# Portland International Jetport Vehicle Operator Training Guide





#### **Jetport Driver Training Program**

This slide presentation is intended to be used as a training tool for authorized driver trainers at the Portland International Jetport.

**This is not a replacement** for the Jetport's Driver Training Manual. All training candidates should read those portions of the Driver Training Manual appropriate for their level of driving authorization first, then review these slides with their authorized driver trainer.

This slide presentation does not cover all required training topics to a level necessary for safe operation of a vehicle on the Jetport's SIDA.



#### Topics to be Discussed

- Levels and Areas of Authorization
- 2. The Driver Training Process
- 3. Airfield Familiarization
- 4. Security and Access Control
- Vehicle/Pedestrian Deviations and Runway Incursions
- 6. Accidents and Spills
- 7. Foreign Object Debris (FOD)
- 8. Vehicle Operations on Non Movement Areas

- 9. Pushback Operations
- 10. Vehicle Operations on Movement Areas
- 11. Jetport Markings, Signage and Lighting
- 12. Consequences of Non Compliance
- 13. Air Traffic Control
- 14. Light Gun Signals
- 15. Instrument Landing System (ILS)
  Critical Area
- 16. The Jetport Perimeter Road
- 17. Specific Areas of Caution at the Jetport



#### **Changes Made Since Last Year**

- 1. The word "Ramp" has been replaced with "Apron" to conform with ICAO/International terminology.
- 2. New SIDA Badge layout.
- 3. Restricted, Limited and Unlimited driving designations are no longer color-coded with red, yellow and green.
- 4. "North G.A. Ramp is now the "North Apron."
- 5. "FSDO Ramp" is now the "Cargo Apron."
- 6. MACJET is anticipated to open in July of 2016.
- 7. MACJET Aprons will be designated as "Yankee and Zulu Aprons."
- 8. New taxiways Yankee and Zulu are expected to be open in June 2016.



### Levels and Areas of Authorization





### The Jetport has 3 Levels of Authorized Drivers

#### **Restricted Authorization**

Includes specific non movement areas only.

Denoted by a vehicle icon on a SIDA (Secured Identification Display Area) badge, with a "Restricted endorsement" noted on the back side of the badge.

#### **Limited Authorization**

Includes specific non movement areas and limited taxiway and runway crossings. Denoted by a vehicle icon on a SIDA (Secured Identification Display Area) badge, with a "Limited endorsement" noted on the back side of the badge.

#### **Unlimited Authorization**

Includes all areas of the airfield/SIDA.

Denoted by a vehicle icon on a SIDA (Secured Identification Display Area) badge, with an "Unlimited endorsement" noted on the back side of the badge.



### Red: Restricted, Yellow: Limited, Green (not shown): Unlimited









### Application:

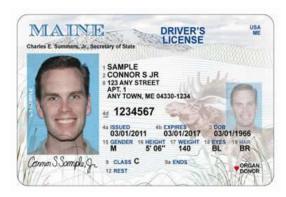
You must have an *operational need* to drive anywhere on the Jetport's SIDA.

Your company's driver trainer, supervisor, or manager and Airport Operations will determine your appropriate level of driving authorization.

### Prerequisites:

Before applying to drive, you must already possess:

- 1 A current/valid drivers license
- 2 A Jetport issued SIDA badge







## The Jetport's "Train the Trainer" Program:

- Airport Operations will provide driver training to designated driver trainers for many of the companies at the Jetport, who will then train their own employees.
- \*Authorized trainers must receive initial and recurrent training from a member of Jetport Operations on an annual basis to retain their driver trainer authorization.
- •Authorized Driver Trainers may only provide training to their company's employees.
- •Driver Trainers will provide Jetport Administration a completed driver training form for each trainee, confirming that they have provided the required training to that individual.



## The Testing Procedure:

Upon completion of driver training, potential drivers will present their completed driver training form and their drivers license to the Jetport Communication Center in order to sit for the appropriate driver training test(s).

**Restricted Drivers** will be required to successfully complete the "Restricted Drivers Test." While **Limited Drivers** will be required to successfully complete BOTH: the "Restricted Drivers Test," and the "Limited Drivers Test."

**Unlimited Drivers** will be required to successfully complete the "Restricted Drivers Test," the "Limited Drivers Test," AND a written test proctored by a member of the Jetport's Operations Department. A field test/ check ride may also be required by Airport Operations.



### Recurrent Driver Training:

Successful completion of the driver training process permits an individual to operate a vehicle on the Jetport for a period of one year (12 consecutive calendar months).



In order to operate a vehicle on the Jetport beyond that one year period, a driver must meet with their driver trainer again and repeat the driver training process.



### Airfield Familiarization



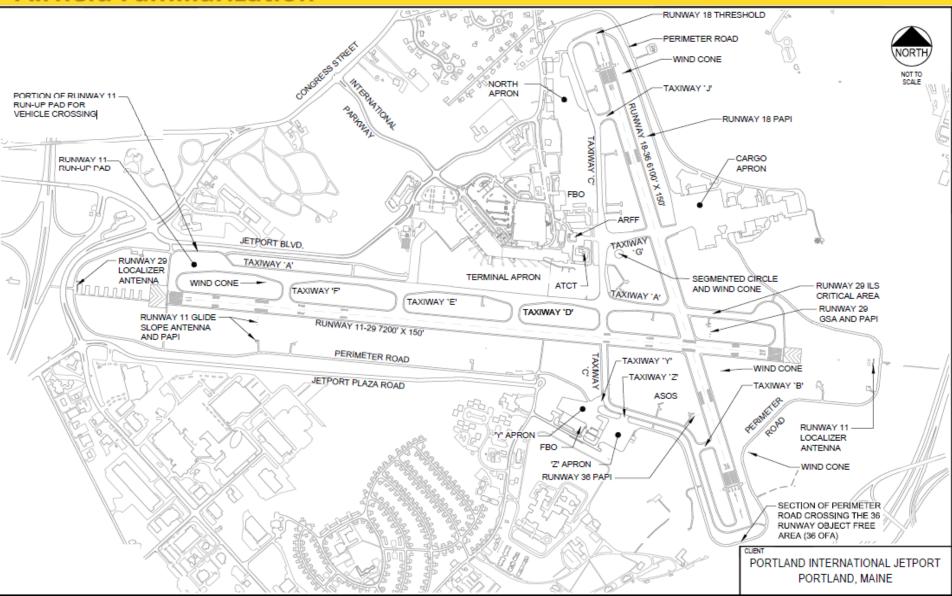


### On Site Training:

- No driver will be permitted to operate a vehicle on any portion of the Jetport's SIDA without first receiving on-site training specific to their area of operation, from an authorized driver trainer.
- **Restricted Drivers** must be provided an on-site tour of the boundaries in which they may operate. This tour will include all non movement area boundary markings that delineate the approved space. Drivers should also be able to identify all movement areas abutting their operating area.
- **Limited Drivers** must receive the same on-site training that a restricted driver would receive. Additionally, they will ride along on a tour of the routes, including each movement area, that they are permitted to operate on.
- **Unlimited Drivers** are expected to have extensive on-site training including every movement area on the Jetport. The following map highlights the basic points on the Jetport that an unlimited driver should be familiar with.



#### **Airfield Familiarization**









### Identification:

- •Any person operating a vehicle on the airfield shall be in possession of a current and valid state issued driver license.
- All drivers must display their Jetport issued Security Identification Display Area (SIDA) Badge with the appropriate colored "D" designating their driving authorization level.
- Expired, suspended or revoked licenses or badges are not a valid form of identification.

Identification badges are to be worn at all times while on the airfield and shall be displayed above the waste and outside of the wearer's outermost garment.





### Vehicle Apron Passes are:

- Required for all vehicles and equipment intended to be kept on the Jetport SIDA.
- Should be displayed on the front bumper, windshield, or other visible location on the vehicle.
- Vehicles without this apron pass need an escort.





### Perimeter Fencing and Controlled Doorways:

- It is your responsibility as a vehicle operator or pedestrian to secure a gate or door after passing through it.
- Maintain a direct line of sight with any gate or door until it has been completely closed.
- If you find an unsecured gate, hole in the fence, open door, or other unsecured point of access to the airfield, maintain a direct line of sight with the area and report it immediately.



Reports should be made to the Jetport Communication Center at: **207-756-8310**.



# "Challenging:"

•Whenever you come upon a person or vehicle on the airfield that is not displaying proper identification, you should ask to see their SIDA Badge/airport identification immediately. This is referred to as a "challenge."







•If the individual cannot provide the proper identification(s), attempt to escort them outside of the perimeter fence and report the incident to the Communication Center at (207) 756-8310.

If the individual is uncooperative, hostile, or will not leave the area, report the individual and attempt to maintain a direct line of sight with them until a Jetport representative or Police Officer arrives.







## Vehicle/Pedestrian Deviations:

- \*Also known as "V/PD's."
- Occur when pedestrians or vehicles enter onto any portion of the Jetport's movement areas (runways, taxiways, or safety areas) without authorization from air traffic control.
- If you are involved or witness a V/PD, notify your Supervisor and Jetport Administration immediately by contacting the Jetport's Communication Center.
- A V/PD would occur if a vehicle were to be operated over a non movement boundary marking like the one found along the edge of the Terminal Apron.





### **Runway Incursions:**

- A runway incursion is any unauthorized intrusion onto a runway, regardless of whether or not an aircraft presents a potential conflict.
- Runway incursions are extremely dangerous and can result in catastrophic accidents involving both aircraft and ground vehicles.
- If you are involved in a runway incursion or witness an incursion, notify your supervisor and the Jetport Communication Center immediately.

| Available | Evasive of Corrective | Environmental | Speed of          | Proximity of    |
|-----------|-----------------------|---------------|-------------------|-----------------|
| Reaction  |                       | Conditions    | Aircraft          | Aircraft and/or |
| Time      | Action                |               | and/or<br>Vehicle | Vehicle         |

### **Increasing Severity**

| Category D  | Category C  | Category B  | Category<br>A   | Accident                                  |
|---|---|---|---|---|
| Incident that meets the definition of runway incursion such as incorrect presence of a single vehicle/person/aircraft on the protected area of a surface designated for the landing and take-off of aircraft but with no immediate safety consequences. | An incident<br>characterized<br>by ample<br>time and/or<br>distance to<br>avoid a<br>collision. | An incident in which separation decreases and there is a significant potential for collision, which may result in a time critical corrective/evasive response to avoid a collision. | A serious incident in which a collision was narrowly avoided. | An incursion that resulted in a collision |



### **Runway Safety**

- Do Not cross any runway at PWM unless it is necessary as part of your job function to do so.
- •If you are required to enter onto or cross a runway, STOP at every taxiway/runway intersection, and every runway/runway intersection...regardless of what access your last ATC instruction permitted you.







•When stopping at a runway intersection, make sure to provide yourself with a "buffer" between the front of your vehicle, and the runway holding position marking. There is a little more than 20 feet in spacing from the end of the second enhanced centerline marking to the holding position marking and makes for an easy spacing tool.

Do not begin to move your vehicle towards a runway until you have completely finished reading back the instructions given to you from ATC and have allowed a pause for them to make a correction if necessary.









### Vehicle Accidents:

- If you are involved in an accident involving another vehicle, aircraft, pedestrian or stationary item (Such as a building, Jetway, fence, ground power unit, etc.) **notification** of the accident needs to be made to Jetport Administration immediately.
- \*This notification can be made to the Jetport Communication Center at: (207) 756-8310.





### Medical Emergencies:



- •If there are injuries as a result of an accident dial 9-1-1 immediately. Do not call the Jetport Communication Center to request medical assistance if you have the ability to call 9-1-1 directly.
- By dialing direct you will save time and get a quicker response from emergency personnel.



### Accidents Involving Parked Aircraft:

If you are involved in an accident involving a parked aircraft, it is critical that the aircraft not be flown until any damage to the aircraft can be properly assessed.



Remember that by not reporting, you are putting someone else's life in jeopardy.



## Spills:

Spills need to be dealt with safely, quickly, and effectively.

Any spill that has the potential to cause a fire must be reported to the Jetport's Aircraft Rescue Fire Fighting (ARFF) Station by dialing: **9-1-1**.

The Jetport's Communication Center should also be notified as soon as possible at:

*(207) 756-8310.* 





## Spills:



- Before you operate any vehicle on the SIDA, make sure you know what to do in the event of a vehicle spill and where your spill supplies are located.
- •Check with your supervisor if you are unsure of what actions you are to take, where your supplies are kept, and how to dispose of any used absorbent materials resulting from the clean up.



## Fire Safety Around Spills:

- If you can do so safely, remove or disable any ignition source immediately.
- \*Keep people and equipment away from the spill and wait for emergency responders to arrive.



# **Environmental Spill Safety:**

- Storage tanks, vehicles, aircraft, etc. that appear to be leaking fuel, antifreeze, hydraulic or other hazardous fluids need to be reported immediately.
- Attempt to prevent spills from reaching storm drains or unpaved areas.
- •Lavatory Cart spills can never be washed down a storm drain.



### Other Fire Safety Considerations:

- Smoking is prohibited anywhere within the Jetport SIDA.
- Open flames of any kind, including cooking grills or welding equipment are prohibited anywhere within the Jetport SIDA.
- If you have a work-related need for an open flame, contact Jetport Administration via the Jetport Communication Center to make a request.





# Foreign Object Debris (FOD)





#### Foreign Object Debris (FOD)

• Foreign Object Debris or "FOD," is any object, live or not, located in an inappropriate location in the airport environment that has the capacity to injure airport or air carrier personnel and damage aircraft.







Like security, the Jetport takes a team approach to dealing with FOD. Anybody operating anywhere on the airfield has the responsibility to keep the area free of FOD.



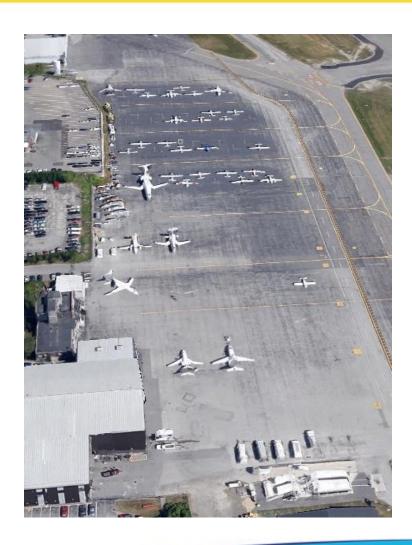
# Vehicle Operations on Non Movement Areas





#### Non Movement Areas:

- Include the aprons where aircraft park, load, and unload passengers or cargo.
- Are where you will find most of the Jetport's activity and where the majority of people authorized to operate vehicles are permitted to drive.
- Are not controlled by an air traffic controller and do not need a controller's permission to operate in that area.





## Jetport Non Movement Areas Include:



- The Terminal Apron (including the West Apron/Deicing Pad)
- The North Apron
- \*The Cargo Apron
- The Yankee Apron
- The Zulu Apron



## A Non Movement Area Boundary Marking:

#### Non-Movement Area





- Separates the non movement Areas from the movement areas.
  - Is painted yellow with two lines that run parallel to each other.
- The line closest to the non movement area will always be solid, while the line closest to the movement area will always be "broken" or dashed.



### Jetport Aprons:



- Are non movement areas and are therefore not under Air Traffic Control.
- \*Can be congested and busy with limited lines of sight.
- \*Could have aircraft, vehicles, pedestrians, air carrier equipment, and Jetways all moving in the same area at the same time.
- \*Have noise levels that are high enough to mask warning sounds.



### Speed Limits on Non Movement Areas:



**5 MPH** within 100' of an aircraft or building.

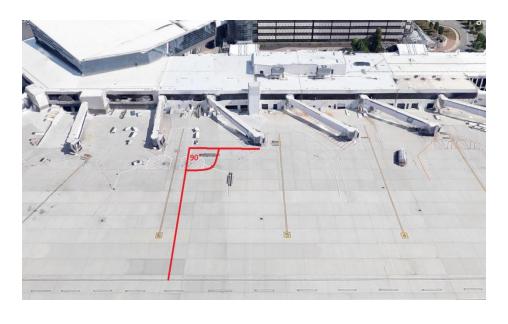
15 MPH everywhere else on the aprons including the portions of the Perimeter Road that traverse the aprons.

"Safe and prudent speed" on the remainder of the Perimeter Road.





## "90 Degrees" on the Main Terminal Apron



- Do not drive along the apron close to the Terminal Building or around Jetways, vehicles and aircraft.
- Instead, drive between the Terminal Building and the Access Road at a 90° angle to the Terminal, then use the Perimeter Road to traverse the apron.
- •This establishes a predictable order of vehicle movement which improves visibility and decreases the potential for an accident.



## **Vehicle Height Considerations**

#### **Inside the Terminal Building:**

- \*Use extreme caution when operating a vehicle inside the Terminal Building including the Baggage Make-Up and Baggage Claim Tug Drive areas.
- It is your responsibility as a vehicle operator to make sure that your vehicle can safely operate in these spaces and you must pay extra attention to your vehicle's height when operating indoors.





## **Vehicle Height Considerations**

#### **Operating under Jetbridges:**

Emergency response, Jetport snow removal, maintenance, and communication center vehicles are all permitted to operate under Any Jetbridge as needed to perform their tasks at the discretion of the vehicle operator.

For all other equipment, operating under a Jetbridge is never allowed without the express consent of Jetport Administration.



#### The Gate 1 Boarding Pier:

Vehicles may operate under this pier as long as doing so does not impact operations at Gates 1 or 2.



### Night Time and Poor Visibility Conditions:

During periods of low visibility including darkness, snow, rain or fog, visual cues including signs and markings will be harder to see.

Know your location on the apron and be aware of your surroundings and operating boundaries at all times.

If you cannot discern a painted marking or sign due to visibility or snow coverage stop your progress and return to an area where you are sure of your location immediately.





## Right of Way



- •Vehicle operators must always yield to aircraft, passengers, and emergency vehicles. They always have the right-of-way on all non movement areas.
- Never drive between safety cones and a parked aircraft. The cones delineate passenger walkways or are intended to keep you from operating too closely to an aircraft.



# **Pushback Operations**





#### **Pushback Operations**

While drivers with Restricted Driving authorization should never operate beyond a non movement boundary marking, there is one important *exception to the rule*:

When a tug operator is pushing back an aircraft on the Terminal Apron with a crew member onboard the plane, it is permissible for the tug operator to operate over the non



movement boundary marking as long as the crewmember has received permission from a ground controller to enter onto Taxiway Alpha.

Any operator engaged in this activity must read and understand the conditions as stated in the Jetport's Driver Training Manual.







#### **Movement Areas:**



- Include all runways and taxiways at the Jetport, and are used for taxiing and the takeoff or landing of aircraft.
- Are considered "controlled" or "under positive control," meaning that you will need permission from air traffic control before you enter onto one of them.



## Movement Areas at the Jetport Include:

- Runways 11-29 and 18-36
- Taxiways A, B, C, D, E, F, G, J, Y and Z
- All Safety Areas surrounding Runways and Taxiways





- Only those vehicles needed to keep the Jetport operating may enter onto a Movement Area.
- Requirements for Operating on a Movement Area:
  - 1. Appropriate authorization from Air Traffic Control
  - 2. An operational need to be there
  - 3. A working beacon
  - 4. A working Tower/Ground radio
  - 5. A proper airport ID and vehicle pass



If you can't meet these requirements, you must be escorted by someone that can.







The following information will discuss some of the different painted markings, lights and signs that will be encountered on the movement areas of the Jetport.

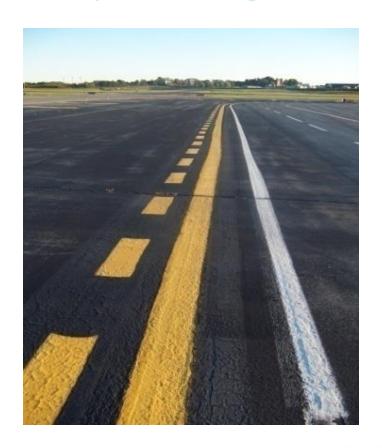
It is important for all vehicle operators to be familiar with these markings and signs even if you are not authorized to operate on the movement areas (Restricted or Limited Authorization).

By ensuring that everybody knows what the markings and signs mean, all drivers should be able to avoid ending up in a location that they are not supposed to be in.



## Non Movement Area Boundary Marking

- This painted marking separates
   Movement Areas from Non
   Movement Areas.
- Movement Areas are under Air Traffic Control, while...
- Non Movement Areas are not under Air Traffic Control.





### **Taxiways**

- Taxiways are areas used by aircraft and vehicles to go between the aprons and the runways, or to get from one part of the Jetport to another.
- You will find the following taxiways here at the Jetport:

A, B, C, D, E, F, G, J, Y, and Z.

Taxiways are labeled with an identifying letter from the alphabet.

 Taxiway markings are always painted YELLOW, and are often outlined in BLACK.





### **Taxiway Centerline Markings**

- Centerline markings are a single solid line down the middle of a taxiway that inform a pilot or a vehicle operator of where the middle of the taxiway is.
- Enhanced taxiway centerline markings can be found on all taxiway centerlines that intersect a runway holding-position marking.







## Taxiway Edge Markings

- A taxiway edge marking is usually painted as a double yellow line. They are used to advise a pilot of where the taxiway edge is located.
- When a plane is not permitted to turn off from a taxiway, the edge lines will be solid.
- When a plane is permitted to turn off from a taxiway and onto another paved area like a apron, the edge lines will be dashed (broken).







### Runway Holding Position Markings:

- Are located on taxiways where a taxiway intersects a runway.
- Denote the entrance of a runway from a taxiway. These markings also show you where to "hold-short" of a runway when instructed to do so.
- Are yellow in color, outlined in black, and are painted across a taxiway parallel to the runway that it intersects.





### Runway Holding Position Markings

#### **Taxiway Side**



**Runway Side** 

- Runway holding position markings consist of two solid yellow lines found on the taxiway side, and two broken yellow lines found on the runway side.
- •When the Control Tower is operating, crossing this marking without authorization will result in a *runway incursion* and could result in a *catastrophic accident*.
- Never cross this marking unless you are sure that you've been authorized to do so.



## Surface Painted Runway Holding Position Signs:

- Are comprised of white numbers painted over a red field.
- •Are located on a taxiway where the taxiway intersects a runway.
- Provides supplemental visual cues that alert vehicle drivers of an upcoming holding position location.
- Depict the associated runway designator(s) as another method to minimize the potential for a runway incursion.





### Taxiway Signage

- Taxiway signs are always painted with YELLOW writing on a BLACK background or BLACK writing on a YELLOW background.
- They are used to tell a pilot or vehicle operator where they presently are and where they can go from that location.

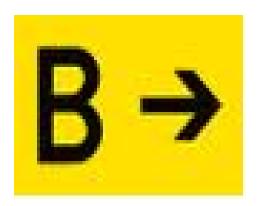




### Taxiway Signage



Taxiway Location Signs have yellow letters on a black background with a yellow outlined border. These signs help to determine your current location by telling you which taxiway you are on.



Taxiway Directional Signs have black letters with a black arrow on a yellow background. These signs help to indicate the location and direction of other taxiways. It is easy to remember which signs are which if you remember that Taxiway Directional Signs always have a black arrow on them.



## Runway Holding Position Signs:

- Are located on a taxiway to mark where the taxiway intersects a runway.
- Display the runway's designator numbers in white over a red background, with the numbers outlined in black.
- Are used to alert drivers that they are approaching a runway.
- Can not be passed without a proper clearance from Air Traffic Control.





### Runway Holding Position Signs



- It is critical that all drivers understand that they
  will need an additional FAA Control Tower
  clearance to proceed beyond a runway holding
  position marking or runway holding position
  sign.
- Just because you have received permission to operate on a taxiway does not grant you permission to enter onto a runway.
- No vehicle operator shall cross a runway holding position marking unless permission from air traffic control has been expressly given to do so.



## Taxiway Edge Lighting

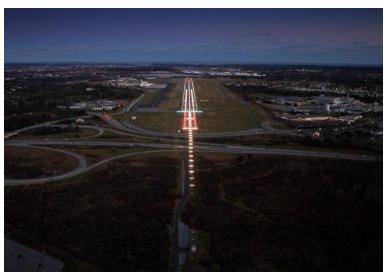
Taxiway edge lights are always blue in color. These lights are used at night and during bad weather conditions to illuminate the taxiway's route and to delineate where the edges are located.





### Runways:

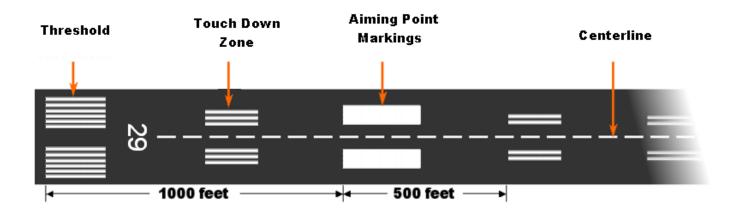
- \*Can be landed upon or taken off from in one of two directions, resulting in two runway designations: one for each end.
- •Are designated with a number.
- Designators match the runway's magnetic heading, so a plane entering onto Runway 29 is facing 290° as read on a magnetic compass. Likewise, Runway 11 would be facing 110°.



The Jetport has two 2 runways, which means 4 runway designations. They are: **11,29** and **18, 36**.



## Painted Runway Markings:



Markings found on the runways are painted white. For driver training purposes it is not necessary that you know what each of these different runway markings mean, but it is necessary that you understand that the only white painted markings on a movement area are located on a runway.



## Runway Edge Lighting

- Runway edge lights are either white or yellow (amber) in color.
- •These colors can only be found on a runway, which helps distinguish them from other areas of the movement area.
- Is used at night and during bad weather conditions to define the runway's borders and to delineate where the runway's usable edges are located.





## Runway End Lighting

- •Threshold Identifier Lights are red and green in color and are located at both ends (Thresholds) of a runway.
- They are used to inform a runway user of the beginning or ending point of the runway.
- •Threshold Identifier Lights are bi-directional, meaning they will appear to be red or green, depending on which side of the lights you are viewing them from.







## Consequences of Non Compliance





#### Consequences of Non Compliance

Jetport Administration, Portland Police and Airline Station Managers all have the authority to revoke the badge/privileges of any employee violating the policies governing vehicle operations. In general, the consequences for violating these rules and regulations will be dealt with through a progressive disciplinary process.

However, based upon each individual case and at the discretion of Jetport Administration, the progressive disciplinary process may be waived in lieu of immediate and permanent revocation as circumstances demand.



#### Consequences of Non Compliance

#### First Driver Violation

- \*A *first* driving violation will result in the suspension of driving privileges within the Jetport's SIDA for **7** days.
- During those 7 days or before the employee is permitted to retest, the employee must also receive recurrent training from their company's authorized trainer.
- This training must be documented and signed-off as completed by that trainer.
- The employee will then have to schedule a re-test with Jetport Administration and receive a passing grade prior to having their privileges reinstated.



#### Consequences of Non Compliance

#### Second and Third Driver Violations

- A **second** driving violation will result in the suspension of driving privileges within the Jetport's SIDA for **14** days.
- During those 14 days or before the employee is permitted to retest, the employee must also receive recurrent training from their company's authorized trainer.
- This training must be documented and signed-off as completed by that trainer.
- •The employee will then have to schedule a re-test with Jetport Administration and receive a passing grade prior to having their privileges reinstated.
- A *third* driving violation will result in *permanent revocation* of Jetport driving privileges.



#### Consequences of Non Compliance

# Additional Consequences of Non Compliance

- The FAA has the right to levy fines against you as a vehicle operator, the company that you work for, and the Jetport, in the event that you are found to be the cause of a vehicle/pedestrian deviation or incursion.
- •The TSA has the right to levy fines against you as a vehicle operator, the company that you work for, and the Jetport, in the event that you are found to be the cause of a breach of the Jetport's secured perimeter, including gates, doorways, or any other unintended point of access.







- •The Portland International Jetport is under the control of an operating air traffic control tower between the hours of 5:45 A.M. to 12:00 A.M.
- •During its hours of operation, the airport is considered a "controlled" airport.
- •Vehicles must receive permission from the controllers prior to operating on the movement areas.
- **Caution:** On some occasions, the air traffic control tower may remain open beyond its regularly scheduled hours of operation. It is your responsibility as a driver to know whether the tower is operating or not. If in doubt, call them and ask prior to entering onto a movement area.





# Common Traffic Advisory Frequency

- •When the tower closes at midnight (12:00 A.M.), vehicles must monitor and announce their position and intentions over the *Common Traffic Advisory Frequency* (CTAF) on 120.90 MHz.
- This is done until the tower re-opens at 5:45
   A.M. on the following morning.
- Refer to the Jetport's Driver Training Manual for more detailed guidance on the Common Traffic Advisory Frequency.





# **Proper Phraseology**



- •All drivers will need to familiarize themselves with the proper phrases and words used when speaking on Jetport frequencies.
- Phonetic letters and numbers are used often and need to be pronounced appropriately.
- The phonetic alphabet should be used when appropriate. Refer to the Jetport's Driver Training Manual for more information on the Phonetic Alphabet.



# **Proper Phraseology**

Understand the meaning and proper usage of the following:

- "Hold short..."
- "Read back."
- "Report off..."
- "Broadcasting into the blind"

Refer to the Jetport's Driver Training Manual for more detailed guidance on proper communication with air traffic control.









If you discover that your radio is inoperative prior to entering onto a movement area, do not enter the movement area until you have fixed the radio / communications problem.

If you find that your radio has failed after you have entered onto a movement area, vacate the movement area by moving onto a apron or the Perimeter Road if possible.

#### Do not cross a runway to do so.

If you can not get to a non movement area without crossing additional movement areas, try the following:

- Check the volume on the inoperative radio.
- Try using another frequency. Use 120.90 MHz or 121.90 MHz.
- Use a different radio such as a company radio to request an escort.
- \*Use a cell phone if you have access to one.





If you are unable to call for help or exit the area without crossing a runway, you will have to use the backup method:

**Light Gun Signals.** 

\*Controllers use a light gun with different colors to tell drivers what to do in the event that their vehicle loses radio communications.



# To Initiate the Usage of Light Gun Signals:

- Operate your vehicle to the next point where an air traffic control clearance would be required.
- Position your vehicle so that it is facing the air traffic control tower.
- 3. Continue flashing your headlights at the tower.
- 4. Be patient and watch for a light signal.
- After you have gained the controller's attention, they will signal you with a light gun.





| LIGHT GUN SIGNALS            |  |
|------------------------------|--|
| COLOR AND<br>TYPE OF SIGNAL  | MOVEMENT OF VEHICLES,<br>EQUIPMENT AND PERSONNEL |
| STEADY<br>GREEN              | Cleared to cross,<br>proceed or go               |
| STEADY RED                   | STOP   |
| FLASHING RED                 | Clear the taxiway/runway                         |
| FLASHING WHITE               | Return to starting point on airport              |
| ALTERNATING<br>RED AND GREEN | Exercise Extreme Caution!!!!                     |



# Instrument Landing System (ILS) Critical Area





## Instrument Landing System (ILS) Critical Area

# The ILS Critical Area at the Jetport is:

- Located on Taxiway Alpha east of Runway 18-36.
- Protected during low visibility when Runway 29 is in use.





- \*Considered "critical" because vehicles can disrupt the antenna signal and become a hazard to landing aircraft.
- Denoted by a painted marking that looks like a "yellow ladder" and a red and white sign that states "ILS."



# The Jetport Perimeter Road





## **Jetport Perimeter Road**

# **Special Considerations:**

There are two locations on the Jetport's Perimeter Road that need to be given special consideration:

- 1. The Runway 18 Threshold and...
- 2. The Runway 36 Object Free Area

Both locations **require authorization from air traffic control** prior to entering or crossing.











## Runway 18-36



- Aircraft and vehicles at opposite ends of Runway 18-36 may not see each other due to gradients between locations.
- It is also difficult to see aircraft in position at the Runway 18 Threshold while crossing Runway 18-36 on Taxiway Golf.



# North Apron Connector Road

- 1. When using the connector road at the northern end of the North Apron to access Taxiway Charlie, understand that the road enters the taxiway beyond the Runway 18 Holding Position Marking on Taxiway Charlie.
- As a result, should you enter onto Taxiway Charlie from this roadway without the appropriate clearance from air traffic control, you will have created a runway incursion.





## Intersection of Taxiways Alpha and Charlie

1. If you are traveling southbound on Taxiway Charlie towards Taxiway Alpha, be mindful of the fact that Runway 11-29 is immediately beyond the intersection of these two taxiways.



- 2. Failure to make the turn onto Taxiway Alpha from Charlie will result in a vehicle encountering the Runway 11-29 Holding Position Marking.
- 3. Should you cross this marking on Taxiway Charlie without the appropriate clearance from air traffic control, you will have created a runway incursion.



#### Locations that Can't be Seen from the Tower:

It is in your best interest to stay visible to the Control Tower whenever possible.

However, there are a couple of locations on the Jetport where a vehicle could be hidden from a Controller's view.

Understand that the Tower may not see you in the following locations:

1. The 11 Run-Up Area on Taxiway Alpha near the Blast Fence.





#### Locations that Can't be Seen from the Tower:



 The Connector Road that links the northern end of the North Apron to Taxiway Charlie.

To gain access to Taxiway Charlie from the North Apron in this area, contact air traffic control while still at the top of the hill.





