

Transports Canada

Transport Canada



AIRSIDE VEHICLE OPERATING PERMIT LOCAL AIRPORT TRAFFIC DIRECTIVES MANUAL D and D/A Permits

Penticton Regional Airport

NOTE: ANY **NON** PENTICTON AIRPORT (CYYF) AVOP'S WILL NOT BE ACCEPTED

DEFINITIONS

Airport – The Airport as referred herein is the Penticton Regional Airport code CYYF.

Aerodrome Beacon – Aeronautical beacon used to indicate the location of an aerodrome from the air.

Airside – That area of an Airport intended to be used for activities related to aircraft operations and to which access is normally controlled.

Airside Vehicle Operator Permit (AVOP) - A permit issued by the Airport Manager certifying that the person named therein is authorized to operate a vehicle on the Airside of an Airport.

Air Terminal Building – A building located adjacent to an airport apron, for the purpose of enplaning and deplaning passengers and for persons meeting and greeting those passengers. Passenger baggage is also processed through these structures.

Air Traffic Services Unit (ATSU) - An Air Traffic Control tower (ATC), a Flight Service Station (FSS), or a Community Aerodrome Radio Station (CARS), operated by or on behalf of NAV CANADA at an Airport.

Controlled Area – An area on the airside which cannot be entered without permission of Flight Services Control. This area includes the taxiways, runways, helipads, and the 200 feet runway protected Area.

"DA" AVOP - An Airside Vehicle Operator's Permit authorizing a person to operate a vehicle on aprons, uncontrolled taxiways and service roads only, at the airport named on the permit and may be subject to restrictions as specified by the Airport Manager.

"D" AVOP - An Airside Vehicle Operator's Permit authorizing a person to operate a vehicle on all airside areas, at the airport named on the permit and may be subjected to restrictions specified by Airport Manager.

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 control services for designated uncontrolled Airports.

Foreign Object Debris (FOD) - A substance, debris or article alien to the vehicle or aircraft which would potentially cause damage. FOD includes loose hardware, tools, parts, pavement fragments, catering supplies, building materials, rocks and sand, pieces of luggage, pens, coins, badges, hats, soda cans, paper clips, rags, trash, paperwork and even wildlife. Anything that can find its way into an aircraft engine or flight control mechanisms is a recipe for foreign object damage.

Foreign Object Damage - The damage done to aircraft engines, tires, or the airplane body from rocks, trash, or the actual foreign object debris found on Runways, Taxiways and Aprons.

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.

Maneuvering Area – That part of an aerodrome intended to be used for the taking off and landing of aircraft and the movement of aircraft associated with taking off and landing, excluding aprons.

Airport Manager - A Department of Transportation duly authorized, official representative, responsible for the operation and maintenance of an Airport and/or a number of Community Airports within a region.

Restricted Area – An area of an airport designated by a sign as an area to which access by persons or vehicles requires the production of valid identification.

Runway Protection Area- The Runway Protected Area covers 200 feet in any direction surrounding a runway.

Uncontrolled Area- An area on the airside, which does not require Penticton Radio Permission to enter. The uncontrolled area consists mainly of the aprons, and perimeter road and the vehicle road network, and areas outside of the 200 feet Runway protected Area.

Vehicle – Under this program is any type of vehicle which is defined as a "vehicle" under the British Columbia Motor Vehicle Act.

Registered Vehicles - A vehicle that has been registered with Penticton Airport

Vehicle Corridor - A roadway on the apron, marked by two solid white lines 7.5 m (25 feet) apart, centered by a single white broken line, to provide guidance to vehicle and equipment operators.

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Penticton Regional Airport	
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AVOP Application61

1 Introduction

The aim of the Penticton Airport Safety Management System (SMS) is to provide an operating framework for use by all Airport personnel, with the goal of ensuring that safety considerations are incorporated into every aspect of operations. Operating a vehicle on the airport is a privilege and requires specialized training and practices in order to ensure safety is not compromised.

The Penticton Airport AVOP Program Manual is a comprehensive document that provides instruction on the directives, procedures and testing for operators before they are permitted to operate a vehicle on the airport.

The Airport Manager is the issuing authority for all AVOPs. The Airfield Maintenance Supervisor has been designated as the testing authority to ensure those personnel requiring an AVOP are properly trained in pertinent policies and procedure to operate a vehicle on the apron, taxiways, and runways at the airport. Testing of all personnel requiring an AVOP shall be conducted before the Airport Manager issues an AVOP testing will include both a written and a practical driving test on the airport surfaces. The AIRPORT MANAGER MAY ISSUES AN AVOP at their discretion.

The Airport is committed to maintaining a safe, healthy and sustainable working environment. Each individual who operates a vehicle at the airport is responsible for meeting this commitment.

2 Type of AVOP's

There are two classes of AVOP's in effect at Penticton Airport:

1. D/A AVOP

- Allows the holder to operate a vehicle on the apron area only.
- Applicants for a D/A A.V.O.P are required to know the material contained in Sections 1-9, including the Apron Layout maps found in Section 8.

2. D AVOP

- D permit enables the holders to operate a vehicle on the apron, taxiways and runways.
- Applicants for a D AVOP are required to know the material contained in Sections 1-10, including the Apron and Airport Layout maps found in Section 8.

3 ADMINISTRATION

3.1 General

- I. The AVOP program at the Airport is administered by Penticton Regional Airport, Airport Manager.
- II. The Penticton Regional Airport Administration and Maintenance offices have been designated by the Airport Manager as the AVOP testing offices.
- III. Two types of permits are available:
 - (a) D/A permit is an AVOP authorizing the person named therein to operate a vehicle on airside aprons in performance of their duties. This permit does not allow the person to operate a vehicle in the Controlled area.
 - **(b)** D permit is an AVOP authorizing the person named therein to operate a vehicle on all Airside areas at the Airport.
- IV. Any person operating a vehicle on the airside of the Airport must possess a valid AVOP issued by Penticton. No other airport's AVOP is valid at Penticton Airport.
- V. There are many laws and regulations that apply to driving on an airport. This manual does not replace those laws and regulations, but rather outlines the airside-driving program as Penticton sees to operate it.

3.2 Employer Responsibilities

The employer of an AVOP applicant/ holder is responsible to:

- (a) Complete and sign the Employer Statement on The Application Form.
- **(b)** Ensure that applicant for their organization are properly trained for driving airside.
- **(c)** Provide AVOP holders in their organization with vehicle that are in safe operating condition, marked as required for operating Airside, and outfitted with the required equipment.
- (d) Return expired or revoked permits to Penticton Airport Manager.

- **(e)** Notify Penticton of any suspension or change to their employee's driver license.
- (f) Perform an annual review of the AVOP holders in their organization, and send a record of the names of all current AVOP holders to the Penticton Airport Manager.
- **(g)** Ensure that the AVOP program remains effective in their organization.

3.3 Applying for an AVOP

- (a) An AVOP Study material and application form may be obtained by contacting the Penticton Airport office.
- **(b)** The application requirements for an AVOP are as follows, and a copy of each must be received by Penticton before an application may be processed:
 - A valid British Columbia Driver's License (in some instances, a valid Driver License from another province or state may be accepted). AVOP holders are to ensure that when a driver's licence is renewed, an updated copy is submitted for their file.
 - A Restricted Operator Certificate with Aeronautical Qualification from Industry Canada. The Study Guide for Radiotelephone Operator's Restricted Certificate (Aeronautical) issue 3 February 2010 may be obtained at Industry Canada offices, downloaded from the Industry Canada website.
 - Examination for a Radio Certificate may be taken at the Airport by contacting the Okanagan Skies Flight School, the Airport Operations and Maintenance Supervisor or Executive Flight.
- **(c)** An Applicant's employer must provide justification on the Application Form in order for an applicant to request an AVOP. AVOP applications must be signed by the applicant and by their employer.
- (d) If an applicant changes employers or works for more than one employer, each employer must complete an AVOP application for the employee. For persons with multiple employers, only one AVOP will be issued, but any other application will be kept on file to provide justification for the need to operate a vehicle on airside.

- **(e)** The complete Application Form, and copies of the required documents, are to be delivered to Penticton's offices. "Learner" stage driver license will not be accepted in applying for an AVOP.
- (f) Airside vehicle operation is limited to those persons with a justifiable need. Penticton shall determine, from the employer's information contained on the application, if the applicant has a justifiable need to operate a vehicle on the airside of the Airport.
- **(g)** Penticton will review and approve/disallow the Application Form, and return it to be applicant's employer.
- **(h)** An AVOP application expired 60 days from the original application approval by Penticton. Applicant must re-apply If testing is not completed within the 60 days.

3.4 Testing

- a. Applicants may utilize the Penticton Airport AVOP Program Manual as training material. The document is available through the Penticton Airport Maintenance office.
- b. An AVOP test consists of two parts: a written, multiple-answer knowledge test and a practical driving test. The test will be based upon the contents of this manual, and the practical test will focus on the operation of a vehicle as it relates to the applicants' duties.
- c. Testing must be completed within 60 days of the original application approval by Penticton Airport. If testing cannot be completed within this time frame, the applicant will be required to re-apply for their AVOP.
- d. Arrangements for the written knowledge test are to be made through the Airfield Maintenance Supervisor.
- e. To pass the written test, applicants must answer a minimum of 90 percent of all questions correctly. The test administrator will review the test with the applicant immediately after it has been completed and correct any and all errors.
- f. For applicant who fail the written test, a re-write of the test may be booked for no less than seven days after a test failure.

- g. Arrangements for a practical test are made through the Airfield Maintenance Supervisor within 1 month of passing the written test. Applicants may only schedule a practical test after the written test has been passed. The practical test is conducted to confirm the driver's ability to apply the knowledge in a working environment. Applicants for a D permit must also demonstrate the proper application of radio communication skills.
- h. For applicants who fail the practical test, a re-test may be booked no less than seven days after a test failure.
- i. An AVOP shall be issued upon successful completion of the written and practical test.

3.5 Training

- (a) Employers are responsible to ensure that applicants for their organization are properly trained for driving airside.
- **(b)** Applicant with a valid drivers' license may drive airside for the purpose of training only when accompanied by trainer who holds a valid Penticton Airport AVOP. The trainer shall be seated next to the trainee in the same vehicle, and assumes all responsibilities for the vehicle's operation.

3.6 Revocation and Suspension of a Permit

Municipal, provincial and federal legislation and acts will be enforced to the extent that they apply airside.

3.6.1 Revocation

An AVOP is revoked when:

- Driver license has been revoked, suspended or is no longer valid;
- Holder is no longer employed by the employer indicated on the Application Form;
- In a position at the airport which does not require that he/she operate a vehicle on the airside of the airport.

3.6.2 Suspension

AVOP may be suspended or permanently revoked by the Penticton Airport Manager at their discretion for violation of safety rules for the Airport:

- Entering restricted area without permission
- Runway incursions
- Taxiway incursions
- Dangerous, reckless or impaired operation of vehicle
- Speed violations
- Other unacceptable offences

Each infraction observed carries specific demerit points ranging from 1 to 4 demerit points. When specific demerit point levels are reached, varying suspension levels will be enforced ranging from a 2 day suspension to 14 day suspension with complete retesting before re-issue.

3.7 Enforcement

Penticton Airport Manager and/or Designate are selected to enforce the elements of this program. If an infraction is committed, these are obliged to stop and investigate the circumstances. A vehicle operator must obey any instruction to stop and then to follow their direction.

4 Airside Access

4.1 General

- (a) Any person who opens a gate or a door that leads to the Airside is responsible for any person or vehicle passing through the gate or door.
- **(b)** All access gates are to be closed and/or locked immediately after entering or exiting the airside area.
- **(c)** All vehicles operated airside must be driven by a holder of a valid Airport AVOP, or under direct escort by an AVOP holder.

4.2 Electronic Gates

When using electronic gate, the operator shall stop and wait for the gate to fully close before leaving. If the electronic gate malfunctions and will not close:

- Stay at the gate and monitor access,
- Call Airport Security at (250) 770-4417
- Wait until someone arrives to repair or assist with the gate
- Ambulances shall use gate 94 for routine airside medevac access
- Couriers shall use gate 76 for airside access

4.3 Escorting on Airside

- (a) Operators without an AVOP, who have an operational requirement, may drive airside if they are under escort by a valid AVOP holder. Airport Staff or a duty Security Commissionaire with an "Unrestricted" AVOP may escort personnel requiring access airside. For escort call (250) 770-4417.
- **(b)** The Vehicle conducting the escort shall be a registered vehicle at the Airport.

- **(c)** Escorting of a vehicle on the Airside shall be provided by a licensed AVOP holder:
 - Guiding the other person at a close proximity in a separate vehicle; or
 - Seated next to the normal operator of the vehicle; or
 - Guiding the other person at a close proximity as a pedestrian.
- (d) The person providing an escort shall assume responsibility for the escorted vehicle(s) (maximum of three vehicles) and the actions of the driver(s)
- **(e)** The escort must ensure that drivers under their escort have been formally briefed regarding the rules, procedures and standard for operating Airside, as outlined in this manual.
- **(f)** The escort shall not lead or direct the escorted vehicle into any area of Airside to which the escort is not authorized to operate a vehicle under his/her AVOP.
- (g) An escort must ensure that any vehicle under their escort has either a rotating or flashing beacon or four-way flashers, and headlights activated, while Airside.
- (h) The foregoing rules are in addition to but do not replace or otherwise supersede any other rules or regulations respecting the control of vehicles on the airside of the Airport or any security regulations applicable to the Airport.

5 Vehicle Requirements

5.1 General

Vehicle operators must be qualified and trained to operate the vehicle they are driving. Vehicle operators are responsible to ensure the vehicle is in a safe condition, will not contribute to FOD and is operated in a safe manner.

5.2 Vehicle Equipment

- I. All closed vehicles that are operated or driven airside at the Airport must be equipped with:
 - A rotating or flashing yellow beacon,
 - Vehicle identifier (see below),
 - Operating radio if require,
 - A rotating or flashing red/white blue combination may apply to emergency vehicles.
- II. It is recommended that each vehicle operated airside contain the following information:
 - Map of the Airport
 - Light signal instructions
 - Airport frequency guide
- III. Radio equipment must be capable of operating on all published radio frequencies for the Airport.
- IV. Beacons must be turned on at all times while vehicles are on airside surfaces. An operating beacon indicated that the operator is in the vehicle and prepared to move. The only vehicles allowed to operate airside without a beacon are those under escort.
- Should a vehicle's beacon stop working while driving airside, the driver must;
 - Activate the hazard lights as a temporary measure;
 - Immediately remove the vehicle from the airside;
 - Do not use the vehicle airside until repairs to the beacon are completed.
- VI. A vehicle's headlights must be turned on while operating airside.

5.3 Vehicle Markings

- I. The vehicles driven airside must be registered with Penticton and must display identifiers as assigned by Penticton.
- II. All vehicles operated in the movement area must be equipped with a rotating or flashing yellow beacon.
- III. All vehicle lighting shall be kept in working order, including; headlights, tail lights, hazard lights and rotating/flashing beacons.

The vehicle must be marked according to the following figure 1.

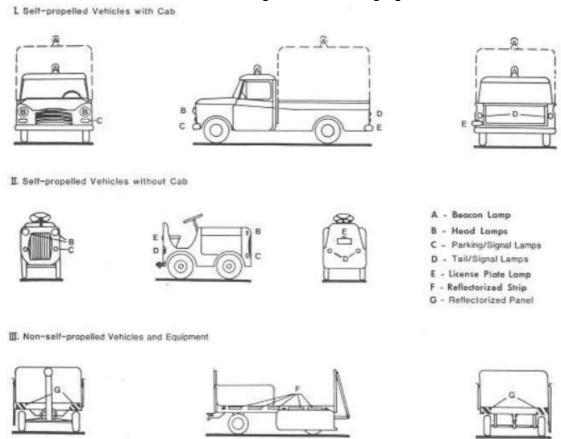


Figure 1. Vehicle Marking

5.4 Studded Tires or Tire Chains

Studded tires are not allowed on any vehicle being operated on the Airport. During abnormal slippery conditions, Penticton may grant permission to use tire chains on aircraft tug vehicles to move aircraft. Such permission will be limited, both to time and to specific operators. Without such special permission, tire chains shall not be used on the airside of the airport.

6 Airside Operations, Rules and Directives

6.1 General

- I. The airport is operational 24 hours per day, 7 days per week. Air traffic control services are available during the operational times and aerodrome information that can be found in the Canada Flight Supplement.
- II. Safety is the first responsibility if all drivers at the Airport. Operational considerations or human factors shall not be sufficient to override the rules. There are many detailed rules for drivers to follow, but the following is a summary of the key ones:
 - Obey all signs and marking;
 - Drive only where allowed to drive;
 - Drive into controlled area only if given specific permission by FSS;
 - Obey speed limits;
 - Drive defensively and in safe manner;
 - Yield to aircraft, pedestrians, emergency vehicles with warning devices operating and snow removal equipment.
 - Remain clear of an area in the event of an incident
- III. All vehicle operators shall give right of way to the following in order of priority:
 - Aircraft
 - Pedestrians
 - Emergency vehicles with warning devices operating;
 - Snow removal or maintenance equipment in the performance of their duties:
 - Vehicles towing aircraft and aircraft fueling vehicles.
- IV. If a vehicle is operated in an unsafe manner, such as the examples listed below, and presents a danger to aircraft, people or other vehicles, the AVOP may be revokes on the spot.
 - Runway Incursion;
 - Reckless driving/ excessive speeding;
 - Impaired driving.
- V. Operators are responsible to ensure their loads are fastened or covered to prevent the load from coming loose or falling on to the surface.

6.2 Foreign Object Damage (FOD)

- I. The control of FOD is the responsibility of all Airside Drivers. Before operating a vehicle airside, all vehicle operator must ensure vehicles are free from mud and other debris which may fall off on the airport surface. Operators need to be vigilant of material in vehicles as it may blow out when doors and windows are opened or items are not secured in or on vehicles.
- II. If an operator discovers FOD on the Airport, he/she should immediately stop to remove the material if safe to do so. Otherwise, the operator should immediately report this to the Air Traffic Control Tower or Airfield Maintenance Supervisor. FOD should be reported immediately as the item(s) mat cause an unsafe condition to exit.

6.3 Smoking or Open Flame

- I. Smoking is expressly forbidden on the airside of the Airport. This includes drivers or passengers in vehicles.
- II. Any devices that has an unguarded open flame is prohibited on the airside unless specific arrangements for use have been approved by Penticton Airport Manager.

6.4 Speed Limits

The Maximum speed limit for the vehicles movement are;

Vehicle	Speed Limit		
Apron	10km/hr		
Runway and Taxiways	40km/hr		
Uncontrolled Areas	20km/hr		
Perimeter road	15km/hr		

Note1: Exceptions are emergency and snow removal vehicles where safe and reasonable limits apply in the performance of their duties or when ordered to immediately leave any maneuvering area by FSS.

Note 2: Driver shall operate at reduced speeds in poor weather/visibility and/or poor road conditions.

6.5 Aircraft (Engines Running)

- I. Movement around any active or moving aircraft is prohibited. All aircraft shall be stopped with engines shut down before vehicles enter the apron area.
- II. Helicopters produce vast amounts of rotor wash and are capable of becoming airborne any time their rotors are turning. At no time are vehicle operators permitted to pass alongside a running helicopter unless they have the attention and authorization of the helicopter crew.

6.6 Vehicle Parking

No person shall park a vehicle or place any other object within 3 meters of the airport perimeter fence on groundside, or with 1 meter on airside.

6.7 Cell Phones and Portable Media Devices

The use of a cellular phone or portable media device is prohibited while operating a vehicle airside.

6.8 Reflective Clothing

While airside, all personnel are to wear reflective clothing. This applies to all persons on foot, and all drivers or passengers on vehicles open to the elements.

7 Reporting

7.1 Hazardous Conditions

Any condition that presents a hazard to people, vehicles, aircraft or other airport operations shall be reported immediately to the Airport Manager or the on-duty Security Commissionaire.

7.2 Accidents and Incidents Reporting

All accidents or incidents resulting in personal injury, damage to aircraft, damage to vehicles or equipment, or damage to property must be immediately reported by the vehicle operator to the Airport Manager or the on0duty Security Commissionaire.

7.3 Spill or Leak of Hazardous Substance

All spills or leaks must be reported immediately to the Airport Manager or the on-duty Security Commissionaire. The operator of the vehicle that caused the spill or leak shall remain with the equipment until the product is cleaned up.

7.4 Debris

Any debris on airside can seriously damage aircraft engines. All vehicle operator shall ensure their vehicles do not deposit any debris on the airside (such as mud or gravel). All operators must do their best to remove any debris they encounter. If the debris cannot be removed, advice the FSS control tower, the Airport Manager or the on-duty Security Commissionaire.

7.5 Bird and Wildlife

Should an airside vehicle operator note bird or wildlife activity on the Airport, they shall immediately contact the FSS Tower or Airport Security to report the details.

8 Maps

Both D/A and D AVOP holders are required to be familiar with the Apron Layout as illustrated in Figure 2.

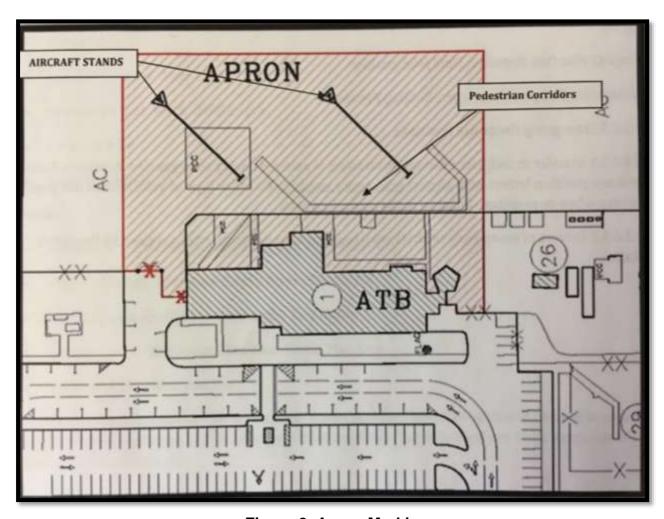


Figure 2. Apron Marking

D AVOP holders are also required to be familiar with the entire airport layout, such as the runway and taxiways.

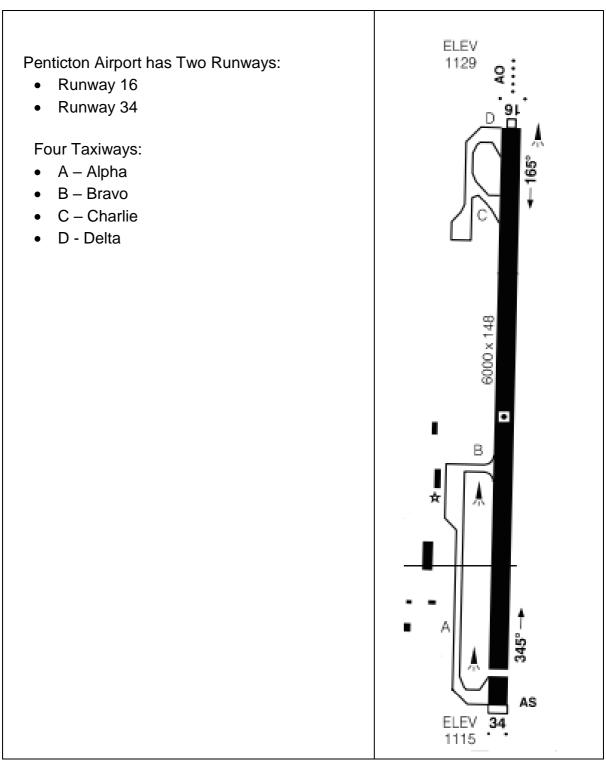


Figure 3. Runway and Taxiways

9 Driving in Uncontrolled areas

9.1 General

Except for runways and taxiways, and the 200 feet Runway Protected Area, all airside areas are uncontrolled.

9.2 Rules

- I. D/A AVOP holders shall not enter any controlled area.
- II. On the apron, all vehicles must use the vehicle corridor. Field Maintenance, aircraft maintenance and emergency vehicle may operate outside the corridor as necessary.
- III. Vehicles already in the corridor gave the right of way over vehicles entering. Passing is not permitted.
- IV. Aircraft movement guidelines should be crosses at a right angle.
- V. Vehicle corridors are not guaranteed safe routes and caution must always be exercised to avoid parked and moving aircraft. If aircraft encroach on the corridor, drives must yield to the aircraft.

9.3 Apron Surface Marking

9.3.1 Pedestrian Corridor

- On the Apron, a pedestrian corridor is marked with two parallel solid white lines.
- Driver may cross a pedestrian corridor but must yield to all pedestrians using the path.
- Driver may not stop vehicles or park vehicles or equipment inside the pedestrian corridor.



9.3.2 Vehicle Corridor

• Two solid white line centered with a single broken line.

• Vehicle operators shall drive within the vehicle corridors when operating on the apron.



9.3.3 Aircraft Movement Guidelines

 Aircraft Movement Guidelines are solid yellow lines that serve as a center-of-aircraft guideline to aid aircraft traversing the apron and taxiways. Vehicles and equipment must not be left in the vicinity of the aircraft movement guidelines.



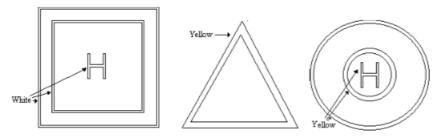
9.3.4 Aircraft Stand Markings

• Aircraft Stand Markings are designated area on an apron intended to be used for parking aircraft.



9.3.5 Helicopter Parking Positions

• Drivers shall not enter areas designated for helicopter use. These areas are marked with large, concentric circles.



Examples of Helicopter Landing, Departure and parking Areas

9.4 Common Signs and Lights

9.4.1 Direction sign

- The entrance to a taxiway from an apron is marked with a sign bearing a letter.
- The sign has a black character on a yellow background.

		,		
Direction Sign		Description		
Taxiway "C" direction sign	C ⇒	 Defines direction of intersection of interesting taxiway Located on Left side, prior to intersection 		
Runway Exit sign	34	 Defines direction of exit taxiway from runway Located on same side of runway as exit, prior to exit 		
Apron direction sign	← APRON	 Defines direction of Aron from runway 		

9.4.2 Taxiway Guard light

The entrance to a taxiway from apron is also marked on either side of the entrance with double amber light



9.4.3 Apron and Taxiway Edge Light

Blue Lights are used along the edge of aprons and taxiways.



10 Driving in Controlled Areas

10.1 Rules

- I. The rules for driving in controlled areas are in addition to the rules for operating a vehicle in uncontrolled areas.
- II. No vehicle or person may enter any controlled area without the permission of Penticton Radio. Contact shall be made using the FSS ground frequency 121.900.
- III. While in a controlled area, vehicles and pedestrians shall maintain a listening watch on the Penticton Radio frequency and shall comply with directions given by Penticton Radio.
- IV. Any vehicle leaving a controlled area shall advise Penticton Radio.
- V. No person may operate any vehicle or device that causes electronic interference to any radio or navigation aid at the airport. Permission from FSS Penticton Radio must be obtained prior to operating a vehicle within the vicinity of any aviation navigation facility.
- VI. Drivers shall hold short of Runways and Taxiways as directed by FSS Penticton Radio at the designated hold point. Explicit authorization is required for a vehicle to cross a runway, regardless of whether or not the runway is active.
- VII. Whenever FSS Penticton Radio issues an instruction to "Hold Short" of a runway, the driver shall read back the instruction to Penticton Radio to confirm that the instruction was received and understood.
- VIII. When holding short at a runway, stop approximately one vehicle length from the hold lines. This is to ensure that visual contact with the signs/lights and lines are maintained. This also allows space for the vehicle to turn away from a hold line if required.
 - IX. Until given permission to enter the runway, the vehicle shall remain behind the yellow taxiway holding line for that runway.

10.2 Controlled Area Operations

10.2.1 General

- I. Vehicle traffic the controlled area is restricted to necessary operational use. All other traffic shall use the vehicle corridors and roadways whenever possible.
- II. When authorized to cross or drive on a runway, drivers shall drive as quickly as possible to minimize time spent on the runway.

10.2.2 Airfield Lighting

Penticton Airport airfield lighting is monitored and controlled by FSS 24 hrs. per day.

10.2.3 Radio Frequencies

The ground frequency for Penticton Radio is 121.900 MHz the frequency for Aerodrome Traffic is 118.500 MHz while in the controlled area, the vehicle must continuously monitor the working Penticton Radio ground frequency of 121.900.

10.2.4 FSS Tower Communication

- Before proceeding into a controlled area, it is necessary to contact FSS Penticton Radio and request clearance. This may be accomplished by:
 - Calling FSS Penticton Radio frequency 121.900
- II. All radio communication with FSS Penticton Radio will be conducted on VHF radio frequency 121.900 and is to be monitored at all times.

Remember aircraft always have the right of way

10.2.5 FSS Penticton Radio Instructions

- Before proceeding in to a controlled area, the vehicle operator shall contact FSS Penticton Radio for permission to proceed to a specific location by a specified route.
- II. Vehicle operators shall only use call signs assigned by the Penticton Airport Manager.
- III. Vehicles operating in groups shall be under the control of one vehicle operator who is responsible for requesting and acknowledging FSS Penticton Radio instructions.
- IV. The standard procedure for a vehicle operator who has received instructions from FSS Penticton Radio is to acknowledge all instructions as understood or request that the instructions be repeated if not understood.
- V. The vehicle operator shall only proceed along the route to the location specified by FSS Penticton Radio.
- VI. When instructed to leave the runway, the vehicle operator shall acknowledge the instruction, immediately leave the runway and report to FSS Penticton Radio when off the runway and beyond the taxi holding line.
- VII. In all cases, the vehicle operator shall report to FSS Penticton Radio immediately after leaving the controlled area.
- VIII. Any driver who becomes lost or confused while driving in the controlled area shall immediately notify FSS Penticton Radio and stop their vehicle.

10.2.6 Equipment Failure

- I. If your vehicle or equipment fails, immediately inform Penticton Radio and request assistance.
- II. If your radio fails while in a controlled area, turn the vehicle to face the control tower and flash the headlights on and off, or switch between high and low beams. Pent
- III. Penticton Radio will respond using a light gun with the following signals:

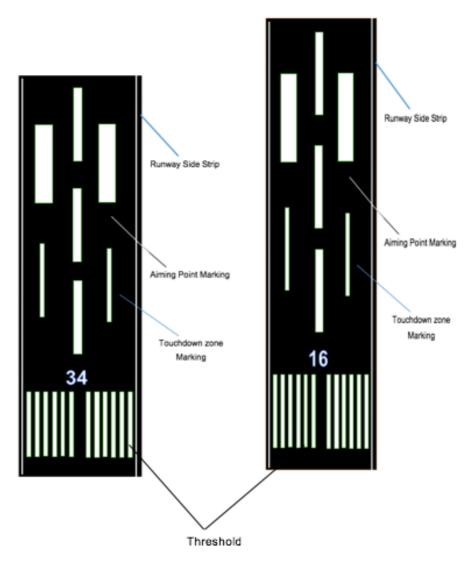
Lights	Instruction		
Flashing GREEN Light	PROCEED		
Steady RED Light	STOP – HOLD YOUR POSITION		
Flashing RED Light	VACATE THE RUNWAY		
Flashing White Light	RETURN TO YOUR STARTING POINT ON		
	THE AIRPORT		
Runway Lights Blinking	LEAVE THE RUNWAY IMMEDIATELY		

- IV. In the course of leaving the controlled area under light signals, the vehicle operator must hold short of each runway encountered and wait for permission to cross the runway with a Flashing GREEN light.
- V. If both the radio and the vehicle fail while in the controlled area, activate any flashing lights available and stay with the vehicle.

10.3 Markings

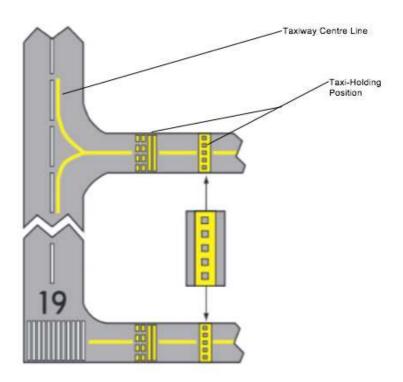
10.3.1 Runway Markings

- I. Runways area numbered in tens of degrees on a magnetic compass heading. The heading of the runway is painted near the threshold in white paint. The center of the runway is marked with a broken white line.
- II. The threshold is the beginning of the useable portion of the runway for landing aircraft. It is marked with a series of white lines running parallel with the length of the runway.
- III. A displaced threshold is set in from the end of the runway. The displaced threshold is marked with the series of white lines running parallel with length of the runway and series of white arrows pointing to a bar that indicates the beginning of the useable portion of the runway.



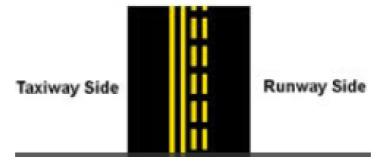
10.3.2 Taxiway Markings

- I. The center of the taxiway is marked with a solid yellow line for aircraft guidance.
- II. Taxiways with paved shoulders are marked with solid yellow lines to identify the edge of the taxiway.



10.3.3 Hold Lines

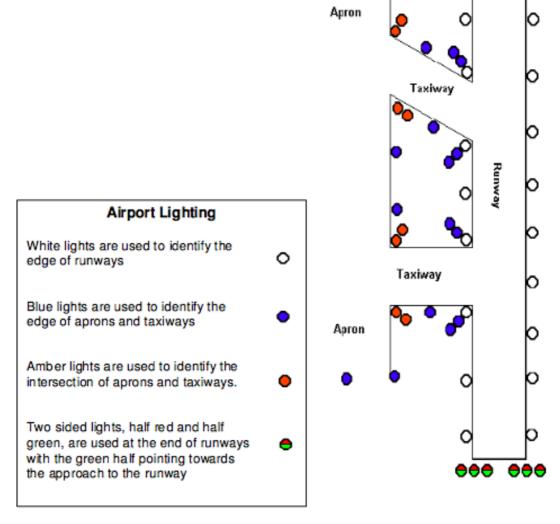
- I. Hold lines are marked with two solid and two broken yellow lines across the width of a taxiway. The broken lines are located closest to the runway.
- II. Vehicles and aircraft must stop behind the solid lines and not proceed unless and until permitted to do so by the FSS air traffic controller.



10.4 Controlled Area Lighting

Lighting within controlled areas allows for control of aircraft and vehicles. The following diagram gives an example of the couloir and sighting of lights that vehicles operators can expect to find in controlled areas.

Lights	Description		
White Light	Along edge of runways		
Blue Light	Along edge of aprons and taxiways		
Amber Light	Intersection of aprons and taxiways		
Two side light, half green and half red	At the end of the Runways with the green		
	half pointing towards the approach of the		
	runway		
Red	Obstruction Light, identify an obstruction or		
	an area of construction		



10.5 Controlled Area Signs

(a) Runway Destination Sign (White on Red)

- A taxi-holding position at a runway and carry message to "HOLD SHORT"
- Do not proceed beyond a Runway Designation Sign without the permission of FSS Penticton Radio



(b) Location Sign

 Primarily to aircraft but vehicle operation use to confirm their position on the airfield



(c) Direction Sign (Black on yellow)

- Indicate the direction to follow to reach certain positions or locations on the airfield
- Indicate the direction of travel to exits, aprons, terminal buildings, or other facilities named on the sign.



10.6 Radio Procedures

10.6.1 General Rules

- I. Restricted transmissions to authorized messages.
- II. Profane and offensive language is strictly prohibited and any person who transmits such language will be turned over to federal enforcement agencies.
- III. Any person who knowingly transmits a false distress signal will be reported to federal enforcement agencies.
- IV. Any person who violates these rules may also have their AVOP suspended or permanently revoked at the discretion of Penticton.
- V. The only vehicle call signs to be used are those assigned by Penticton. The radio call sign must be used in full, in every transmission.
- VI. Listen out first to ensure that you will interrupt another transmission.
- VII. Press the "talk" switch before speaking and wait until you are finished before letting it go.
- VIII. Speak plainly and distinctly in your natural conversation voice.
 - IX. Use standard words and phrases and standard airport terminology.

10.6.2 Phonetic Alphabet

The ICAO Phonetic Alphabet is used in radio communications at the Airport Syllables that are capitalized are emphasized in your speech.

Letter	Word	Pronounced	Letter	Word	Pronounced
Α	Alpha	AL fah	N	November	No VEM ber
В	Bravo	BRAHVOH	0	Oscar	OSS cah
С	Charlie	CHAR lee	Р	Papa	oah PAH
D	Delta	DELL ta	Q	Quebec	keh BECK
E	Echo	ECK oh	R	Romeo	ROW me oh
F	Foxtrot	FOKS trot	S	Sierra	see AIR rah
G	Golf	GOLF	Т	Tango	TANG go
Н	Hotel	hoh TELL	U	Uniform	YOU nee form
I	India	Indeeah	V	Victor	VIK tah
J	Juliet	JEW lee ETT	W	Whiskey	WISS key
K	Kilo	KEY loh	Х	X-Ray	ECKS ray
L	Lima	LEE mah	Y	Yankee	YANG kee
М	Mike	MIKE	Z	Zulu	ZOO loo

10.6.3 Numbers

(a) Numbers and pronounced are as follows:

Number	Pronounced	Number	Pronounced
0	ZERO	5	FIFE
1	WUN	6	SIKS
2	TOO	7	SEV en
3	TREE	8	AIT
4	FOW er	9	NIN er

- **(b)** Speak all numbers, except the thousand, by pronouncing each digit separately.
 - Add the word "thousand" after the digit to indicate a thousand
 - Add the word "decimal" in between digits to indicate a decimal

Number	Spoken As
10	ONE ZERO
50	FIVE ZERO
100	ONE ZERO ZERO
427	FOUR TWO SEVEN
15000	ONE FIVE THOUSND
121.9	ONE TWO ONE DECIMAL NINE

10.6.4 Standard Words & Phrases

Word or Phase	Meaning
AKNOWLEDGE	Let me know you have received and understood
	this message.
AFFIRMATIVE	Yes, or permission granted.
CONFIRM	My version is is that correct?
CORRECTION	An error has been made in this transmission (or
	message indicated). My correct version is

HOLD SHORT	Do not cross the identified runway. This instruction
(runway identifier)	must be read back to Penticton Radio to confirm
	vehicle operator understanding.
HOW DO YOU READ	Can you hear and understand me?
I SAY AGAIN	I will now repeat my last word (or sentence) for
	clarification.
NEGATIVE	No, or permission not granted, or THAT is not
	correct, or i do not agree
OVER	My transmission is ended and I expect a response
	from you. (Normally used only under poor
	communication conditions)
OUT	This conversation is ended and no response is
	expected. (Normally used only under poor
	communication conditions)
READ BACK	Repeat all, or the following part, of you last
	transmission.
	(Do not use the word "repeat".)
ROGER	I have received all or your last transmission
SAY AGAIN	Repeat all, or the following part, of your last
	transmission. (Do not use the word "Repeat".)
SPEAK SLOWER	(self-explanatory)
STANDBY	Wait and listen. I will call you again.
THAT IS CORRECT	(self-explanatory)
VERIFY	Check text with originator and send correct
	version.
THAT IS YOUR	(self-explanatory)
REQUEST/MESSAGE	

10.6.5 Conversing on the Radio

- **1.** Before calling on a radio, listen out to make sure that frequency is not in use.
- **2.** To establish communication with FSS Penticton Radio the vehicle operator will use the "call-up" procedure: This is
 - call sign of the station called
 - call sign of the station calling

Example:

Penticton Radio, Staff 42

- **3.** If you do not receive a response, wait a few moments to re-try.
- **4.** An acknowledgement means a transmission has been received and fully understood. If the instructions are not fully understood, the vehicle operator must request a repeat of the message.

Example:

Penticton Radio, Staff 42, Roger or Penticton Radio, Staff 42, Say Again

5. To end any communication, say the call sign of calling station.

Example:

Staff 42

- **6.** All Radio test should be done when you are unsure of your radio's performance. Tests must be short and not interfere with other transmission. Readability of transmissions will be reported on the following scale:
 - 1. Unreadable
 - 2. Readable now and then
 - 3. Readable but with difficulty
 - 4. Readable
 - 5. Perfectly readable

Example:

Vehicle: Penticton Radio, Staff 42, Radio Check

Penticton Radio: Read you Five

7. During communications with Penticton Radio, Standard phraseologies will be used to make transmissions more efficient and to avoid misunderstandings. The following are some examples of standard radio transmissions.

Authorization request and response:

Example:

Vehicle: Penticton Radio, Staff 42

Penticton Radio: Staff 42, Penticton Radio

Vehicle: Staff 42 on Apron, Request permission to proceed in

Runway 16/34 and All Taxiway for runway inspection

Penticton Radio: Staff 42, proceed on Runway 16/34 and All Taxiways for

runway inspection and report when Off

OR

Staff 42, Negative: Hold your position

8. Authorization request and response when accompanying a non-radio equipped vehicle:

Example:

Vehicle: Penticton Radio, Staff 42 Plus One

Penticton Radio: Staff 42 Plus One, Penticton Radio

Vehicle: Staff 42 Plus One on Apron, Request permission to

proceed on Runway 16/34 for runway inspection

Penticton Radio: Staff 42, proceed on Runway 16/34 for runway

inspection and report when Off

0R

Staff 42 Plus One, Negative: Hold your position

- 9. Emergency Response Position
 - In order to facilitate efficient positioning of vehicles during emergencies, Penticton Radio will use position letters with airport emergency vehicles. No other type of vehicle shall use position letters when requesting a location in the controlled area.
 - II. Driver of emergency vehicles shall read back the position letter assigned by Penticton Radio

11.0 AVOP SELF-TEST

Your written AVOP test will be based on a number of multiple choice questions taken from those contained in the following pages.

The correct answer for each question is provided in section 9.2 to check your own score and identify those parts of the manual which may need further study.

11.1 DEFINITIONS

- 1) Which of the following most accurately describes that part of an aerodrome intended to be used for the taking of and landing of aircraft and the movement of aircraft associated with taking off and landings, excluding aprons:
 - 1. Restricted Area
 - 2. Movement Area
 - 3. Airport Area
 - 4. Manoeuvring Area
- 2) Which of the following most accurately describes the beginning of that portion of the runway usable for landing?
 - 1. Taxiway
 - 2. Apron
 - 3. Threshold
 - 4. Button
- 3) An airport at which an air traffic control unit is provided is called a:
 - 1. Aerodrome
 - 2. Controlled Airport
 - 3. Flight Service Station
 - 4. Uncontrolled Airport
- 4) A road delineated by surface markings on an apron is called a:
 - 1. Designated Vehicle Corridor
 - 2. Aircraft Taxi Line
 - 3. Airport Service Road
 - 4. Aircraft Lead-in Line

11.2 LOCAL AIRPORT TRAFFIC DIRECTIVES

- 5) Local Airport Traffic Directives
 - 1. Apply at all Transport Canada airports
 - 2. Apply only to commercial vehicles
 - 3. Apply only at the airport where issued
 - 4. Apply only to government

- 6) Who has authority for the issuing, suspension or cancellation of permission to operate a vehicle on the airside of a Transport Canada operated airport?
 - 1. The Minister of Transport
 - 2. The Airport Manager
 - 3. The Officer in Charge of Security
 - 4. A Police Constable

11.3 RESPONSIBILITIES AND DUTIES

- 7) The manual which contains all regulations and procedures related to operation of a vehicle on the airside of a Transport Canada operated airport is:
 - 1. The General Radio Operators Handbook
 - 2. The Manual of Airport Traffic Directives (TP2633)
 - 3. The Provincial Drivers Handbook
 - 4. The Guide to Sport Car Driving on Runways and Taxiways
- 8) The person responsible for determining that his or her vehicle is operating satisfactory and has the required safety equipment and markings is:
 - 1. The owner of the vehicle
 - 2. The operator of the vehicle
 - 3. The police
 - 4. The Airport Manager
- 9) If you encounter a condition on an aircraft movement surface that is likely to cause damage to an aircraft, you should report it to:
 - 1. The airport mechanic or foreman
 - 2. Your immediate supervisor
 - 3. All airport operators
 - 4. The local security office
- 10) Who is responsible for reporting any vehicle malfunction or dangerous condition to the supervisor:
 - 1. Any other driver
 - 2. The base supervisor
 - 3. The mechanic
 - 4. The vehicle operator
- 11) Who is required to wear a Transport Canada Restricted Area Pass while on the airside of the airport?
 - 1. All persons on the airside of an airport
 - 2. Every person who is not aircrew or a ticketed passenger
 - 3. Aircrew and passengers
 - 4. Security staff only

- 12) How is a restricted area pass carried?
 - 1. On the outside of the clothing
 - 2. In your wallet
 - 3. In the vehicle glove compartment
 - 4. Not required to be carried
- 13) Who is responsible for reporting a person found on the airside of an airport who is not wearing a restricted area pass?
 - 1. The Security Officer
 - 2. The company chief representative
 - 3. Everyone who has a restricted area pass
 - 4. Any passengers
- 14) Who is responsible for ensuring that all designated gates to the airside of the airport are closed and locked?
 - 1. Every person who has authority to use a gate giving airside access
 - 2. Airport Security staff
 - 3. Airport Management staff
 - 4. Airline employees only
- 15) There are many types of vehicles and equipment used on the airside of an airport. Who is responsible for ensuring that a vehicle operator knows how to operate the equipment he or she uses?
 - 1. The licensing authority
 - 2. The vehicle operator
 - 3. The vehicle operator's employer
 - 4. The security office

11.4 VEHICLE OPERATING PROCEDURES - GENERAL

- 16) All vehicles operated on the airport manoeuvring areas, except those under escort, must be equipped with:
 - 1. Headlamps and tail lamps and reflective tape on both sides.
 - 2. A flashing beacon and radio on company frequency
 - 3. An approved rotating beacon lamp and radiotelephone on the appropriate radio frequency
 - 4. A reflective yellow material on the sides and striped black and yellow patches on the lower left and right corners of the vehicle

- 17) All vehicles with a cab while operating without escort on the airport aprons must be equipped with which of the following lights or markings?
 - 1. An amber flashing or rotating beacon, headlamps, parking and tail lamps
 - 2. Headlamps, tail lamps and reflective tape on both sides
 - 3. A two-way radio on the citizens band or company frequency
 - 4. None of the above
- 18) All non self-propelled equipment used on the airport aprons must be equipped with safety marking. Which of the following most accurately describes that marking?
 - Yellow reflective stripe along the sides, and black and yellow patches at the front and read lower corners
 - 2. Headlamps, tail lamps and a horn
 - 3. Both 1 and 2 above
 - 4. Any reflective material that can be seen from 300m at night
- 19) Which of the following traffic has first priority, (right of way) over all other traffic?
 - 1. Maintenance vehicles in the performance of their duties
 - 2. Emergency Vehicles
 - 3. Aircraft
 - 4. The vehicle approaching from the right
- 20) Which of the following examples most accurately describes the precaution which must be taken before operating a vehicle near radio navigational facilities?
 - 1. Ger permission from the Airport Manager first
 - 2. Drive a small vehicle so that the signal will be affected as little as possible
 - 3. Get approval from ground control or Flight Services
 - 4. Stay away from this equipment at all times
- 21) Smoking on apron area is:
 - 1. Permitted
 - 2. Permitted in vehicles only
 - 3. Prohibited both inside and outside vehicles
 - 4. Permitted if no aircraft are within 100m of the smoker
- 22) It is permissible to operated a vehicle in front of or directly behind an aircraft with engines running when:
 - 1. Not at any time
 - 2. The red, anti-collision beacon of the aircraft is turned off
 - 3. The marshaller wave's permission and the aircraft wheels are blocked (chocked).
 - 4. You have waited three minutes and the pilot has not indicated any intention to move the aircraft

- 23) When vehicles are parked in an approved parking space in the vicinity of Terminal Buildings or adjacent to heavy traffic areas, they should be:
 - 1. Left with beacon or flashing signal lamps in operation
 - 2. Backed into the parking area
 - 3. Driven in front first
 - 4. Left with engine running
- 24) Whenever an aircraft carrying distinguished visitors is at an airport, unauthorized personnel and vehicles are required to:
 - 1. Remain clear of the aircraft unless otherwise authorized by the Airport Manager
 - 2. Drive slowly past the area but do not take pictures
 - 3. Conduct normal vehicle movements but do not stare
 - 4. There is no restriction on vehicle movement
- 25) Vehicle operators must ensure that mud and gravel are not deposited on aircraft movement surfaces because:
 - 1. This material can cause damage to taxiing aircraft and engines
 - 2. Erosion could occur if too much dirt is removed from the runway edge
 - 3. The material can cause damage to aircraft in the air
 - 4. Dirty vehicles are not permitted on airport property
- 26) If a vehicle operator notices foreign materials (mud gravel solid objects) on an aircraft movement surface, the vehicle operator is required to:
 - 1. Report the nature and location of the material to the police
 - 2. Stop and remove the material
 - 3. Report the nature and location of the material to your supervisor
 - 4. No special requirements exist for vehicle operators
- 27) If an aircraft were to crash on the airport, unauthorized vehicle operators are to:
 - 1. Wait until Crash Firefighting and Rescue is over before entering the area
 - 2. Proceed immediately to the scene and render assistance
 - 3. Stay away from the area unless otherwise authorized by the Airport Manager
 - 4. Remain clear of the area unless otherwise authorized by the Airport Manager

11.5 OPERATION OF VEHICLES ON APRONS

- 28) The colour of pavement markings which outline vehicle corridors and security lines is:
 - 1. Green except in grassed areas
 - 2. Yellow
 - 3. White
 - 4. Red at intersections, white in other areas

- 29) The colour of pavement markings related to aircraft movement guidelines and aircraft lead-in lines is:
 - 1. Green except in grassed areas
 - 2. Yellow
 - 3. White
 - 4. Different for each class and type of aircraft
- 30) Select the description below which most accurately describes how vehicle corridors are indicated on paved aprons:
 - 1. Two solid white lines 7.5 m apart, centered by a single broken line
 - 2. Two broken yellow lines divided by a solid white line
 - 3. Two solid yellow lines 7.5 m apart, centered by a single broken line
 - 4. Two solid white lines 7.5 m apart, centered by a broken green line.
- 31) The purpose of an aircraft movement guideline is:
 - 1. To indicate where aircraft movement is permitted.
 - 2. To show where aircraft movement is not permitted.
 - 3. To delineate lanes on a taxiway for taxiway for movement.
 - 4. To serve as a center-of-aircraft guideline to aid aircraft travelling on taxiways and aprons.
- 32) Aircraft lead-in lines are provided to:
 - 1. Lead the aircraft onto the runway when landing
 - 2. Assist in the docking of an aircraft at a gate
 - 3. Indicate where aircraft are restricted on an apron
 - 4. Indicate the limits of vehicle corridors
- 33) What vehicles must stay within vehicle corridors when moving about the apron to or from operational stands, between operational stands, across aircraft taxi lines, etc.
 - 1. Emergency vehicles and vehicles towing aircraft
 - 2. All vehicles except emergency and airport maintenance vehicles in the performance of their duties
 - 3. Delivery vehicles except those under escort
 - 4. Airline service vehicles only
- 34) What vehicles are permitted to operate outside the vehicle corridors on aprons:
 - 1. Emergency vehicles and airport maintenance vehicles while operated in the performance of their duties.
 - 2. Anyone who wishes to pass at speed.
 - 3. No one except the Airport Manager
 - 4. Both 2 and 3 above

- 35) A vehicle operating in the right hand lane of a vehicle corridor has right of way over:
 - 1. Snow removal equipment engaged in snow removal
 - 2. Other vehicles entering the corridor
 - 3. Small aircraft only
 - 4. All other vehicle traffic
- 36) When operating a vehicle in a vehicle corridor on an apron, the operator may:
 - 1. Use the left lane to pass slower vehicles
 - 2. Leave the vehicle corridor to pass slower vehicles
 - 3. Drive in the left lane rather than tailgate another vehicle
 - 4. None of the above
- 37) Where vehicle corridors intersect, the vehicle which has the right of way is:
 - 1. The vehicle on the left
 - 2. The vehicle entering the corridor from the right
 - 3. The vehicle travelling at the greater speed
 - 4. The vehicle on the right
- 38) You are operating a vehicle in a vehicle corridor which passes behind an aircraft with engines running, you are required to:
 - 1. Stop well clear of the aircraft and wait until the aircraft has been backed out or the marshaller clears you to pass
 - 2. Pass behind the aircraft as quickly as possible
 - 3. Leave the vehicle corridor and go around the aircraft at a minimum distance of 15 m.
 - 4. Turn your vehicle around and return to your starting point on the apron
- 39) Vehicle Corridors are:
 - 1. Required to be used at all times regardless of circumstances
 - 2. Not guaranteed safe routes and caution must always be exercised to avoid parked and moving aircraft
 - 3. Guaranteed safe routes for vehicles under all circumstances
 - 4. Provided to ensure the safe and orderly movement of aircraft.
- 40) Areas within Operational Stands:
 - 1. Are provided for the servicing and maintenance of vehicles
 - 2. Provided for free movement of vehicles performing their duties related to aircraft
 - 3. Are defined as areas where vehicle flashing lamps or beacon lamps must always be turned on
 - 4. Are provided for the refuelling of aircraft only

- 41) Vehicles operators must always exercise caution:
 - 1. When vehicle corridor markings are obscured due to faded paint, snow cover or any other reason
 - 2. When entering and leaving the active apron area and entering and leaving vehicle corridors.
 - 3. When operating in front of or behind aircraft with engines running
 - 4. When any of the conditions indicated above are encountered.
- 42) Where vehicle roads or corridors intersect, the vehicle which has the right of way is:
 - 1. The largest vehicle.
 - 2. The vehicle on the left.
 - 3. The vehicle on the right.
 - 4. The vehicle with a cab and flashing or rotating beacon
- 43) When not in use, Apron Service Vehicles may be parked:
 - 1. On the apron where space is available
 - 2. In any apron area not used for the movement of aircraft
 - 3. In parking areas designated by the Airport Manager only.
 - 4. As in one and two above if overflow parking is only provided on the groundside of the airport and assigned space on the apron is full.
- 44) All non-self-propelled equipment used on an apron is required to be marked with reflective material. Which of the following most accurately describes how this equipment must be marked:
 - 1. A yellow stripe on the front and back the full width of the vehicle
 - 2. Black and yellow patches on the sides and a yellow stripe across the end.
 - 3. One and two (above), but not four (below)
 - 4. A solid yellow stripe on the sides and black and yellow patches at the front and rear lower corners.

11.6 MANEOUVERING AREAS - CONTROLLED AIRPORTS

- 45) Three documents must be carried at all times when operating a vehicle without escort on the manoeuvring area of a controlled airport. Which of the following most accurately describes these documents?
 - 1. Provincial driver's license, AVOP, security passes.
 - 2. Security Pass, AVOP, Restricted Radio Telephone Operators Certificate
 - 3. Security Pass, parking permit, radio operators hand book.
 - 4. All of the above.
- 46) At controlled airports, the control tower is responsible for directing which of the following traffic:
 - 1. Vehicles and pedestrians on aprons
 - 2. Aircraft, vehicles and pedestrians on manoeuvring areas
 - 3. All vehicles, aircraft and pedestrians on the airport
 - 4. Aircraft on manoeuvring areas but not vehicles

- 47) When required to operate a vehicle in the manoeuvring area of a controlled airport, the vehicle operator must first:
 - 1. Notify the Airport Manager
 - 2. Consult his/her supervisor
 - 3. Contact the ground controller by radio for permission
 - 4. Contact the apron management by radio for permission
- 48) The instructions of a ground controller:
 - 1. Apply to vehicles on runways but not taxiways
 - 2. Must be obeyed at all times
 - 3. Are a guide only for vehicle operator information
 - 4. Apply to aircraft only
- 49) Standard procedures for a vehicle operator who has received instructions from a ground controller is to:
 - Acknowledge all instructions as understood or request that the instructions be repeated.
 - 2. Proceed immediately according to instructions heard.
 - 3. Always ask for a repeat of the instructions to ensure they are fully understood.
 - 4. Do nothing if all instructions are not fully understood.
- 50) When instructed by a ground controller to proceed into the manoeuvring area only along a specified route, the vehicle operator has the following options if he/she chooses to proceed:
 - 1. Proceed as originally planned regardless of instructions from ground control
 - 2. Proceed as directed or do not enter the manoeuvring area
 - 3. Request the reason why you may not use an alternate route
 - 4. Drive on the unpaved edge of the runway to reach your destination
- 51) When a vehicle is towing an aircraft on the manoeuvring areas of an airport, the vehicle operator must:
 - 1. Ensure that the towing vehicle is diesel powered only
 - 2. Maintain radio contact with ground control
 - 3. Refrain from further radio contact with the tower after towing commences
 - 4. Maintain radio contact with the pilot only.
- 52) When is it permissible to operate a vehicle on taxiways or runways without first receiving permission by radio from ground control?
 - 1. When radio contact with ground control cannot be made due to interference
 - 2. Whenever you are unable to get permission by radio within a reasonably short period of time
 - 3. Whenever use of part of the runway or taxiway is the most direct to your destination.
 - 4. When the taxiway or runway has been designated to be used in this manner in the Local Airport Traffic Directives.

- 53) Which of the following should be included in a request to operate a vehicle in the manoeuvring area?
 - 1. Vehicle identification and location
 - 2. Requested destination and route within the manoeuvring area
 - 3. Duration of time and purpose for being in the manoeuvring area
 - 4. All of the above
- 54) When told to "Hold Short" or when awaiting permission to cross a runway, what must the vehicle operator do?
 - 1. Stop at least 45 m from the nearest edge of the runway or behind the solid yellow lines painted on the taxiway and wait for permission from ground control to proceed.
 - 2. Stop at least 45 m from the nearest edge of the runway or behind the solid yellow line on the taxiway. Look both to the right and left and proceed only if aircraft are not landing or taking off.
 - 3. Remain out of the manoeuvring area and do not proceed until the ground controller gives permission.
 - 4. Keep all future transmissions as brief as possible.

55) Which of the following illustrations most accurately illustrates how yellow hold line painted on a taxiway?						
1. Instrument Runway	Non- Instrument Runway					

2.	Instrument Runway	Non- Instrun	nent Runway - -
		 	-
3.	Instrument Runway	Non- Instrun 	nent Runway
		<u> </u>	
4.	Instrument Runway	Non- Instrun	nent Runway

- 56) Which of the following is used to indicate the "HOLD" position on a taxiway:
 - 1. A red sign to the side of the taxiway bearing the word "HOLD".
 - 2. A solid and broken yellow line across the width of the taxiway with the broken line closest to the runway.
 - 3. Two solid and two broken yellow lines across the width of the taxiway with the broken lines closet to the runway.
 - 4. All of the above.
- 57) The colour of "HOLD" lines is:
 - 1. White
 - 2. Green
 - 3. Yellow
 - 4. Red
- 58) As soon as a vehicle has left the runway of a controlled airport, the vehicle airport operator must:
 - 1. Turn off the rotating beacon light
 - 2. Reduce speed and use a lower gear.
 - 3. Stop and hold short of the apron until given permission to proceed
 - 4. Advise the ground controller that you are off the runway and give your location.
- 59) When instructed by the ground controller to "Leave (or) Get Off the Runway", the vehicle operator must:
 - 1. Acknowledge the instruction
 - 2. Proceed to a holding position or to a safe position off to the side of the runway at least 45 m from the nearest runway edge.
 - 3. Inform the ground controller when off the runway and give your exact location.
 - 4. All of the above.
- 60) When it is permissible to operate closer 45 m from the edge of a runway?
 - 1. When the work to be performed is closer than 45 m from the edge of the runway
 - 2. During grass cutting only
 - 3. Only on non-instrument runways
 - 4. When the ground controller has given permission
- 61) You are working in the manoeuvring area and your vehicle breaks down. You are unable to move the vehicle under its own power. What should you do?
 - 1. Leave your vehicle with the lights on and walk to where you can get assistance.
 - 2. Wait until your shift ends and go home.
 - 3. Try to repair the vehicle on your own
 - 4. Notify the ground controller of your location and difficulty and ask for assistance and stay with the vehicle until help arrives.

- 62) Vehicle Operators must monitor the ground control frequency:
 - 1. When in the manoeuvring area
 - 2. At all times and in all locations of the airport
 - 3. Only when on the apron
 - 4. When operating on aprons and service roads
- 63) A vehicle which is not equipped with a radio on the ground control frequency may be operated in the manoeuvring area when:
 - 1. The vehicle weight exceeds (14,000 lbs) 6,500 kg.
 - 2. A radio-equipped vehicle is not available.
 - 3. It is under escort of a radio-equipped vehicle operated by a qualified employee responsible for requesting and acknowledging all ground control instructions
 - 4. No aircraft are scheduled to land or take off from the airport for at least thirty minutes.
- 64) You are operating a radio-equipped vehicle in the manoeuvring area and your radio breaks down. What should you do?
 - 1. Return to a non-manoeuvring area by the shortest route for repairs
 - 2. Try to repair the radio and if this fails, sound the horn until someone comes to your assistance
 - 3. Wait until the next aircraft lands and follow it back to the apron
 - 4. Turn your vehicle to face the control tower and flash your headlights on and off. Wait for the controller to respond using light signals.
- 65) A flashing green light signal from the control tower means:
 - 1. Stop, hold you position.
 - 2. Proceed
 - 3. Leave/vacate the runway
 - 4. Return to starting point of the airport
- 66) A steady red light signal from the control tower means:
 - 1. Proceed
 - 2. Stop, hold you position
 - 3. Leave / vacate the runway
 - 4. Return to starting point on the airport
- 67) A flashing red light signal from the control tower means:
 - 1. Stop, hold your position.
 - 2. Return to starting point on the airport
 - 3. Leave / vacate the runway.
 - 4. Proceed

- 68) A flashing white light from the control tower means:
 - 1. Proceed.
 - 2. Return to starting point on the airport
 - 3. Stop, hold your position
 - 4. Leave / vacate the runway
- 69) A vehicle with a disabled radio has received ground control instruction by light signal to "return to starting point on the airport". To get there, the vehicle must cross a runway to reach the apron. The vehicle operator is required to:
 - 1. Proceed without stopping until off the manoeuvring area.
 - 2. Sound the horn twice before crossing the runway.
 - 3. Hold short of the runway and check for arriving or departing aircraft before proceeding across the runway.
 - 4. Hold short of the runway and wait for a green flashing light from the control tower before proceeding.
- 70) The blinking on and off of runway lights means:
 - 1. Identify yourself to the tower by turning your beacon light off.
 - 2. Leave the runway immediately
 - 3. The controller wants you to drive faster.
 - 4. The runway lights are being tested.

11.7 MANOEUVERING AREAS - UNCONTROLLED AIRPORTS WITH FSS

- 71) An airport is considered to be uncontrolled when:
 - 1. There is no control tower at the airport or the existing control tower is not staffed (closed for the day).
 - 2. There is no control tower or Flight Service Station at the airport.
 - 3. The airport is served is a Flight Service Station which is located at another airport.
 - 4. All of the above.
- 72) At uncontrolled airports, vehicle advisory for the airport manoeuvring areas may be provided by radio from:
 - 1. The Flight Service Station
 - 2. The maintenance garage
 - 3. The Airport Manager's office
 - 4. A control tower at a remotely located airport.
- 73) Vehicle operators are required to respond to a Flight Service Station advisory:
 - 1. If aircraft are currently using the runways and taxiways
 - 2. In the same way as if were issued from ground control.
 - 3. In the majority of cases but not as strictly as for ground control.
 - 4. Not at all.

- 74) Vehicles on the manoeuvring area of uncontrolled airports with a Flight Service Station must be operated by a person with two valid documents called:
 - 1. A provincial driver's license and a valid airside parking permit.
 - 2. A regionally issued vehicle operators permit for all airports in the Region and a provincial or territorial driver's license
 - 3. An Airside Vehicle Operators Permit issued or endorsed for the specific airport and a Restricted Radio Telephone Operators Certificate (or equivalent).
 - 4. A Restricted Radio Telephone Operators (or equivalent) Certificate and a Vehicle Ownership License.
- 75) At uncontrolled airports with a Flight Service Station, vehicles may operate on or near manoeuvring areas only according to:
 - 1. Instructions issued by radio from the Airport Manager
 - 2. Instructions issued by the ground controller
 - 3. Instructions issued by the Flight Service Station
 - 4. Instructions issued by the Airfield Maintenance Foreman.
- 76) A vehicle advisory from a Flight Service Station may indicate that there is "no reported traffic". What does this term mean?
 - 1. No aircraft traffic has been reported to the Flight Service Station but aircraft without a radio may be present.
 - 2. There are no aircraft in the area of concern to the vehicle operator.
 - 3. Aircraft are known to be operating to and from the airport but are not big enough to brother reporting them to the vehicle operator.
 - 4. Secret military flights are operating into the airport which cannot be reported to the vehicle operator.
- 77) At all uncontrolled airports, every vehicle operator, before driging onto or crossing the runway, must:
 - 1. Check his brakes to ensure the vehicle will stop short of the "HOLD" position on taxiways.
 - 2. Ensure that all cigarettes and other smoking material are extinguished.
 - 3. Flash the vehicle headlights on and off three times to notify the Flight Service Station of his intentions to cross the runway.
 - 4. Visually check to ensure that aircraft are not approaching or departing using the runway.
- 78) At uncontrolled airports with a Flight Service Station, a vehicle operator may not proceed into the manoeuvring area before:
 - 1. Receiving traffic advisory from the Flight Service Station and acknowledging all information received as understood.
 - 2. Checking the vehicle for safety and fastening the seatbelt.
 - 3. Turning on all vehicle lights.
 - 4. Checking first with the Flight Service Station to ensure that the vehicle has been registered with the Flight Service Station

- 79) If all vehicle advisory information from a Flight Service Station is not fully understood, the vehicle operator must:
 - 1. Assume that he has enough knowledge of the airport to proceed in safety based on that portion of the instructions that he heard.
 - 2. Assume that the Flight Service Station operator is too busy to ask for a repeat of the message ("say again") and proceed with caution.
 - 3. Ask the Flight Service Station to repeat ("say again") the message until it is understood and confirmed ("Roger") to the Flight Service Station.
 - 4. Report the problem of communication to your supervisor and refuse to enter the manoeuvring area.
- 80) A radio request from a vehicle to a Flight Service Station to operate on or near the manoeuvring area must include which of following information?
 - 1. The vehicle identification and present location.
 - 2. The specific destination in the manoeuvring area where you wish to operate.
 - 3. The time that you will be in the manoeuvring area and purpose for being there.
 - 4. All of the information listed above.
- 81) Hold lines painted on a taxiway always have the broken line:
 - 1. Closest to the runway
 - 2. Furthest from the runway
 - 3. Between solid yellow lines
 - 4. In pairs.
- 82) When instructed to leave the runway, the vehicle operator shall:
 - 1. Acknowledge the instruction.
 - 2. Proceed to the nearest taxiway hold position or to a safe position at least 45 m to the side of the runway.
 - 3. Advise ground advisory when are off the runway and give your exact location.
 - 4. All of the above.
- 83) When is it permissible to operate a vehicle within 45 m of a runway edge at an airport with a Flight Service Station?
 - 1. When your work requires you to be there and permission has been given by the Flight Service Station to operate in that area.
 - 2. When the ground is dry and the vehicle will not sink into the soft shoulder.
 - 3. Whenever required in order to perform necessary maintenance.
 - 4. Any time if you ensure that the vehicle's rotating beacon is on at all times.

- 84) What are you required to do if your vehicle breaks down while in the manoeuvring area at an airport with a Flight Service Station?
 - 1. Abandon the vehicle and walk as quickly as possible to the Flight Service Station to advise the location of the vehicle.
 - 2. Stay in the vehicle and hope that aircraft see the rotating beacon in time to avoid collision.
 - 3. Complain very strongly to vehicle maintenance staff for not maintaining the equipment.
 - 4. Immediately notify the Flight Service Station and ask for assistance.
- 85) When leaving the manoeuvring area, every vehicle operator is required to:
 - 1. Proceed to the Flight Service Station and sound the horn to indicate you are no longer in the manoeuvring area.
 - 2. Advise the Flight Service Station by radio when you are off the manoeuvring area.
 - 3. Proceed directly to the vehicle fueling location and refill the tank.
 - 4. Take a coffee break.
- 86) When vehicles are operating in a group or fleet in the manoeuvring area under guidance of one radio-equipped vehicle, the operator of the radio-equipped vehicle is responsible to:
 - 1. Display a red flag on the right front fender to indicate that the vehicle is radioequipped.
 - 2. Display red flags on all vehicles in the group which are not radio equipped.
 - 3. Request and acknowledge all Flight Service Station advisories for all vehicles in the group.
 - 4. Ensure that all the operators of vehicles without a radio know the meaning of light signals used to direct vehicles during radio failure at controlled airports.
- 87) If at an uncontrolled airport your radio fails while you are in the manoeuvring area, you must:
 - 1. Stay where you are and sound the horn repeatedly until someone is sent to escort you out of the area.
 - 2. Leave the vehicle and proceed directly to the Flight Service Station for assistance.
 - 3. Wait until an aircraft lands and then follow it as it taxies out of the manoeuvring area.
 - 4. Leave the manoeuvring area immediately and advise the Flight Service Station of your action as soon as possible by telephone or other appropriate means.
- 88) When an aircraft makes a low pass over the runway, all vehicle operators on the runway must:
 - 1. Wave vigorously to show the pilot where you are.
 - 2. Proceed with your duties until you receive direct instructions to leave the manoeuvring area.
 - 3. Park your vehicle parallel to the runway edge with headlights on and facing the direction of aircraft approach.
 - 4. Leave the runway immediately.

11.8 MANOEUVERING AREAS – UNCONTROLLED AIRPORTS WITHOUT FSS

- 89) At airports where vehicle radios are not required, before entering the manoeuvring area, every vehicle operator must:
 - 1. Drive quickly to ensure the vehicle is on the runway for the shortest period of time.
 - 2. Check the runway visually to ensure there are no aircraft arriving or departing.
 - 3. Wait until an aircraft makes a low pass and then proceed onto the runway.
 - 4. Always travel in company of a second vehicle so that both ends of the runway can be watched for approaching aircraft at the same time.
- 90) At controlled airports without a Flight Service Station, the vehicle operator must not:
 - 1. Interfere with wild animals on the runway unless they have a license to do so from the appropriate authority.
 - 2. Perform snow removal or other maintenance during hours of darkness.
 - 3. Drive in excess of the posted speed limit.
 - 4. Leave the vehicle unattended on the manoeuvring area.
- 91) At uncontrolled airports without a Flight Service Station, vehicle operators must, while in the manoeuvring area:
 - 1. Keep a lookout for arriving or departing aircraft.
 - 2. Leave the runway as soon as aircraft appear.
 - 3. Leave the runway if an aircraft makes a low pass.
 - 4. Be alert at all times and do all of the foregoing

11.9 AIRSIDE PAVEMENT MARKINGS, LIGHTS AND SIGNS

- 92) The colour of a "Hold" sign is:
 - 1. Green with white letters
 - 2. White with black letters.
 - 3. Red with white letters.
 - 4. Yellow with black letters.
- 93) Manoeuvring surfaces at an airport that are designated by a letter are:
 - 1. Aprons
 - 2. Runways
 - 3. Service Roads.
 - 4. Taxiways.
- 94) Runway edge lights are what colour:
 - 1. Red.
 - 2. White.
 - 3. Blue.
 - 4. Amber (Yellow).

- 95) Apron and taxiway edge lights are what colour:
 - 1. Red.
 - 2. White.
 - 3. Amber (Yellow).
 - 4. Blue.
- 96) Lights used to indicate the intersection of a taxiway and an apron are what colour:
 - 1. Amber (Yellow).
 - 2. White.
 - 3. Red.
 - 4. Green.
- 97) Signs used to identify the location of various surfaces and giving direction to various movement area locations may be which of the following colours:
 - 1. White with black or Green with yellow numbers/letters.
 - 2. Green with white or Yellow with black numbers/letters.
 - 3. Red with white or Green with white letters/numbers.
 - 4. Blue with white or White with black letters/numbers.
- 98) Two coloured (double feared) threshold marker lights are what colours:
 - 1. Blue and white.
 - 2. Red and white.
 - 3. Red and green.
 - 4. Green and amber.
- 99) The colour of threshold marker lights which face towards the runway is which of the following colours:
 - 1. White.
 - 2. Green.
 - 3. Amber.
 - 4. Red.
- 100) The arrival and departure point on an airport for use by helicopters is identified by which of the following pavement markings:
 - 1. A large, white, "H" within a white circle or square or a yellow triangle.
 - 2. A silhouette of a helicopter within a white circle.
 - 3. A yellow "H" within two concentric, yellow circles.
 - 4. A large, white "H" within a white cross.
- 101) The pavement marking which indicates an apron location reserved for the parking of helicopters is:
 - 1. A yellow triangle.
 - 2. A white "H" within a yellow triangle.
 - 3. A yellow "H" within two, concentric, yellow circles.
 - 4. None of the above.

11.10 RADIO TELEPHONE PROCEDURES

11.10.1 RADIO TELEPHONE AND VOICE TECHNIQUES

- 102) Microphones which have background noise cancelling capability should be held how close to the lips?
 - 1. 6.5 centimeters in front of mouth.
 - 2. As close to the lips as possible.
 - 3. 2.4 centimeters in front of mouth.
 - 4. 6.5 inches from the lips.
- 103) Most microphones which are <u>not</u> background noise-cancelling should be held how far in front of the mouth?
 - 1. 6.5 centimeters in front of the mouth.
 - 2. One meter in front of the mouth.
 - 3. Against the lips.
 - 4. To the side of but near the mouth.
- 104) The "press to talk" switch on a microphone should be:
 - 1. Clicked on and off between words or phrases while you think about what you want to say.
 - 2. Left open after you complete your transmission to show you are waiting for a reply.
 - 3. Depressed before beginning to speak and kept depressed for the full transmission.
 - 4. Clicked on and off rapidly to get the attention of the ground controller or FSS as appropriate.
- 105) When speaking into a microphone, you should always:
 - 1. Speak plainly and distinctly without artificially accentuating words or running words together.
 - 2. Speak rapidly and loudly to ensure that the message received is loud enough and does not take up too much time.
 - 3. Accentuate every syllable of every word in a loud clear voice and slowly so that nothing is missed by ground control or ground advisory.
 - 4. Make sure that aircraft are listening so that everyone gets the message the first time.
- 106) A radio "blind spot" is:
 - 1. Any place on the airport where radio signal to or from a vehicle cannot be received by the control tower or Flight Service Station or the vehicle.
 - 2. Any place where the vehicle operator cannot see the control tower or Flight Service Station.
 - 3. Any place in a vehicle where the vehicle operator cannot see the vehicle radio.
 - 4. A hole in the ionosphere through which radio signals will not pass.

- 107) When phonetics is required for clarify in radiotelephone communications, what alphabet must be used?
 - 1. The Standard English (French) Alphabet.
 - 2. The Radio Technician's Alphabet.
 - 3. The ICAO Phonetic Alphabet.
 - 4. The Ground Controller's Alphabet for Vehicle Communication in Canada.

11.10.2 ICAO PHONETIC ALPHABET AND PRONUNCIATION OF NUMBERS

108) Circle the correct phonetic word for each of the following letters of the alphabet:

Apple	Australia	Alpha	Able
Boston	Bravo	Baker	Baron
Canada	Charlie	Cocoa	China
Delta	Doughnut	Datsun	Dog
Equator	Easy	Echo	Empty
Fox	Frigid	Foxtrot	Fan
Golf	Golden	Gantry	Girl
Handle	How	Hostel	Hotel
Income	India	Item	Ink
Juliet	John	Jig	January
King	Kangaroo	Kilometer	Kilo
Love	Liter	Lima	Lost
Mary	Mexico	Matron	Mike
Neilson	November	Nugget	Nancy
Oslo	Oboe	October	Oscar
Papa	Police	Peter	Poland
Quart	Quebec	Quick	Queen
Romeo	Rose	Roger	Rat
Sugar	Sam	Sierra	Spitfire
Tang	Taxi	Tear	Tango
Uncle	Uniform	Unit	Under
Victor	Vision	Vapour	Vent
Walter	Whiskey	Wing	West
Xebec	Xanadu	X-Ray	Xerox
Yak	Young	Yoko	Yankee
Zébra	Zipper	Zip	Zulu
	Canada Delta Equator Fox Golf Handle Income Juliet King Love Mary Neilson Oslo Papa Quart Romeo Sugar Tang Uncle Victor Walter Xebec Yak	Boston Bravo Canada Charlie Delta Doughnut Equator Easy Fox Frigid Golf Golden Handle How Income India Juliet John King Kangaroo Love Liter Mary Mexico Neilson November Oslo Oboe Papa Police Quart Quebec Romeo Rose Sugar Sam Tang Taxi Uncle Uniform Victor Vision Walter Whiskey Xebec Xanadu Yak Young	Boston Bravo Baker Canada Charlie Cocoa Delta Doughnut Datsun Equator Easy Echo Fox Frigid Foxtrot Golf Golden Gantry Handle How Hostel Income India Item Juliet John Jig King Kangaroo Kilometer Love Liter Lima Mary Mexico Matron Neilson November Nugget Oslo Oboe October Papa Police Peter Quart Quebec Quick Romeo Rose Roger Sugar Sam Sierra Tang Taxi Tear Uncle Uniform Unit Victor Vision Vapour Walter Whiskey Wing Xebec Xanadu X-Ray Yak Young Yoko

Which of the following is the correct way to speak numbers:

- 109) 2330
 - 1. Twenty three, thirty
 - 2. Two thousand, three hundred and thirty
 - 3. Two three three zero
 - 4. Two thirty three zero
- 110) 583
 - 1. Five hundred and eighty-three.
 - 2. Five eighty three.
 - 3. Fifty eight three.
 - 4. Five eight three.
- 111) <u>12000</u>
 - 1. One two thousand.
 - 2. Twelve thousand
 - 3. One-two-zero-zero
 - 4. Twelve-zero-zero

11.10.3 STANDARD PROCEDURES AND WORDS

- 112) In the space opposite to the following words and phrases, enter the number which corresponds to the correct meaning listed below:
 - 1. Repeat all, or the following part, of your last transmission.
 - 2. Wait and listen. I will call you again.
 - 3. Let me know that you have received and understood the message.
 - 4. My transmission is ended and I expect a response from you.
 - 5. Yes, or permission granted.
 - 6. Check text with originator and send correct version.
 - 7. I will now repeat my last word (sentence) for clarification.
 - 8. Repeat all, or the specified part, of this message back exactly as received.
 - 9. My version is...is that correct.
 - 10. I have received all of your last transmission.
 - 11. An error has been made in this transmission. My correct verision is.....
 - 12. This conversation is ended and no response is expected.
 - 13. No, or permission not granted, or that is not correct, or I do not agree.
 - 14. Can you hear and understand me?

Acknowledge	Affirmative
Confirm	Correction
Verify	How do you read?
I say again	Negative
Over	Out
Read back_	Roger
Say again	Standby

11.10.4 CALL UP PROCEDURES

- 113) Before making a radio "call-up", the vehicle operator must:
 - 1. Ask for a radio check.
 - 2. Click the switch to let others know you intention.
 - 3. Turn up the volume of the transmitter to maximum.
 - 4. Listen out to make sure the frequency is not in use.
- 114) A "call-up" consist of:
 - 1. The call sign of the station called and the call sign of the station from which the call is made.
 - 2. The name number (callsign) of your vehicle and your request.
 - 3. The station called and your request.
 - 4. No special procedures have been developed for radio "call up".
- 115) If a vehicle operator does not receive a response to a call up, he/she should:
 - 1. Repeat the call until he gets an answer.
 - 2. Wait a reasonable time and call again.
 - 3. Try a different frequency.
 - 4. Proceed without approval.
- 116) An "acknowledgement" means a message or instruction transmitted by radio has been received and fully understood. Vehicle operators entering or operating within the manoeuvring area should always:
 - 1. Avoid requesting a repeat of the message because it requires too much radio transmission time.
 - 2. Be careful if the message refers to runway crossing but do not be concerned if only taxiways are involved.
 - 3. Never acknowledge a message or instruction unless it is received and fully understood.
 - 4. Respond according to past procedures of the message is not clear or fully understood.

11.10.5 ACKNOWLEDGEMENTS

- 117) When ground control or Flight Service transmits directions or instructions that are not fully understood or not clearly transmitted, the vehicle operator must:
 - 1. Assume that the portion of the message heard is adequate and proceed.
 - 2. Guess at what is meant on the basis of past experience.
 - 3. Request a repeat of the message and fully understand it before proceeding.
 - 4. Consult the manual for possible meanings for what was heard.

- 118) When ground control or Flight Service Station transmits directions or instructions which are heard clearly and fully understood, the vehicle operator must:
 - 1. Acknowledge the directions or instructions and then proceed.
 - 2. Proceed immediately according to direction / instructions.
 - 3. Ignore the direction / instruction if not suited to your needs.
 - 4. Call back to ensure that the instructions given were exactly what was wanted / intended.

11.10.6 END OF TRANSMISSION

- 119) When a vehicle operator wishes to end a radio transmission, the proper procedure is:
 - 1. Say the name of the station called and the vehicle call sign.
 - 2. Stop transmitting.
 - 3. Say the vehicle call sign.
 - 4. There is no standard procedure.

11.10.7 STANDARD PHRASEOLOGIES

- 120) Standard phraseology is used in radio communication with ground control and Flight Services. What is the purpose of using these standard ways of saying things.
 - 1. It is a habit of the old timers that is hard to change.
 - 2. Because this method of communication has always been used.
 - 3. A better system of spoken communication has not been developed.
 - 4. To transmit clear instruction and messages efficiently (in the shortest time) with the fewst words and without misunderstanding.
- 121) Staff 27 is providing escort for two other vehicles which are not radio equipped. Staff 27 is required to identify himself / herself of ground control as:
 - 1. Staff 27 with grader and truck.
 - 2. Staff 27 escorting two other vehicles.
 - 3. Staff 27 plus 2.
 - 4. Staff 27.
- 122) What is the correct meaning of the following ground control, instruction to a vehicle? "Proceed to Runway 14 32 inspection, advise when off the runway."
 - 1. You are authorized to go to runway 14-32 but not enter on to it. You are to advise ground control when you are off the runway.
 - 2. You are directed to inspect runway 14-32 and must advise ground control if you drive off the edge of the runway.
 - 3. You may not inspect runway 14-32 and must confirm to ground control that you are off the runway at this time.
 - 4. You are authorized to drive on runway 14-32 for the purpose of inspecting that runway and are required to advise ground control by radio when you have left the runway, giving your location at that time.

- 123) What is the correct meaning of the following ground control instructions: "hold short runway 32".
 - 1. Stop and hold your vehicle 45 m from the nearest edge of runway 32 or behind the solid yellow line on a taxiway so marked until given permission to cross.
 - 2. Stop and hold your vehicle at the edge of runway 32 and await permission to cross.
 - 3. Stop and hold your vehicle at the taxiway leading to runway 32 and await further instructions.
 - 4. The term "hold short" applies only to aircraft and need not be obeyed by vehicle operators.
- 124) Which of the following call up to ground control is correct?
 - 1. (Site name) Ground, this is truck eighty-eight.
 - 2. (Site name) Ground, staff twenty-nine.
 - 3. (Site name) Ground, truck eight three.
 - 4. (Site name) Ground, this is staff six eight.

11.10.8 RADIO TEST PROCEDURES

- 125) On-the-air radio tests, when necessary, should be:
 - 1. Conducted only by a supervisor.
 - 2. At least three (3) minutes long to ensure they need not be repeated.
 - 3. Should be short (not more than seconds).
 - 4. Conducted using the ICAO phonetic alphabet only.
- 126) The readability of a radio signal may be reported numerically. A reported readability of three (3) means:
 - 1. Perfectly readable.
 - 2. Readable but with difficulty.
 - 3. Unreadable.
 - 4. Readable.
- 127) The readability of a radio signal may be reported numerically. A reported readability of four means:
 - 1. Readable
 - 2. Unreadable
 - 3. Readable but with difficulty.
 - 4. Perfectly readable.
- 128) The readability of a radio signal may be reported numerically. A reported readability of five (5) means:
 - 1. Readable now and then.
 - 2. Perfectly readable.
 - 3. Unreadable.
 - 4. Readable but with difficulty.

- 129) The readability of a radio signal may be reported numerically. A reported readability of one (1) means:
 - 1. Perfectly readable.
 - 2. Readable now and then.
 - 3. Readable but with difficulty.
 - 4. Unreadable.

11.11 AVOP NATIONAL TEST ANSWERS

Listed below are the correct answers to questions in this section.

- 1) 4
- 2) 3
- 3) 2
- 4) 1
- 5) 3
- 6) 2
- 7) 2
- 8) 2
- 9) 2
- 10) 4
- 11) 2
- 12) 1
- 13) 3
- 14) 1
- 15) 3
- 16) 3
- 17) 1 18) 1
- 19) 3
- 20) 3
- 21) 3
- 22) 3
- 23) 2
- 24) 1 25) 1
- 26) 3
- 27) 4
- 28) 3
- 29) 2
- 30) 1
- 31) 4
- 32) 2
- 33) 2 34) 1
- 35)2
- 36) 4
- 37) 4
- 38) 1
- 39) 2
- 40) 2

- 41) 4
- 42) 3
- 43) 3
- 44) 4
- 45) 2
- 46) 2
- 47) 3
- 48) 2
- 49) 1
- 50) 2
- 51) 2
- 52) 4
- 53) 4
- 54) 1
- 55) 3
- 56) 4
- 57) 3
- 58) 4
- 59) 4
- 60) 4
- 61) 4
- 62) 1
- 63) 3
- 64) 4
- 65) 2
- 66) 2
- 67) 3
- 68) 2
- 69) 4
- 70) 2
- 71) 1
- 72) 1
- 73) 2 74) 3
- 75) 3
- 76) 1
- 77) 4
- 78) 1
- 79) 3
- 80) 4
- 81) 1
- 82) 4
- 83) 1
- 84) 4
- 85) 2
- 86) 3 87) 4
- 88) 4
- 89) 2
- 90) 4
- 91) 4
- 92) 3

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93) 4
94) 2
95) 4
96) 1
97) 2
98) 3
99) 4
100)
        1
101)
        3
102)
        2
103)
        1
104)
        3
105)
        1
106)
        1
107)
108)
        Check your answers with section 5.2 of this manual.
109)
        3
110)
        4
111)
        1
112)
   Acknowledge - 3
   Confirm - 9
   Verify - 6
   I say again - 7
   Over – 4
   Read back - 8
   Say again – 1
   Affirmative – 5
   Correction - 11
   How do you read? - 14
   Negative - 13
   Out - 12
   Roger - 10
   Standby - 2
        4
113)
114)
        1
115)
        2
116)
        3
117)
        3
118)
        1
119)
        3
120)
        4
121)
        3
122)
        4
123)
        1
124)
        3
125)
        3
126)
        2
127)
        1
128)
        2
129)
        4
```

AVOP Application

CYYF - PENTICTON REGIONAL AIRPORT													
APPLICATION FOR AN AIRSIDE VEHICLE OPERATORS PERMIT (AVOP)													
APPLICANT (PLEASE PRINT)													
NAME:													
ADDRE	SS (Ho	me):											
EMAIL:													
TELEP	HONE:				ВС	DRIVE	_	ISE					
RAD	IOTELE					CTED CERTIFICATE:		RC	OC-A #:				
		(Req	uired F	or "D" F	Permit C	Only)			ISSUE	DATE:			
l hereb	y certif	y that, t	o the bo	est of m	y know	ledge, a	all of th	e inforr	nation p	orovide	d is true):	
					APPI	LICANT	SIGNAT	ſURE					
EMPLO	YER'S	STATEM	/IENT										
THE PE	RSON	NAMED	ABOVE	IS AN	EMPLO	YEE OF:							
ADDR	ESS:												
TELEP	HONE:												
The fo	llowing	duties	justify		_l uiremei				ed in A\ right for				
JUS.	JUSTIFICATION:												
-	TYPE OI	F PERM	IT REQI	UESTEC):	APRON AND SERVICE ROADS ONLY			ALL AIRSIDE AREAS				
TYPE OF PERMIT REQUESTED:		-	D/	/A			Г)					
SIGNATURE OF REQUESTING AUTHORITY													
AIRPO	RT USE	ONLY											
		APPLICATION ACCEPTED					OR			REJE	CTED		
	SIGNA	TURE							DATE				