflict between the information contained in these directives and applicable regulatory requirements, the regulatory requirements shall supersede.

"Driving airside at the Regina International Airport is a privilege that brings with it much responsibility. I encourage you to embrace this privilege through diligent study of this manual followed by conscientious application of what you learn. Always remember, the safety of the travelling public, airport employees, and yourself is directly linked to adherence to the standards, guidelines, and spirit of safety set forth in our Airport Traffic Directives."

Earl Spencer

VP Operations and Safety

Regina Airport Authority

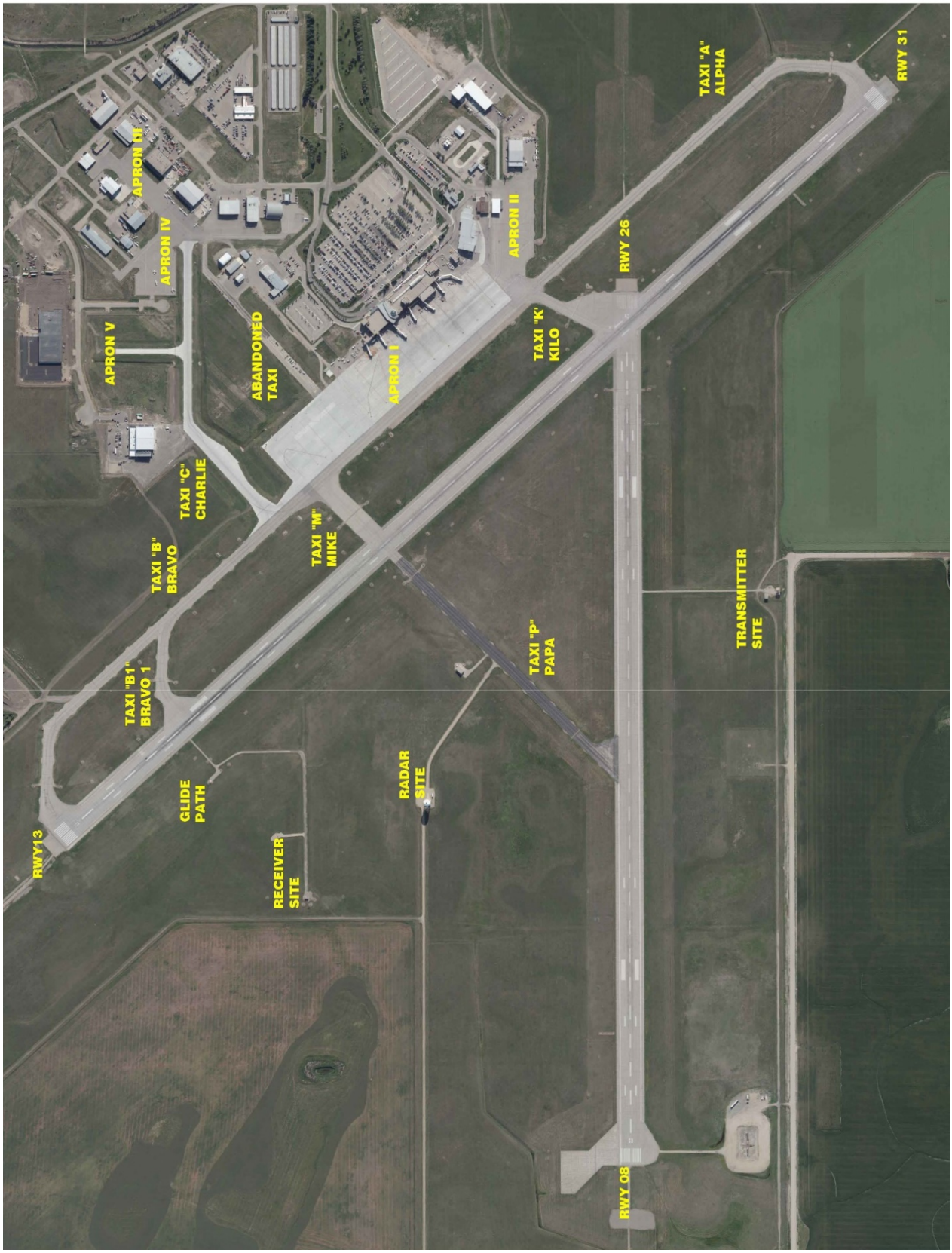


FIGURE 1: YQR SITE MAP

1. AIRSIDE VEHICLE OPERATOR'S PERMIT PROGRAM

1.1. Introduction to AVOP Program

The Airside Vehicle Operators Permit (AVOP) program is an essential component of airside safety. It establishes the standards that everyone operating a vehicle airside must follow. The RAA determines an applicant's need to drive airside by assessing the applicant's job-related duties and the frequency of required airside access.

1.2. Administration

The AVOP program is administered by the RAA Emergency Response Services (ERS). Inquires or requests for information may be submitted directly to:

AVOP Administrator
RAA Emergency Response Services
2990 Firehall Road
Regina, SK S4W 1A7
(306)761-7576
AVOP@yqr.ca

1.3. AVOP Terms and Conditions of Issue

All holders of an AVOP are required to abide by the following terms and conditions of issue:

- Comply with all rules and regulations of the ATDs;
- Possess a valid Restricted Area Identity Card (RAIC);
- Possess a valid provincial driver's license of appropriate level for the vehicles intended to be operated;
- Operate vehicles only in the areas designated by the AVOP type and the need while performing duties;
- Drivers shall ensure they are trained, licenced, and qualified to operate the vehicles they use airside;
- Drivers are responsible for the safety, maintenance condition, and regulatory compliance of the vehicles they operate airside. Drivers shall immediately report any vehicle malfunction or safety concern to their supervisor;
- AVOPs are the property of the RAA;
- AVOP holders must immediately report all accidents and spills on Airport property to the SOC at (306)761-7550 and their immediate supervisor.

1.4. Driver Responsibilities

To support safe, secure, and efficient operations, drivers must demonstrate to the RAA a clear need and right to obtain and retain an AVOP.

Any suspensions, limitations, or special requirements applied by an issuer of a provincial licence shall be deemed to also apply to a driver's AVOP. It is the driver's duty to disclose such conditions to their employer and the RAA immediately.

Drivers must visibly display their RAIC when working within the Critical Restricted Area (CRA) and carry their driver's licence and RAIC at all times for presentation while driving airside.

1.5. Employer Responsibilities

For the purposes of the AVOP program, employers are defined as airport tenants, RAA contractors, support services companies, and government agencies employing personnel for the delivery of services airside at the Regina International Airport. Where personnel are required to drive airside for job-related duties, it is the employer's responsibility to:

- Provide information about the AVOP program to employees including access to current versions of:
  - RAA Airport Traffic Directives;
  - RAA Apron Management Plan;
  - Applicable RAA Operations Circulars and Information Notices https://cirrus.myyqr.ca/nextcloud/login?;
  - NavCanada's Ground Traffic Phraseology publication (AVOP "D" applicants) http://www.navcanada.ca/EN/media/Publications/Ground%20Traffic%20Phraseology.PDF.
  - Industry Canada's study guide for the Restricted Operator Certificate with Aeronautical Qualification (ROC-A) (AVOP "D" applicants) http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf01397.html. Regina local contact (306)780-5008.
- Ensure employees are trained to operate vehicles safely and to meet all applicable airside rules, regulations and standards as contained in the most current version of the Airport Traffic Directives; *and*
- Ensure that all employees with an AVOP comply with provincial driver's license requirements for vehicles they will be operating.

1.6. AVOP Permit Types

An AVOP is a licence issued by the RAA. It provides the holder authorization to operate a vehicle on the airside of the airport.

There are two (2) types of AVOP issued by the RAA which are indicated on the drivers RAIC:

- **"D/A" AVOP:** This permit allows the holder to operate a vehicle on Apron I and Taxiway Charlie; see map below for designated "D/A" area.

Note: Any vehicle operating on Taxiway Charlie between Apron I and Apron III (red hatched area shown on map below) shall have a radio and monitor ground frequency (121.9 MHz). This will ensure the operator is aware of any active aircraft traffic.

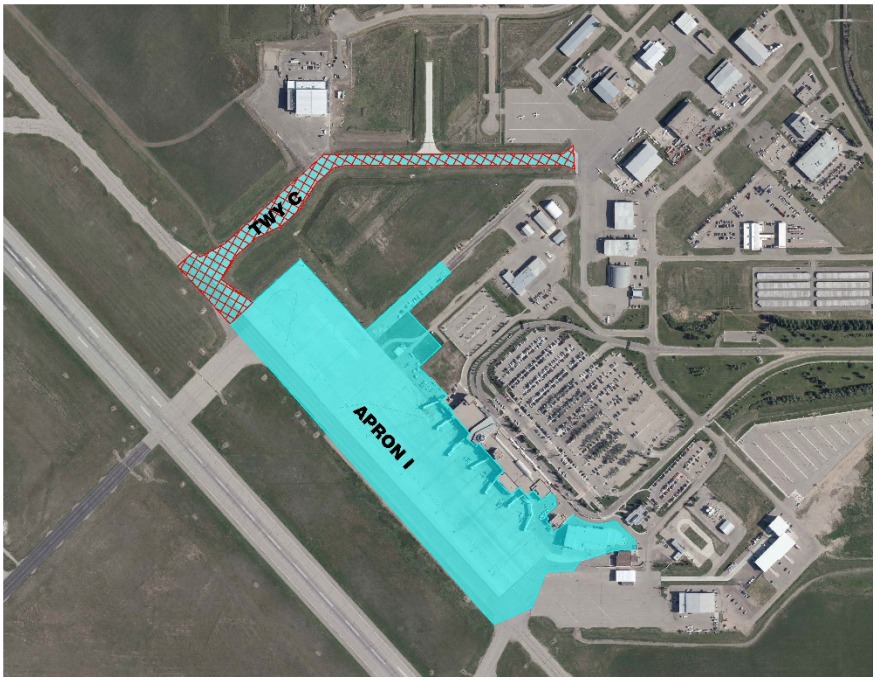


FIGURE 2: D/A AUTHORIZED OPERATING AREA MAP

- **"D" AVOP:** This permit authorizes the holder to operate a vehicle in all Movement Area. A Restricted Operators Certificate with Aeronautical Qualification (ROC-A) is required for this permit.

1.7. Application Process

The following process is to be followed when applying for an AVOP:

1. Applicant can obtain an AVOP application from YQR's website, RAA Vortex Portal https://cirrus.myyqr.ca/nextcloud/login or pick up a paper copy at the RAA Pass Office. Both the applicant and employer portions must be completed, see Appendix A;
2. Completed applications can be emailed to AVOP@yqr.ca or dropped off at the RAA Pass Office;
3. The applicant or employer is required to contact ERS at (306)761-7553 or email AVOP@YQR.ca to arrange for AVOP testing at the Fire Hall; *and*
4. Applicant must present on the day of AVOP testing, their driver's licence, RAIC or Temporary Pass, and Restricted Operator Certificate with Aeronautical Qualification (ROC-A) for "D" applicants.

1.8. AVOP Exam and Driving Tests

1.8.1. Study Material

- "D/A" AVOP applicants must review all sections of this manual except Section 6.
- "D" AVOP applicants must review all sections of this manual.

1.8.2. Written Test

Persons applying for a "D" or "D/A" AVOP must pass a written exam. During the exam, applicants are not permitted any aids or documents to assist. Exam questions are based on the material in this manual. Applicants must receive a score of 80% to pass. The test administrator will review the test with the applicant immediately after completion.

1.8.3. Practical Driving Test

Persons applying for a "D" or "D/A" AVOP must pass a practical driving test upon successful completion of the written exam. The driving test shall be completed within one (1) month of passing the written exam otherwise the written exam must be retaken. All practical driving tests are conducted using an RAA vehicle.

"D/A" Permit Driving Test

Conducted during daytime hours and applicants will be expected to demonstrate safe and proficient operation of a vehicle in designated areas.

"D" Permit Driving Tests

This permit requires passing two separate driving tests, one (1) daytime and one (1) nighttime to demonstrate the safe and proficient operation of a vehicle.

1.8.4. Retesting Timelines

- 1st attempt: waiting period of two (2) calendar days;
- 2nd attempt: waiting period of seven (7) calendar days
    - Required written confirmation from the applicant's employer that the employee has been spent adequate time in training and preparation for 2nd attempt.

If an applicant is unsuccessful in two (2) attempts, they will be required to meet with the RAA AVOP Administrator to determine if any further opportunity to obtain an AVOP will be considered.

1.9. AVOP Renewal

An AVOP expires on the same date as the holder's RAIC pass expires at which time the AVOP holder must retake and pass the "D" or "D/A" written exam. An AVOP holder should allow sufficient time prior to AVOP expiry to complete the above.

2. VEHICLE REQUIREMENTS

2.1. Vehicle Safety

Drivers should inspect the vehicle they intend on operating to determine that it is in good condition, safe to operate, has the required safety equipment and markings, and is free of materials that could become Foreign Object Debris (FOD) before driving the vehicle airside.

2.2. Vehicle and Equipment Safety Requirements

2.2.1. Warning Beacons

All vehicles driven in the Movement Area must have a rotating, flashing, or strobe-type beacon mounted on top and visible from 360 degrees. Beacons must comply with Transport Canada Aerodrome Standards and Recommended Practices TP312 4th Edition section 6.3.2.

In the event while driving airside a vehicle's beacon stops working, the driver must activate the vehicle's four-way flashers/hazard lights.

Note: The only vehicles allowed to operate airside without a beacon are those under escort in which case they must operate four-way flashers/hazard lights.

2.2.2. Headlights (front running lights) and Taillights (rear lights)

At night and during periods of reduced visibility, vehicle headlights shall be turned on while the vehicle is running and in use in the Movement Area.

2.2.3. Reflective Striping

All non-self-propelled towed equipment requires a strip of reflective material along the full length of the equipment and on the front and back ends at the lower corners.

2.2.4. Examples of Safety Equipment

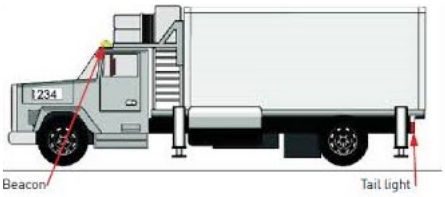


FIGURE 3: CABBED (SELF-PROPELLED) VEHICLES

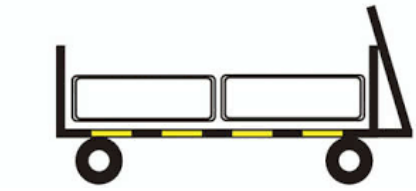


FIGURE 4: NON- SELF-PROPELLED EQUIPMENT

3. AIRSIDE SAFETY AND PRACTICES

3.1. Introduction

Aviation Safety is our collective responsibility and remains our highest priority in all airside activities. No person shall operate a vehicle on an airside surface in a manner dangerous to aircraft, equipment, pedestrians, or vehicles. At no time do operational considerations such as time pressures allow drivers to disobey any of the directives described in this manual.

3.2. Accident, Incident, and Hazard Reporting

It is expected that AVOP holders shall:

- Immediately remove or rectify any unsafe condition wherever possible; *and*
- Immediately report all accidents, incidents, hazards, and unsafe acts or conditions to the SOC at (306)761-7550.

General proactive safety concerns can be reported to the SOC at (306)761-7550 or via the "Submit a Safety Concern" web form on the RAA Vortex Portal https://yqr.vortexcms.com/safety-concern .

When reporting incidents or safety concerns, it is essential to provide as much information as possible and whenever possible include photos.

3.3. Handheld Devices

Drivers shall exercise caution and focus on the task of driving. The use of hands-free communication equipment is recommended where practical.

No person shall drive a vehicle airside while holding or using a handheld wireless communication device with the exception of company radios in the performance of one's duties. Stopping the vehicle in a safe area is the recommended practice when taking a call or communicating on two-way radios.

Dialing or texting is prohibited while the vehicle is in motion. The use of personal electronic equipment or entertainment devices while operating a vehicle airside is also strictly prohibited.

3.4. Smoking

Smoking is strictly prohibited on Apron 1, Apron 2 and within the manoeuvring area.

3.5. Seat Belts

Drivers and passengers must wear seat belts while vehicles and equipment are in motion provided that seat belts were installed by the manufacturer.

3.6. High-Visibility Safety Vests

The use of high visibility vests or clothing is mandatory for all personnel working airside. High visibility garments (safety vest or other clothing) must at minimum conform to the latest Class 2 version of one of the following standards: CSA Z96 or ANSI/ISEA 107 or EN 471.

Regardless of the standard selected above, the background colour of these garments shall be fluorescent (either red, orange/red or yellow/green) and the garment must cover the full torso of the wearer.

3.7. Foreign Object Debris (FOD)

All AVOP holders must actively participate in the airport FOD control program. This program involves:

- Being aware of FOD and the damage it can cause;
- Keeping a FOD free work area;
- Identifying potential FOD risks and reporting hazards to the SOC at (306)761-7550;
- Picking up any FOD found airside and placing the FOD in waste receptacles;
- Ensure all equipment loads are secured;
- Checking vehicles and equipment to ensure there are no loose components that may become dislodged. This may include rocks, gravel and other material that may be in vehicle tire treads; *and*
- When FOD is encountered on runways and taxiways, drivers shall advise ATS of the FOD type and location and ask for permission to stop and remove.

3.8. Snow Removal Operations

Drivers operating near snow removal equipment during winter operations shall reduce their speed and proceed with caution. All drivers shall yield and give way to snow removal equipment.

3.9. Emergency Response Operations

Drivers shall yield and give way to emergency vehicles and personnel responding to an emergency. All personnel involved in or witness to an accident or incident that requires an ERS response must remain at the scene and refrain from moving vehicles or altering the scene. All parties involved at an incident scene shall comply with the direction of ERS.

3.10. Escorting Vehicles

Drivers without an AVOP that are required to operate a vehicle on Apron I or on the manoeuvring area may do so under the escort of a driver with a valid AVOP.

Persons allowing another vehicle(s) airside will be considered as having the other vehicle(s) under escort and shall accept full responsibility for their activity.

The driver providing the escort shall ensure the following:

- Verify the drivers under escort hold a valid provincial driver's licence;
- Ensure all vehicles under escort have either a warning beacon or headlights and four-way flashers/hazard lights on;
- Remain in a position to control escorted vehicle(s) at all times;
- Ensure all gates are closed behind any escorted vehicles;
- Ensure that no more than five (5) vehicles are being escorted at any one time; *and*
- If escorting vehicles within the critical restricted area, ensure all personnel under escort have a valid RAIC or are issued a temporary visitor pass.

3.11. Safely Operating Vehicles in the Vicinity of Aircraft

3.11.1. Parked Aircraft

Drivers shall:

- When operating around parked aircraft in general, drivers should endeavour to remain as far from the aircraft as practicable;
- Remain outside apron safety markings while an aircraft stand is occupied unless servicing the aircraft;
- Not operate a vehicle within 15 metres (50 feet) of an aircraft being fueled except for the purpose of servicing that aircraft;
- Not pass behind parked aircraft with anti-collision lights on while driving in the vehicle corridor. Operating anti-collision lights indicates the aircraft engines are running or about to start. In the event a marshaller signals permission to proceed, the onus remains on the driver to ensure that it is safe to do so; *and*
- Ensure when an aircraft has powered onto a gate that the aircraft engines are off before driving behind the aircraft.

3.11.2. Aircraft Taxiing or being Towed

Drivers shall:

- Always maintain a minimum of 15m (50') distance between the vehicle being operated and an aircraft that has its engines running. Increase this minimum distance up to 2 aircraft lengths as engine thrust is increased. This is due to dangerous air thrusts that are created by operating propellers and jet engines which can create hazardous wind conditions or flying debris referred to as "jet blast" or "prop wash". Keep safe and stay clear.
- Not cause an aircraft under power or under tow, to deviate from their planned course or to adjust the aircraft or tow speed to perform an evasive manoeuvre.

4. APRON I RULES & DIRECTIVES

4.1. Maximum Speed

The maximum airside speed is 70 km/h on runways and taxiways with the exception of RAA maintenance staff taking runway friction readings during winter operations or other required maintenance functions. The maximum apron speed is 25 km/h.

4.2. Vehicle Corridors

Vehicle corridors are designated roadways intended for use by all vehicles and should be used in transiting Apron I. Drivers are required to drive in vehicle corridors at all times except in the performance of the following duties:

- Servicing an aircraft;
- Performing maintenance using maintenance equipment; *and*
- Responding to an emergency with vehicle emergency flashing lights activated.

Drivers must drive in the right-hand lane and may not pass slower-moving vehicles in the vehicle corridor. Vehicles already in a designated vehicle corridor have the right of way over all other vehicles attempting to enter.

If a vehicle lane is obscured for any reason such as faded paint or snow cover, drivers should follow the designated roadway as closely as possible.

Vehicle corridors are not guaranteed safe routes due to potential encroachment of parked or manoeuvring aircraft, vehicles, or equipment. Caution should be exercised at all times.

4.3. Right of Way

Every vehicle operating on an apron shall yield right of way based on the following order of priority:

1. Aircraft (including aircraft tows and pushbacks)
2. Vehicles towing or pushing back aircraft
3. Emergency Vehicles with warning devices operating
4. Snow removal and maintenance equipment in the performance of their duties
5. Aircraft refueling vehicles
6. Pedestrians

4.4. Passenger Loading Bridges (PLBs)

Operators may drive a vehicle under a PLB provided:

- There is sufficient clearance;
- The bridge is not in motion; *and*
- The vehicle being operated does not exceed 2.3 m (7.5 ft.) in height, which includes any onboard equipment or cargo.

Parking under PLBs is prohibited.

Note: Damages caused to a PLB shall be the responsibility of the driver/employer.

4.5. Towed Carts

The maximum allowable number of carts that can be towed by a vehicle on movement areas is six (6). It is recommended that no more than three (3) units be towed by a vehicle in adverse weather conditions such as slippery surfaces or low visibility. A maximum number of four (4) carts in tow are allowed in the Air Terminal Building (ATB) baggage make-up and drop-off halls (see the Apron Management Plan).

Drivers are responsible for ensuring that all towed units are securely attached to the towing vehicle or another towed unit and that all necessary safety devices such as safety chains and locking clamps are used.

4.6. Tire Chains

Tire chains are not permitted on any vehicle being operated on airside. During abnormally slippery conditions, the RAA may grant permission to use tire chains on aircraft tug vehicles when moving aircraft. Such permission will be limited both to time and to specific operators.

4.7. Lightning Hazard Conditions

When lighting is detected in the airport's vicinity, red strobe lights on the ATB, Fire Hall, and Multi-Tenant Facility Airside buildings may be activated. Drivers shall exercise caution while performing duties on movement areas and follow their company's established lightning hazard protocol. See RAA Apron Management Plan for further details on apron operations during lightning hazard conditions.

4.8. Apron Markings

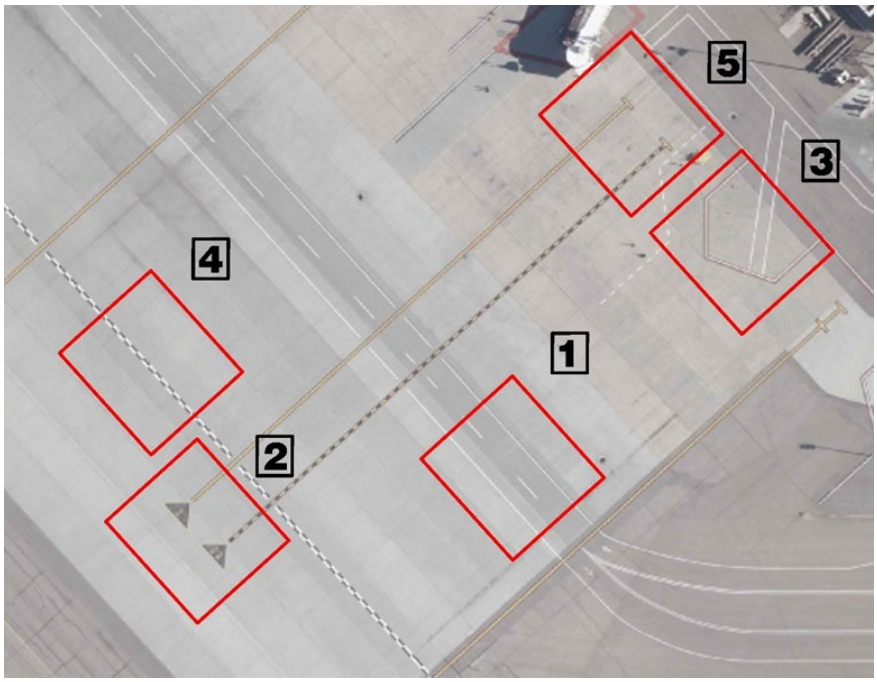


FIGURE 5: APRON PAINT MARKINGS

1. Vehicle Corridors

Vehicle Corridors are denoted by two parallel solid white lines with a dashed centreline in the middle to separate traffic traveling in opposite directions.

2. Aircraft Lead-in Lines

Lines guiding the flight crew into the gate stop position. The lines also provide a means for the servicing crews to monitor the arriving and departing aircraft's path to and from the stop position.

3. Apron Safety Lines

Apron Safety Lines consist of parallel lines (one red, the other white) to demarcate the limits of where equipment can safely be staged when aircraft are moving on and off an aircraft stand. Vehicles and equipment should be on the white side of the line. It is prohibited to park a vehicle or equipment on the red side of this line when an aircraft is arriving or departing an aircraft stand.

4. Zipper Line

Markings that consist of two dashed lines side by side with alternating dashes used to mark the border between Apron I and the uncontrolled apron taxiway that runs parallel to Apron I. Also represents the border of the Critical Restricted Area.

5. Aircraft Stand

An area on an airport apron designated for parking aircraft for the purpose of loading/unloading passengers and cargo along with providing for ground services.

4.9. Critical Restricted Area (CRA) / Non-Passenger Screening-Vehicles (NPSV)

The CRA on Apron I is the area designated and protected for commercial aircraft operations.

Prior to accessing the CRA, all vehicles and personnel must report to the NPSV checkpoint located on Apron II for inspection. All persons must present a valid RAIC or document of entitlement and submit themselves and their vehicle to a security inspection. Any person caught bypassing NPSV or refusing to comply with security staff instructions may have their access rights suspended.

Persons not displaying a valid RAIC while in the CRA should be considered unauthorized and reported to the SOC at (306) 761-7550 immediately.

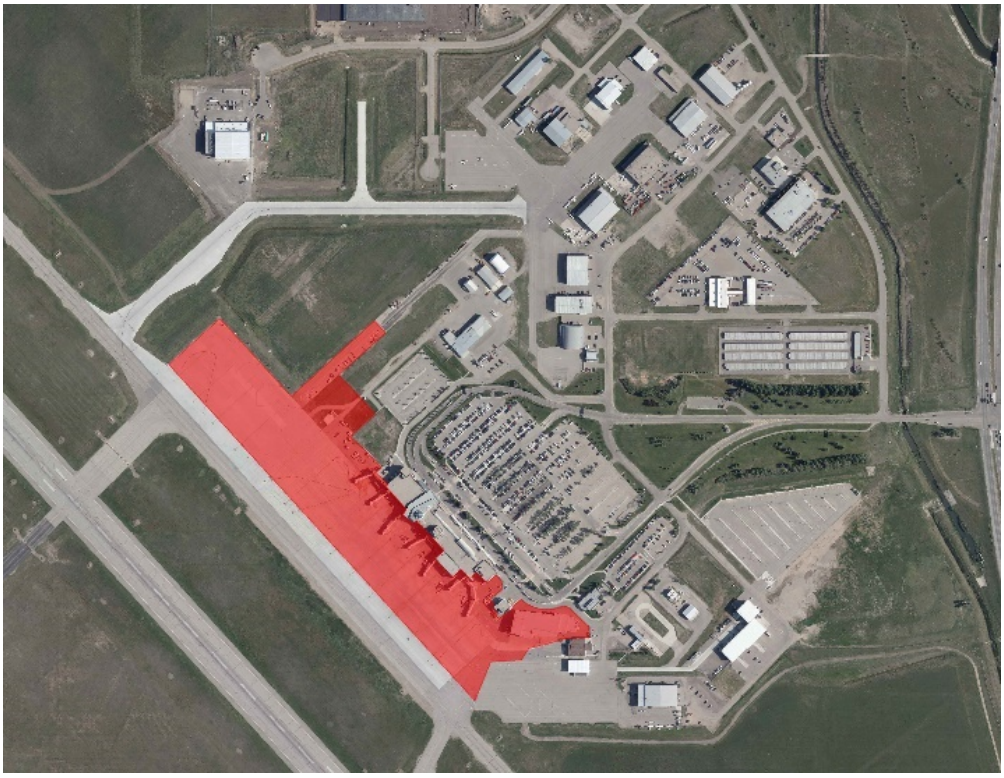


FIGURE 6: CRITICAL RESTRICTED AREA MAP

4.10. Apron Edge Lighting

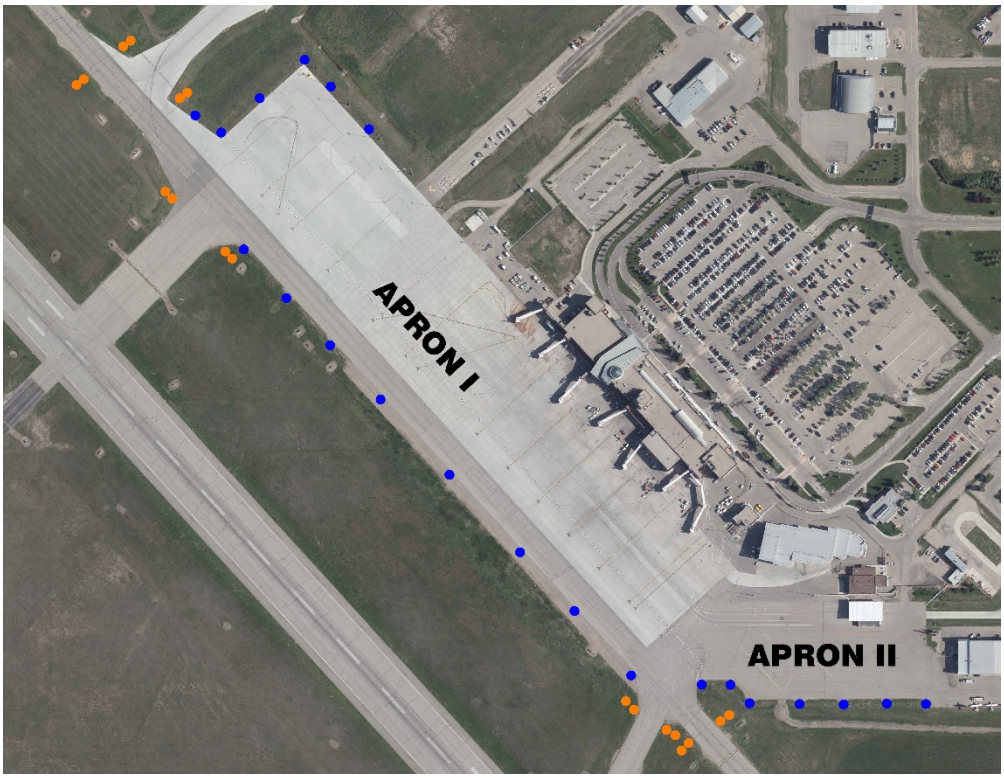


FIGURE 7: APRON EDGE AND INTERSECTION LIGHT MAP

4.10.1. Blue Lights

Blue lights are used along the edge of aprons.

4.10.2. Amber Lights

Double amber lights are used to indicate the intersection of aprons and taxiways.

5. ENFORCEMENT, INFRACTIONS AND APPEALS

5.1. Enforcement and Infractions

Any failure to comply with the ATDs contained in this manual may result in enforcement action being taken by the RAA. In such cases, the RAA will issue an AVOP Notice of Infraction to the AVOP holder and their employer by written letter or email outlining the nature of the infraction. RAA Fire Fighters are the primary enforcement officers however Regina Airport Security (RAS) staff have been granted the ability to take immediate enforcement action(s) in consultation with the RAA Fire Hall.

Reports of AVOP infractions will be reviewed by the VP, Operations & Safety who has the authority to immediately suspend AVOP privileges of those operators who fail to follow the rules. All suspensions are kept on file and if the violations continue your AVOP and your Restricted Area Identification Card may be cancelled permanently.

5.2. Demerit Point System

Drivers incur demerit points for each infraction and points are assigned against the drivers AVOP. Multiple infractions arising from the same incident will result in multiple points on record.

The Airside Vehicle Operator's Permit (AVOP) Program Demerit Point System has four stages based on total points accumulated on the driver's AVOP record.

Stage 1: 0-5 points — no penalty.

Stage 2: 6-8 points — immediate 2 day AVOP suspension.

Stage 3: 9-11 points — immediate 5 day AVOP suspension.

Stage 4: 12 points or more — immediate 10-day suspension. Pending an investigation, suspension duration may be increased.

5.2.1. Minor Infraction

Minor Infractions—On record 12 months from the date of issue.	Points
Failure to comply with general RAA Airport Traffic Directives	2
Failure to comply with vehicle safety equipment and markers	2
Driving with unsecured loads	2
Driving under a moveable bridge in motion	2
Towing an excessive amount of carts/dollies	2

Minor Infractions—On record 12 months from the date of issue.	Points
Improper use of terminal service roads	2
Driving behind aircraft with engines running	3
Failure to obey signs and barriers	3
Failure to use vehicle corridor	3
Failure to obey a stop sign/signal	3
Failure to yield to vehicular traffic	3
Unsafe reversing of vehicle	3
Unsafe movement of vehicle	3
Improper parking of vehicle/equipment	3
Driving outside the vehicle corridor while aircraft is on pushback	3
Improper passing	3
Failure to wear seat belt	3
Failure to wear safety vest	3
Depositing, creating, or failure to retrieve FOD	3
Exceeding speed limits	3
Operating an unsafe vehicle	3

5.2.1. Major Infraction

Major Infractions—On record 24 months from the date of issue.	Points
Interfering with an emergency in progress (e.g. fuel spills)	6
Failure to maintain proper escort (vehicle or aircraft)	6
Failure to remain at, or altering, an accident/incident scene	6
Improper driving for conditions	6
Unsafe operation of vehicle	6
Improper parking of vehicle/equipment causing damage	6
Driving within 15m (50ft) of an aircraft unless servicing the aircraft	6
Failure to yield to aircraft under power or being towed	6
Failure to yield right-of-way to aircraft/marshalling crew	9

Major Infractions—On record 24 months from the date of issue.	Points
Failure to yield right-of-way to apron maintenance vehicles	9
Failure to comply with Enforcement Officers	9
Failure to yield right-of-way to responding emergency vehicles	9
Driving or parking under an aircraft not being serviced	9
Driving between aircraft and marshaller	9
Driving between deplaning/enplaning passengers and their gate/aircraft	9
Distracted/careless driving	9
Taxiway Incursion	9
Smoking on Apron I or II	10
Driving with an expired/suspended provincial driver's licence	10
Dangerous driving	10
Driving airside under the influence of drugs/alcohol	10
Driving on the Movement Area without proper permit (no AVOP)	10
Runway Incursion	10

5.3. Appeals

Violations may be appealed within ten (10) business days of the offence date. A written letter of appeal or email (AVOP@yqr.ca) must be sent to the RAA AVOP Administrator that includes all pertinent details of the appealed violation and justification as to why the appeal should be considered.

The VP Operations and Safety will render a decision and advise both the employer and employee in writing. The decision of the RAA shall be considered final.

6. "D" PERMIT

6.1. Vehicle Control on Manoeuvring Area (ATS Controlled Areas)

6.1.1. Manoeuvring Areas

Vehicle traffic airside within the manoeuvring area of the Regina International Airport is controlled by Air Traffic Services (ATS). ATS consists of Air Traffic Control (call sign "Regina Ground") and Flight Service Station (call sign "Regina Radio"). Air Traffic Control provides ATS every day from 06:00 to 22:00 and the Fight Service Station provides ATS every day from 22:01 to 05:59.

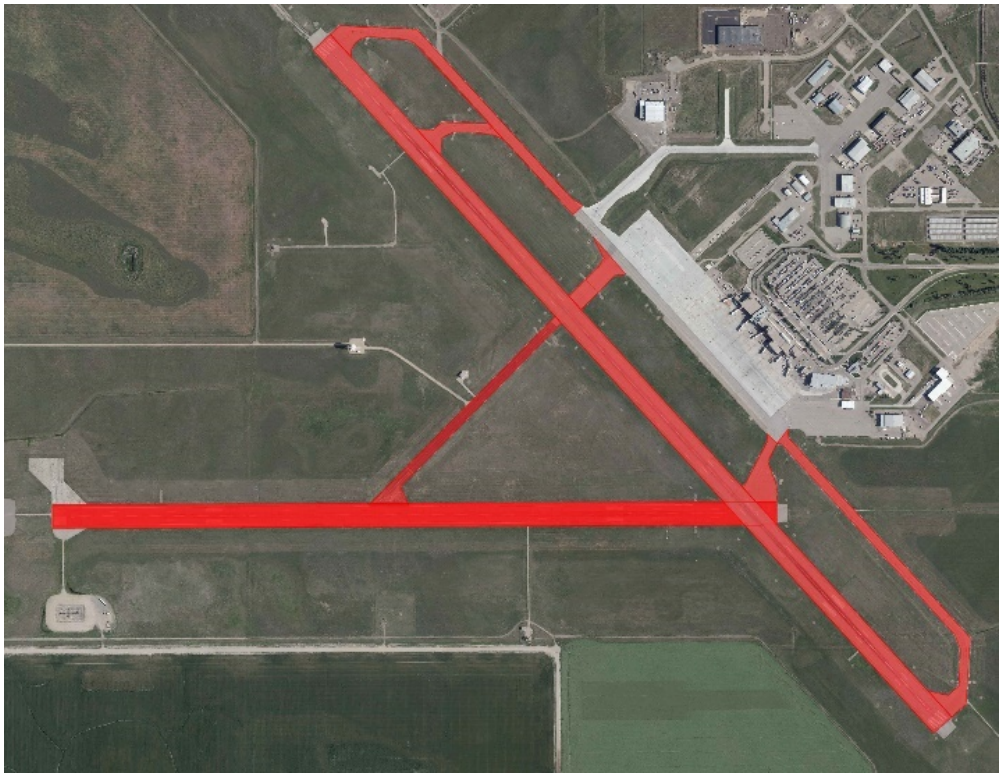


FIGURE 8: ATS CONTROLLED AREAS

6.1.2. Taxiways

A taxiway is the part of the manoeuvring area used for taxiing of aircraft between an apron and a runway. See below for list of taxiways.

- Alpha
- Bravo
- Bravo 1
- Charlie (uncontrolled)
- Kilo
- Mike
- Papa

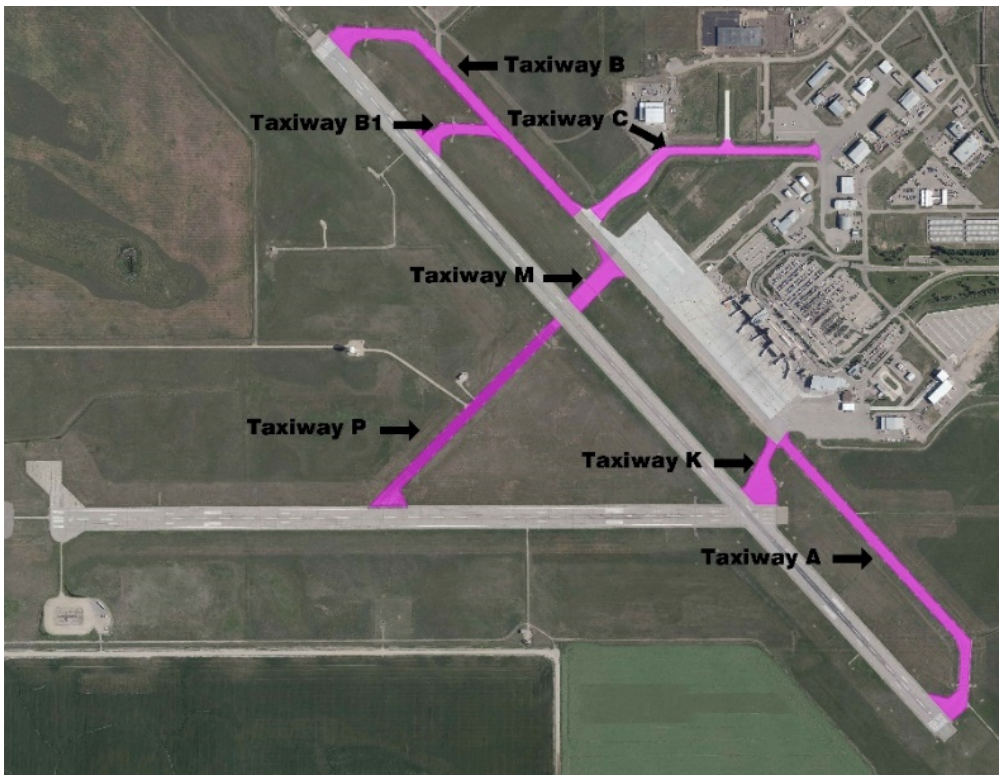


FIGURE 9: TAXIWAY MAP

6.1.3. Runways

A runway is the part of the manoeuvring area used for aircraft takeoff and landing.

- 13-31 (primary)
- 08-26 (secondary/cross wind)

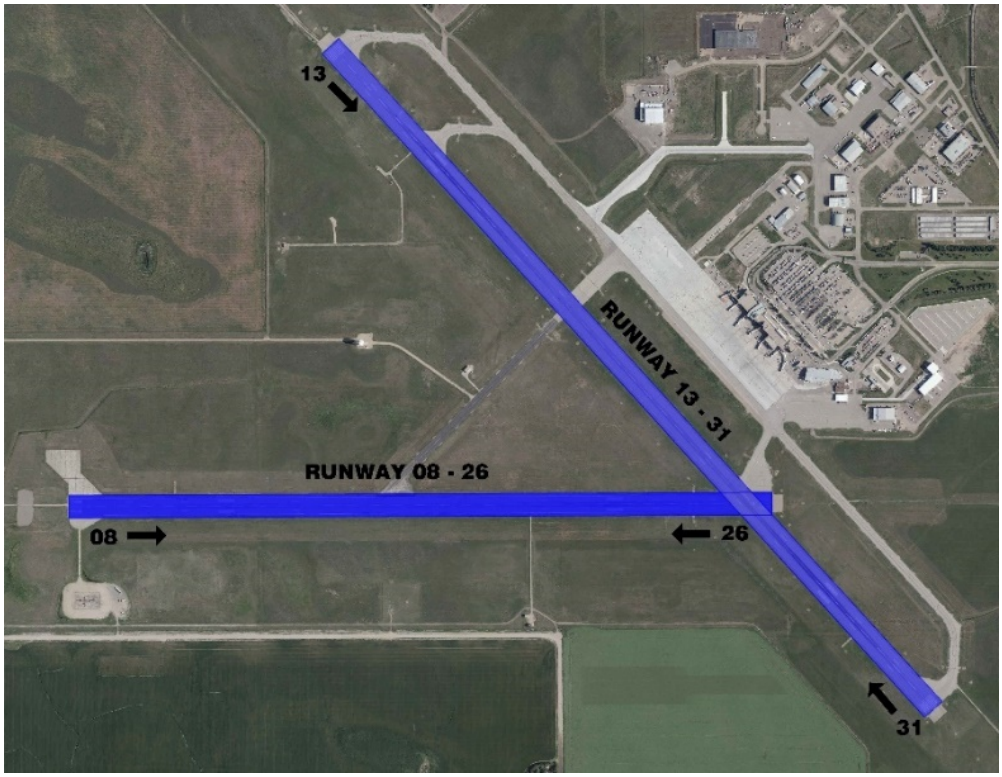


FIGURE 10: RUNWAY MAP

6.1.4. Service Roads

A service road is a roadway intended for the use of vehicles entering or transiting between aircraft movement areas. Drivers shall use service and perimeter roads to reach field locations when these roads are available and time permits. If operating on an unpaved service road, ensure that the vehicle is free of FOD (i.e. mud) before entering paved movement areas.

6.2. Radio Communication Process

When operating a vehicle in the manoeuvring area, radio communication with ATS on frequency 121.9 MHz must be maintained at all times.

6.2.1. Radio Communication Tips

When communicating by radio:

- Listen first to ensure that you will not interrupt another transmission, then depress the "press to talk" (PTT) switch before beginning to speak, and keep it depressed for the entire transmission;
- Avoid clicking on and off. When the transmission is finished, release the PTT switch immediately;
- Hold the microphone approximately 6.5 cm (2–3 in.) in front of the mouth;
- Speak plainly and distinctly to prevent running consecutive words together. Do not shout, accentuate syllables artificially, or speak too rapidly; *and*
- Use standard procedure words and phrases and standard airport terminology. (Refer to Industry Canada's study guide for the Restricted Operator Certificate with Aeronautical Qualification (ROC-A))

6.2.2. Radio Test Procedures

The following test procedure should be used in the event the driver is unsure that the vehicle's radio is operating correctly:

1. Contact ATS.
2. Identify yourself.
3. Say: "Radio check."

On-the-air radio tests, when necessary, should be short (not more than 10 seconds). Do not interfere with other communications.

The response from ATS may be in plain language, but it will most likely be given on the following readability scale of 1 to 5:

(1) Unreadable
(2) Readable now and then
(3) Readable but with difficulty
(4) Readable
(5) Perfectly readable

Example:

DRIVER	REGINA GROUND, TRUCK ONE-ONE, REQUEST RADIO CHECK.
ATC	TRUCK ONE-ONE, REGNA GROUND, READ YOU THREE, BACKGROUND STATIC.
DRIVER	GROUND, TRUCK ONE-ONE, ROGER.

6.2.3.

6.2.4. Call-up Procedure

A “call-up" is a procedure used to establish two-way communication between a vehicle and ATS. Before driving onto the manoeuvring area, the driver shall contact ATS for permission to proceed.

Requests for permission to proceed into the maneuvering area shall include:

1. The station being contacted:
    - When initiating radio contact the standard practice is first to say the full station identifier “Regina Ground” or “Regina Radio,” and thereafter say “Ground” or “Radio”;
2. The vehicle identification:
    - Use the correct call sign for the vehicle you are operating in every radio transmission;
3. The vehicle location; *and*
4. Desired destination.

If you do not receive a response to your call-up, wait a reasonable time and call again.

6.2.5. Mandatory Read Back Instructions

The driver shall read back all instructions from ATS as understood, or request that the instructions be repeated if not understood.

6.2.6. Entering the Manoeuvring Area

Upon receiving ATS permission, the driver shall proceed along the specified route to the specified location unless alternative instructions are provided by ATS.

Before proceeding, check visually to ensure that you will not interfere with any aircraft on, or approaching the path you have been given permission to follow.

While on the manoeuvring areas, drivers shall always monitor frequency 121.9 and acknowledge and comply with any instructions from ATS.

6.2.7. Holding Short of Runways and Taxiways

When ATS issues an instruction to "HOLD SHORT" of a runway or taxiway, the driver shall:

- Read back the "HOLD SHORT" instruction to ground control to confirm that the instruction was received and understood.
- Stop the vehicle at the designated hold line or in their absence of a painted hold line, at least 60m (200 ft.) from the edge of the runway and 30m (100ft) from the edge of a taxiway.

Note: YQR has a unique hold line on Taxiway Alpha for the approach of Runway 26.

6.2.8. Exiting the Runway

When instructed to leave the runway, drivers shall acknowledge instructions and proceed to a taxiway holding position or to a safe position off to the side of the runway at least 60m (200ft) from the nearest edge of the runway and "report off" giving current position. This also applies when the runway lights are blinking on and off which indicates a communications failure with ATS.

Drivers must report off upon completion of work and/or when exiting the manoeuvring area.

6.2.9. Review of Operations in the Manoeuvring Area

- Before proceeding into a manoeuvring area, the driver shall contact ATS for permission to proceed to a specific location;
- Drivers may only operate within areas for which they have been granted permission to access;
- The driver shall acknowledge all instructions as understood or request that the instructions be repeated if not understood;
- The driver shall only proceed along the route specified by ATS to the requested location;
- Drivers shall maintain a listening watch on the Regina Ground frequency 121.9 while in a manoeuvring area and shall comply with the direction given by ATS;
- When instructed to leave a runway the driver shall acknowledge the instruction and immediately leave the runway. Drivers are to report to ATS when off the runway and

beyond the taxi holding line or the appropriate distance of 60m (200ft) off the edge if not marked;

- Any driver leaving a maneuvering area shall advise ATS and report when off;
- When authorized to cross or drive on a runway, drivers shall drive as quickly and safely as possible to minimize time spent on the runway;
- Any driver who becomes lost or confused while driving on the maneuvering area shall immediately notify ATS and stop their vehicle; and
- In addition to receiving ATS authorization, drivers shall visually check to ensure that proceeding onto a maneuvering area will not cause interference with any aircraft.

6.3. Standard Phraseology

Standard phraseology has been developed through years of practice to transmit instructions and messages most efficiently and without misunderstanding; refer to NavCanada's "Ground Traffic Phraseology" document for additional examples.

Word	Meaning
ACKNOWLEDGE	Let me know you have received the message
AFFIRMATIVE	Yes
APPROVED	Permission granted
BREAK	Separation between portions of the message
BREAK BREAK	Separation between messages for two different vehicles/aircraft
CHECK	Examine a system or procedure (e.g. check runway lights)
CONFIRM	I request verification of: (clearance, instruction, action, information)
CONTACT	Establish communication with
CORRECT	True/accurate
CORRECTION	An error was made in transmission, the correct will follow
DISREGAURD	Ignore

EXPEDITE	Follow instructions expeditiously, specifically and safely
HOW DO YOU READ	Can you hear my transmission clearly
I DO NOT UNDERSTAND	I do not understand, please rephrase your last transmission
I SAY AGAIN	I repeat for clarity or emphasis
IMMEDIATLEY	Immediate action is required for safety reasons
MONITOR	Actively listen to (frequency)
NEGATIVE	No/permission not granted/not correct/not capable
NO DELAY	Follow instructions expeditiously, specifically and safely
OVER	End of transmission, require response
READ BACK	Repeat all, or specified part of message back
ROGER	I have received your transmission (generally used by ATS)
SAY AGAIN	Repeat all, or specified part of last transmission
SPEAK SLOWER	Reduce rate of speech
STAND BY	Wait and monitor frequency, caller will re-establish contact
UNABLE	Cannot comply with instructions/clearance/request
WILCO	I understand the message and will comply
WITHOUT DELAY	Follow instructions expeditiously, specifically and safely (used primarily by FSS)

6.4. Radio Communication Examples

Example 1: Driver request to proceed, ATS response, reporting off.

DRIVER	REGINA GROUND, STAFF TWO ONE.
ATC	STAFF TWO ONE, REGINA GROUND, GO AHEAD.
DRIVER	GROUND, STAFF TWO ONE, ON APRON I, REQUEST PERMISSION TO PROCEED TO THE FTA.
ATC	STAFF TWO ONE, REGINA GROUND, PROCEED VIA KILO ACROSS RUNWAY 31 ONTO RUNWAY 26 REPORT OFF AT THE FTA.
DRIVER	GROUND, STAFF TWO ONE, ROGER PROCEED VIA KILO ACROSS RUNWAY 31 ONTO RUNWAY 26 REPORT OFF AT THE FTA
DRIVER	GROUND, STAFF TWO ONE, REPORTING OFF AT FTA.
ATC	STAFF TWO ONE, REGINA GROUND, ROGER.

Example 2: Driver request to proceed when escorting multiple vehicles.

DRIVER	REGINA GROUND, STAFF TWO FIVE PLUS THREE.
ATC	STAFF TWO FIVE, REGINA GROUND, GO AHEAD.
DRIVER	GROUND, STAFF TWO FIVE PLUS THREE, AT THE FTA, REQUEST PERMISSION TO PROCEED TO THE GARAGE.
ATC	STAFF TWO FIVE PLUS THREE, REGINA GROUND, PROCEED RUNWAY 26, TAXIWAY PAPA ACROSS RUNWAY 31, TAXIWAY MIKE TO THE MAIN APRON, REPORT OFF ON THE MAIN APRON.
DRIVER	GROUND, STAFF TWO FIVE PLUS THREE, ROGER, PROCEED RUNWAY 26, TAXIWAY PAPA ACROSS RUNWAY 31, TAXIWAY MIKE TO THE MAIN APRON, REPORT OFF ON THE MAIN APRON.

Example 3: Hold short or a change in the approved routing.

DRIVER	REGINA GROUND, STAFF TWO FOUR.
ATC	STAFF TWO FOUR, REGINA GROUND, GO AHEAD.
DRIVER	GROUND, STAFF TWO FOUR, AT THE FTA REQUEST PERMISSION TO PROCEED TO THE MAIN APRON.
ATC	STAFF TWO FOUR, REGINA GROUND, NEGATIVE, PROCEED RUNWAY 26 HOLD SHORT OF RUNWAY 31.
DRIVER	GROUND, STAFF TWO FOUR, ROGER, PROCEED RUNWAY 26 HOLDING SHORT OF RUNWAY 31.

Example 4: Driver request to Flight Service Station to proceed.

DRIVER	REGINA RADIO, STAFF THREE ONE
FSS	STAFF THREE ONE, REGINA RADIO, GO AHEAD
DRIVER	REGINA RADIO, STAFF THREE ONE, ON RUNWAY 26, REQUEST PERMISSION TO PROCEED ONTO RUNWAY 31 TO SWEEP SNOW.
FSS	STAFF THREE ONE, REGINA RADIO, PROCEED ONTO RUNWAY 31, UNTIL FURTHER ADVISED.
DRIVER	RADIO, STAFF THREE ONE, ROGER, PROCEED ONTO RUNWAY 31 UNTIL ADVISED.

6.5. Vehicle Radio Failure

6.5.1. Radio Failure

If the radio fails while operating in the manoeuvring area, the driver should turn the vehicle to face the Air Traffic Control Tower and flash headlights off and on.

Regina Ground will respond using the following light gun signals:

Flashing green 	Cleared to cross; proceed; go.
Steady red 	Hold your position; stop.
Flashing red 	Vacate the runway immediately
Flashing white 	Return to starting point on aerodrome

The driver must hold short of each intervening runway and receive permission to proceed (flashing green light signal) before crossing the runway.

6.5.2. Vehicle Failure

If a vehicle breaks down, the operator shall immediately notify ATS of their location and difficulty and request assistance.

6.5.3. Failure of Both Vehicle and Radio

If the radio and vehicle both fail while in the manoeuvring area, the driver shall place approved emergency signaling devices approximately 30 metres (100 feet) ahead of and behind the vehicle in a line parallel to the nearest runway or taxiway as a warning to aircraft.

If the signaling devices when placed are not likely to be seen from the control tower due to snowbanks or other intervening obstructions, place one or more devices near the vehicle where they may be clearly visible from the control tower.

Stay with the vehicle.

6.6. Runway/Taxiway Paint Markings

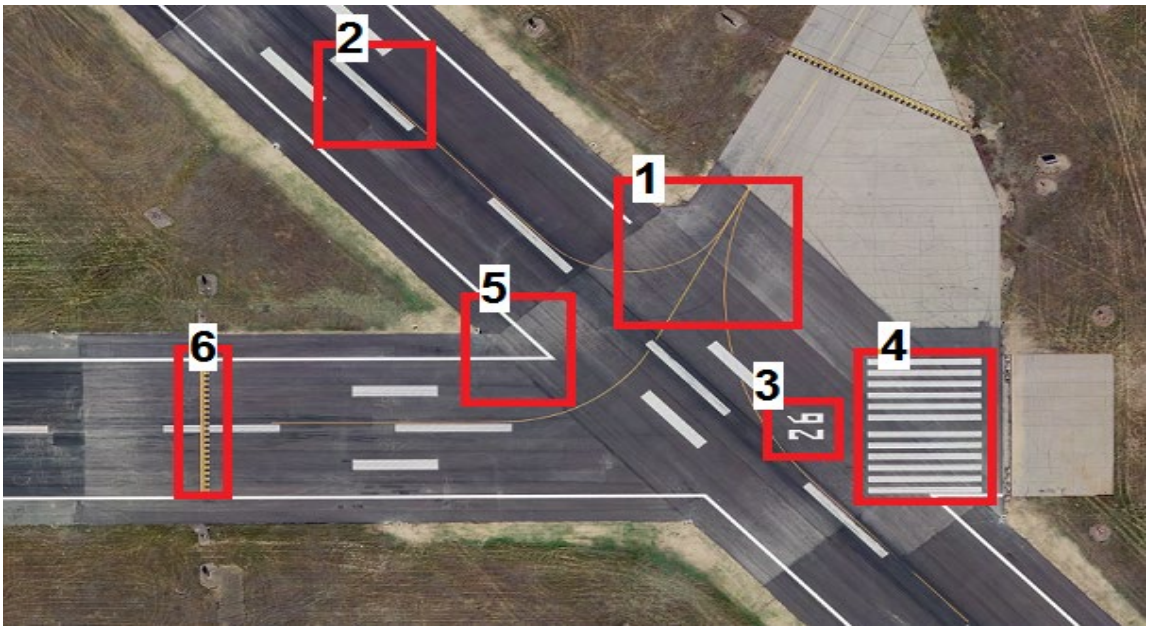


FIGURE 11: RUNWAY/TAXIWAY PAINT MARKING MAP

1 Taxiway Centre Line

A single yellow line extending from the runway along a taxiway to the apron. These lines are continuations of a taxiway centre line. Pilots position the aircraft's nose wheel on this line to ensure that the main wheels are on pavement and that the wings will not contact known obstructions such as buildings and light standards.

2 Runway Centre Line

The centre of a runway is marked with a broken white line made up of several lines close together; each group is 30.5 metres (100 feet) in length with 30.5 metres (100 feet) distance between them.

3 Runway Designation Markings

White numbers that face towards the end of the runway indicating the runway designation. The number corresponds to the direction of the runway in relation to a magnetic compass. For example, an aircraft compass will read 130 degrees when approaching the end of a runway marked with the number 13.

4 Runway Threshold Markings

The threshold marking consists of patterned longitudinal white strips of uniform dimension (30m long and approximately 1.8m wide). Runway threshold markings indicate the beginning of the portion of the runway that is usable for landing.

5 Runway Side Stripes

These solid white lines indicate the sides of the runway and on narrowed runways where there is a lack of contrast between the runway edges and the runway shoulder.

6 Hold Lines

Two solid and two broken yellow lines across the width of a runway or taxiway with the solid lines closest to the direction of approach, behind which a vehicle or an aircraft must hold while awaiting permission from ATS to cross.

6.7. Manoeuvring Area Signs

There are two types of manoeuvring area signs that drivers need to understand the meaning of.

1. Mandatory Instruction Signs:
    a. Signs with white lettering on red background identify a location beyond which an aircraft taxiing or vehicle shall not proceed beyond unless authorized by ATS.
2. Information Signs:
    a. Signs with black lettering on yellow background identify either direction, a runway exit, or a destination.
    b. Signs with yellow lettering on black background identify location.

Sign	Type	Location	Indicated Action
	Mandatory Hold	On a taxiway or runway prior to runway intersections	Identifies the position to hold prior to entering or crossing a runway.
	Location / Mandatory Hold	On taxiways at runway intersections	Identifies the position to hold before entering or crossing a runway.
	Direction	On runways or taxiways	Indicates the name and direction of the upcoming taxiway.

	Direction	On taxiways and runways	Indicates the name and direction of the upcoming taxiways.
	Location	On taxiways	Indicates the taxiway on which the driver is currently positioned.
	Destination Sign	On taxiways	Indicates manoeuvring area destination.
	Traffic Frequency Sign	On uncontrolled taxiway (Charlie)	Indicates your vehicle is about to enter an ATS controlled area.
	Holding Position Sign	On service roads	Indicates your vehicle is about to enter an ATS controlled area.

6.8. Manoeuvring Surfaces Edge Lighting

Different colored lights are used to indicate the edge of various aircraft manoeuvring surfaces. All drivers must know the meaning of these lights to avoid entering areas where they are not permitted to be and as a guide to vehicle movement when within the manoeuvring areas (runways and taxiways) of the airport.

6.8.1. White Lights

White lights are used along the edge of runways.

FIGURE 12: RUNWAY EDGE LIGHT MAP

Tip: Runway edge lights are spaced at 60m (200 ft.) apart so they can be used as a guide for a driver to judge distances from a runway/runway intersection or runway/taxiway intersection.

6.8.2. Blue Lights

Blue lights are used along the edge of taxiways.

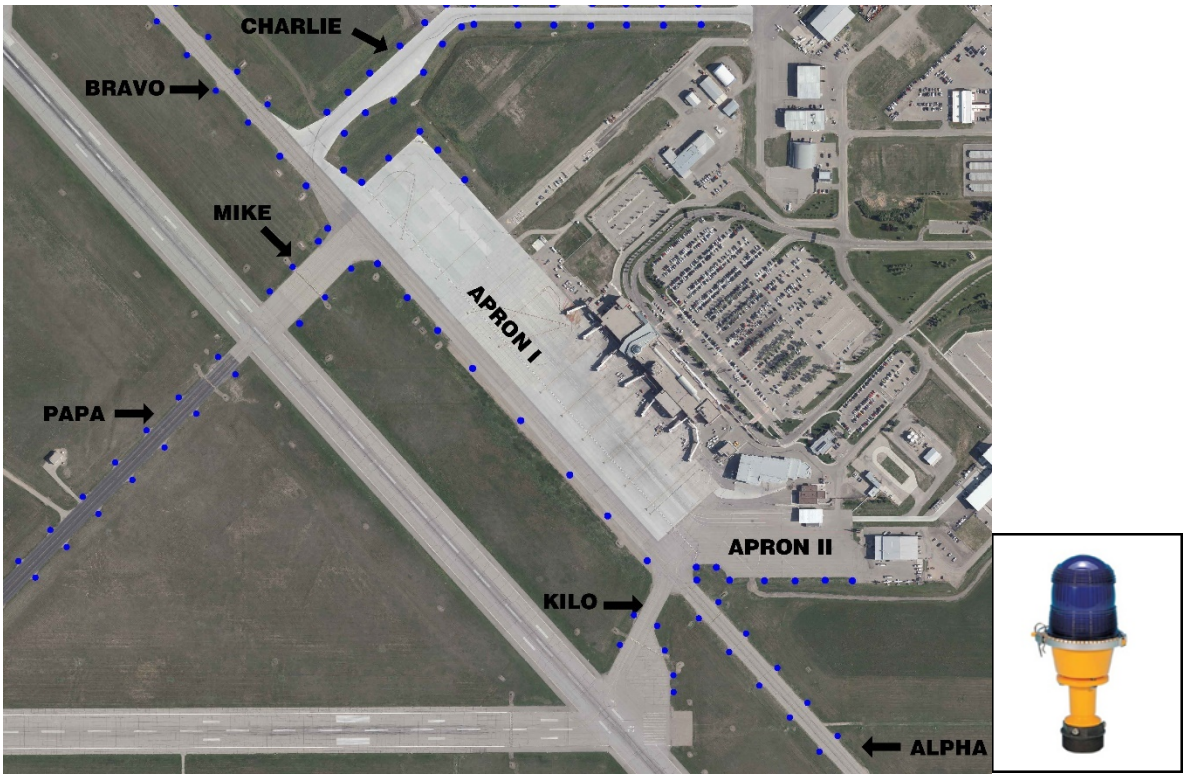


FIGURE 13: TAXIWAY EDGE LIGHT MAP

6.8.3. Red and Green Lights (Runway Threshold)

Two-sided lights, half red and half green, are used at the end of runways. The red half faces the runway and the green half faces the runway approach.

FIGURE 14: RUNWAY THRESHOLD LIGHTING MAP

6.8.4. Runway Guard Lights

Dual lamp fixtures located on either side of a holding position marking at either a taxiway/runway intersection or a runway/runway intersection. These lights are used to caution pilots or drivers that they are about to enter an active runway. These are sometimes referred to as “wig wags“ because the duel lamps alternate on and off.

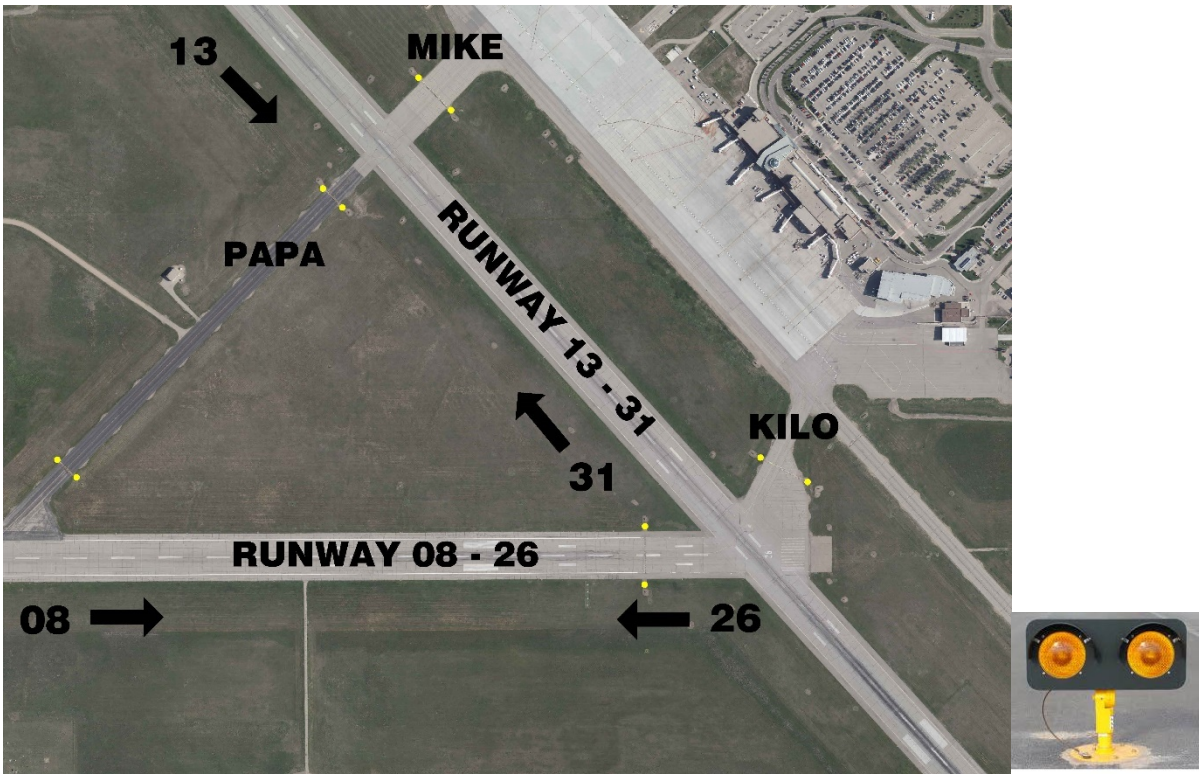


FIGURE 15: RUNWAY GUARD LIGHTS MAP

6.9. Aerodrome Beacon

The aerodrome beacon is a rotating/flashing white light mounted on top of the Air Traffic Control tower. It is provided for aircraft to visually identify the airport at night and is also a good reference point for vehicles on the airfield.

6.10. Electronic Interference

No person may operate any vehicle or device that causes electronic interference to any radio or navigation aid at the airport. No vehicle shall proceed closer than 300 meters (1,000 feet) of an Instrument Landing System (Localizer, Glide Path, Radar site) except with the permission of ATS.

This sign indicates a navigational aid sensitive area where no stopping

FIGURE 16: SIGN EXAMPLE

6.11. Driving in Grassed Areas

In the course of required duties, vehicles may have to operate in grassed areas within 67.5 metres (225 feet) of a runway edge or 36m (120 ft) of a taxiway edge. Authorization from ATS is required to operate within these areas. When directed by ATS to hold short of a runway or taxiway in grassed areas, the driver must hold short no closer than 67.5 metres (225 feet) from a runway edge or 36m (120 ft) from a taxiway edge.

Drivers must ensure their equipment is clean prior to exiting a grassed infield area so as not to track anything onto the manoeuvring surfaces. Any FOD generated shall be removed or reported to ATS prior to exiting the area.

6.12. Incursions

An incursion is defined as any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for taxiing or landing and takeoff of aircraft.

In simple terms, when a driver enters an active runway or taxiway or its safety area WITHOUT clearance, THEY HAVE COMMITTED AN INCURSION!

Being involved in an incursion presents one of the greatest hazards in operating a vehicle in the manoeuvring area and the consequences can be immediate and deadly. An incursion results in an immediate suspension of the drivers AVOP.

6.13. Hot Spot

The intersection of Kilo taxiway-08/26-13/31 is a major crossing point for vehicles and aircraft. This area is considered a “Hot Spot” which identifies it as an area of potential risk for collisions or runway incursions where heightened attention by airside drivers is necessary.

FIGURE 17: HOT SPOT MAP

6.14. Reduced Visibility Operations (RVOP)

Reduced visibility operations allow for continued airfield operation in poor visibility conditions. During such conditions extra care and attention should be exercised when operating within movement areas, see Appendix B.

Appendix A

Regina Airport Airside Vehicle Operator Permit Application

SECTION 1	APPLICANT - PLEASE PRINT		
NAME			
ADDRESS		TELEPHONE	E-MAIL
JOB TILE			

APPLICATION TYPE

NEW ☐ RENEWAL ☐ CHANGE OF EMPLOYER ☐ SECOND EMPLOYER ☐

RESTRICTED AREA IDENTIFICATION CARD (RAIC)

NUMBER	COMPANY	
		TEMPORARY ☐ PERMANENT ☐

DRIVERS LICENCE #	CLASS	PROVINCE	ENDORSEMENTS	RADIO LICENCE#

I hereby certify that, to the best of my knowledge, all of the information provided above is correct.

Signature: **Date:**

SECTION 2	EMPLOYERS STATEMENT - PLEASE PRINT
JUSTIFICATION	The above named applicate is an employee of this Company. Listed below are the duties of the employee.

COMPANY NAME	TELEPHONE	E-MAIL

AUTHORIZED COMPANY REPRESENTATIVE (Print)	JOB TITLE

TYPE OF PERMIT REQUESTED

D/A ☐ D ☐

SECTION 3	TRAINING AFFIDAVIT – VERIFY EMPLOYEE HAS COMPLETED ALL REQUIRED TRAINING

☐ Employee has read the ATD manual in its entirety and fully understands the rules and regulations regarding operation of a vehicle airside.

☐ Employee has received theory/practical training sufficient to ensure the competent and safe operation of a company vehicle airside

☐ As the authorized company representative, I accept full liability for the conduct of employees operating company vehicles airside within the scope of their duties.

As the company representative named above, I certify this employee is adequately trained in the safe operation of a company vehicle on the airside of Regina International Airport as required above and is authorized to complete the written and practical portions of the AVOP program:

Authorized Company Representative:

Signature: Date:

FOR RAA USE ONLY

APPLICATION	ACCEPTED ☐	REJECTED ☐	AVOP ID#
SIGNATURE			DATE

The following process is to be followed when applying for an AVOP:

1. All sections of the application must be completed.
2. Completed applications can be emailed to AVOP@yqr.ca or dropped off at the RAA Pass Office.
3. The applicant or employer is required to contact ERS at (306)761-7553 or email AVOP@YQR.ca to arrange for AVOP testing at the Fire Hall.
4. Applicants must present on the day of AVOP testing, their driver's licence, RAIC or temporary pass, and Restricted Operator Certificate with Aeronautical Qualification (ROC-A) for "D" applicants.

Appendix B

Regina Airport Authority
Reduced Visibility Operations Plan

Amendment #1
Date: July 2020

Page left Blank Intentionally

Regina International Airport Authority

Reduced Visibility Operations Plan

Updated 15 July, 2020

Regina International Airport Authority,
Vice President, Operations and Safety

28-AUGUST-2020
Date

NAV CANADA, Regina Site Manager

24-JUL-2020
Date

Contents

1. GENERAL INFORMATION 5
1.1 Purpose 5
1.2 Responsibilities 5
1.3 Definitions 6
1.4 Airport Map 8
1.5 Runway Published Certification 8
2. RVO PROCEDURES 9
2.1 Preparation for Reduced Visibility Operations 9
2.2 Activation of Reduced Visibility Operations 9
2.2.1. Actions of NAV CANADA 9
2.2.2. Actions of RAA 9
2.3 Sustained Reduced Visibility Operations 10
2.4 Arrivals & Departures 10
2.5 Runway Entry/Exit Points 10
3. '1 IN - 1 OUT' PROCEDURES 10
3.1 Access to Maneuvering Areas 10
3.2 '1 In - 1 Out' After Taxiing has Commenced or After Arrival 11
3.3 Aircraft Towing 11
4.0 GROUND STOP 11
4.1 Ground Stop After Taxiing Has Commenced or After Arrival 11
4.2 Vehicle Access to Maneuvering Areas 12
4.3 Aircraft Towing 12
5.0 TERMINATION OF RVO 12
5.1 Beyond End of ERS Shift 12

1. GENERAL INFORMATION

1.1 Purpose

This Reduced Visibility Operations Plan (RVOP) is specific to the Regina International Airport (YQR).

The Regina Airport Authority (RAA) meets the standards of TP312 and /or the mitigation requirements listed in Transport Canada Advisory Circulars.

This plan establishes the operational procedures to allow aircraft and vehicles to safely operate on the maneuvering areas in reduced visibility conditions.

1.2 Responsibilities

RAA is the primary contact for all aspects of the Reduced Visibility Operations Plan.

RAA will publish and distribute the plan, coordinate annual reviews, amend the plan as necessary, and ensure compliance with the plan.

NAV CANADA ATC/FSS is responsible for monitoring aerodrome visibility and advising the RAA of Reduced Visibility Operation (RVO) conditions.

Aircraft operators and service support providers are responsible to ensure their staff understand and comply with this RVOP.

Air Carriers must operate in accordance with their Air Operator's Certificate as approved by Transport Canada.

1.3 Definitions

Aerodrome Operating Visibility – in accordance with Advisory Circular 602-002, aerodrome visibility is defined as follows:

- When Air Traffic Control tower in operation

  For arrivals and departures, the aerodrome operating visibility is in accordance with the following hierarchy in order:

  1. Runway Visual Range (RVR) for runway 13 (if it is the runway of intended use);
  2. Aerodrome visibility (METAR).
  3. Visibility as determined by the pilot.

- When FSS in operation

  For arrivals, the aerodrome operating visibility is in accordance with the following hierarchy in order:

  1. Runway Visual Range (RVR) for runway 13 (if it is the runway of intended use);
  2. Aerodrome visibility (METAR)
  3. Visibility as determined by the pilot.

For departures, the aerodrome operating visibility is the lowest of the following visibilities:

- Ground visibility (METAR)
- Any reported Runway Visual Range (RVR);
- Visibility as determined by the pilot.

ERS – Emergency Response Service

Essential Vehicles – Those vehicles involved in safety/security/emergency or snow and ice control on the maneuvering areas (also includes NAV CANADA vehicles involved in high priority work).

Final Approach Fix (FAF) - A specified point on a non-precision instrument approach which identifies the commencement of the final segment or, where there is no FAF, the point where the final approach course is intercepted to a runway.

Ground Stop – Maneuvering areas closed to aircraft. No landing, takeoff, or taxi operations are permitted. Only essential vehicles permitted on maneuvering areas.

Maneuvering Area – Runways and taxiways only, excluding aprons and taxiway Charlie (uncontrolled).

Minimum Equipment List (MEL) – a list of required minimum airfield lighting which must be operational in order to continue operations when aerodrome visibility falls below ½ SM or the RVR for runway 13 (if it is the runway of intended use) falls below RVR2600.

1 In-1 Out Operation – Where aerodrome operating visibility falls below ¼ SM but not less than 1/8 SM, while at the same time the RVR for Runway 13 is indicating RVR 1200 or above (if it is the runway of intended use). Under this condition, aircraft and vehicle movements are restricted to one at a time on the maneuvering areas.

Reduced Visibility Operations (RVO) – operations below RVR 2600 (1/2 SM) down to and including RVR 1200 (1/4 SM). If RVR readings are unavailable, then aerodrome visibility is considered reduced when it has stabilized below ½ SM and at or above ¼ SM of observed visibility.

Reduced Visibility Operations Plan (RVOP) – a plan that calls for specific procedures established by the airport operator when aerodrome visibility is below RVR 2600 (1/2 SM) down to and including RVR 1200 (1/4 SM).

RGL(s) – Runway Guard Light(s)

RVR – Runway Visual Range

RWY – Runway

Safe Areas – Areas on the airport where aircraft or vehicles can proceed to under the direction of ATC/FSS during RVO and 1 In - 1 Out operations. Safe Areas are defined as follows:

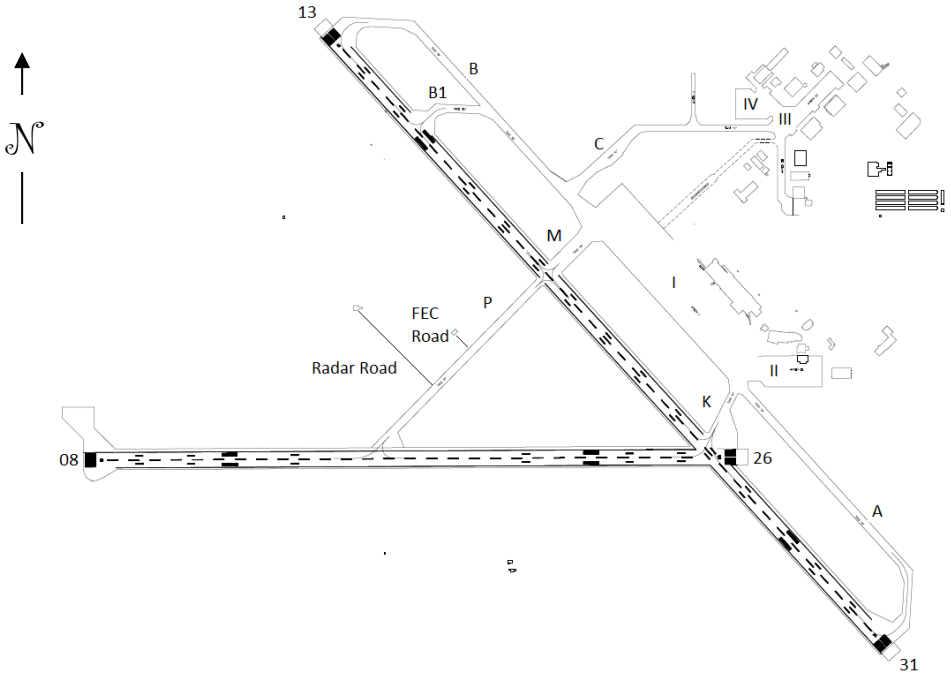
- FEC Road: located North of taxiway P
- Radar Road: located North of taxiway P
- Fire Training Area: located south of threshold RWY08

SM – Statute Mile

Taxi Routes – approved taxi routes permitted for aircraft use during RVO.

TWY – Taxiway

1.4 Airport Map



1.5 Runway Published Certification

Runway 13: RWY CERT – RVR 1200(1/4SM); Lighting – Edge: High intensity; Approach lighting: SSALR

Runway 31: RWY CERT – 1/4SM; Lighting – Edge: High intensity; Approach lighting: ODALS

Runway 08/26: Not certified for RVO

Runway Guard Lights

Runway Guard Light s are located at the following intersections on the airport:

- TWY A and threshold RWY 31
- TWY K and threshold RWY 26
- TWY M and RWY 13/31
- TWY P and RWY 13/31
- TWY B1 and RWY 13/31
- TWY B and threshold RWY 13
- TWY P and RWY 08/26
- On RWY 08 short of RWY 13/31

2. RVO PROCEDURES

2.1 Preparation for Reduced Visibility Operations

When prevailing visibility of RVR2600 is imminent or has been established in a downward trend with visibility expected to continue deteriorating below RVR2600, ATC/FSS may notify the RAA in order to allow sufficient time to complete the requirements as outlined below in 2.2 Activation of Reduced Visibility Operations.

2.2 Activation of Reduced Visibility Operations

2.2.1. Actions of NAV CANADA

- ATC/FSS will notify the RAA when aerodrome visibility falls below RVR 2600 feet or aerodrome visibility below ½ SM.

- ATC/FSS will turn on the following airport lighting at the appropriate power settings:
  - Runway 13 Approach lights
  - Runway edge lights (RWY 13/31)
  - Runway guard lights
  - Taxiway lights

- ATC/FSS will inform pilots when RVOP is in effect:
  - FSS will do so via Radio.
  - ATC will update ATIS to include “Reduced Visibility Operations in effect.”

- ATC/FSS will restrict all aircraft arrivals and departures to RWY 13-31 only.

2.2.2. Actions of RAA

- Perform or direct the performance of an airside inspection to confirm:
  - Movement area surface condition
  - Confirm equipment on the MEL is functioning
  - That activities such as construction or non-essential maintenance etc. on the airfield are pulled back and shut down
- Report completion of airfield inspection to ATC/FSS
- Advise ATC/FSS of any deficiencies
- Initiate maintenance response for corrections or repairs
- Advise ATC/FSS of change of status of airfield conditions
- Upon confirmation that airfield lighting meets standards, inform NAV CANADA that the airfield is in RVO.

Note: All equipment identified on the MEL must have two power sources with maximum switchover times as noted in *TP312 4th Ed. Table 8-1.*

2.3 Sustained Reduced Visibility Operations

Sustained Reduced Visibility Operations are defined as a period of 8 hours of continuous or intermittent RVO. RAA will conduct periodic inspections of the airside maneuvering surfaces, lights and visual aids during sustained RVO.

Note: Full airfield inspections are not required as long as an inspection has been performed within the previous 24 hours. Additional light inspections will be performed when specifically requested by Tower.

2.4 Arrivals & Departures

Arrivals and departures during RVO shall be from RWY 13-31.

2.5 Runway Entry/Exit Points

Only TWY Alpha and TWY Bravo shall be used as the approved taxi routes for arriving and departing aircraft using RWY 13-31.

3. '1 IN - 1 OUT' PROCEDURES

During ATC hours of operations, 1 In-1 Out procedures shall be implemented whenever aerodrome visibility falls below 1/4 SM but not less than 1/8 SM, while at the same time the RVR for RWY 13 is indicating RVR 1200 or above (if that is the intended runway of use).

3.1 Access to Maneuvering Areas

ATC will ensure that only one aircraft or essential vehicle is permitted access to the maneuvering areas at any given time. Only one essential vehicle at a time will be granted access to any portion of the maneuvering areas, provided there is no other aircraft on any portion of the maneuvering area at the same time, except in the event of an emergency.

3.2 '1 In - 1 Out' After Taxiing has Commenced or After Arrival

Where the aerodrome operating visibility is less than the RVO minima as set out in this RVOP, taxi operations are deemed to be occurring below the published aerodrome operating visibility, except when:

(a) Visibility deteriorates below the published aerodrome operating visibility after the aircraft has commenced taxi for departure (including de-icing stop); or

(b) Visibility deteriorates below the published aerodrome operating visibility after the aircraft has landed and is taxiing to the destination on the aerodrome.

If more than one vehicle or aircraft are actively moving on the maneuvering areas when aerodrome visibility falls below 1 In-1 Out minima, vehicle and aircraft movements will be coordinated by ATC and completed one at a time until such time that 1 In-1 Out operations can be fully established.

3.3 Aircraft Towing

No towing of aircraft is permitted during RVO and 1 In-1 Out operations.

4.0 GROUND STOP

During ATC hours of operation, whenever the RVR falls below RVR1200 during 1 In-1 Out Operations, or, if outside of ATC hours operation whenever the RVR falls below RVR 1200 or visibility falls below 1/4 SM, 1 In-1 Out operations will cease, and a Ground Stop will be initiated. ATC/FSS will notify RAA that a Ground Stop has been initiated. Any subsequent aircraft movement will not be permitted on any maneuvering areas. When RVR improves to RVR1200 or above, 1 In-1 Out operations or Reduced Visibility Operations may resume.

4.1 Ground Stop After Taxiing Has Commenced or After Arrival

Aircraft which are inside the final Approach Fix (FAF) when the Ground Stop is initiated may continue the approach at their discretion provided no other aircraft are on the maneuvering areas. Aircraft that are currently taxiing for departure when Ground Stop is initiated may continue taxiing to the HOLD line position short of RWY 13-31. Aircraft which are currently holding short of RWY 13-31 for departure when Ground Stop was initiated will remain stopped. If required due to operational requirements (e.g. low fuel, expiration of de-icing holdover time), aircraft currently holding short of the runway may be permitted to taxi back to their point of origin on the airport, one at a time.

4.2 Vehicle Access to Maneuvering Areas

Only one essential vehicle may be granted access to the maneuvering areas, provided there is no other aircraft on any portion of the maneuvering area or stopped at a HOLD line, except in the event of an emergency.

4.3 Aircraft Towing

No towing of aircraft is permitted during Ground Stop.

5.0 TERMINATION OF RVO

RVO may be terminated when aerodrome visibility is at or above RVR2600 and aerodrome visibility ½ SM or greater and has been in an upward trend for a minimum of 15 minutes with visibility expected to continue improving.

5.1 Beyond End of Emergency Response Service (ERS) Shift

In the event that reduced visibility conditions persist beyond the end of the operational day (the time when ERS are off-duty) the Reduced Visibility Operations Plan will remain in effect until cancelled at the discretion of the FSS. Once cancelled, RVO cannot be implemented again until ERS returns at the start of the next operational day, typically 0500 local (1100Z). FSS to contact ERS in emergent or extenuating circumstances.