

Airfield Driver Permit STUDY GUIDE

Revised June 2008



PHX

**PHOENIX SKY HARBOR
INTERNATIONAL AIRPORT**

America's Friendliest Airport™

FOREWORD

This study guide is designed to be a reference of Federal Regulations, Airport Rules and Regulations, and Industry Standards for vehicle operations on the Air Operations Area at Phoenix Sky Harbor International Airport. The guide is also designed to prepare employees for the Aviation Department Airfield Driver Safety Training Course and Exam.



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INTRODUCTION

Purpose

Phoenix Sky Harbor International Airport (PSHIA) has one of the busiest airfield operating environments in the world. Operating motor vehicles and equipment in an environment where aircraft are landing, taking off, and taxiing is inherently dangerous. The purpose of the Airfield Driver Permit (ADP) program is to ensure all individuals operating motor vehicles and/or equipment on the Air Operations Area (AOA) are provided with proper training and certification to meet federal, state, and local safety and security standards. This program will only permit employees to operate in **non-movement areas** of PSHIA. Access to **movement areas** requires additional training and certification by Airside Operations.

The intent of this study guide is to provide the reader with information on procedures recommended for safe vehicle operations on the AOA and other restricted areas at PSHIA. The information in this study guide is extracted from applicable Federal Aviation Regulations, Arizona Revised Statutes, Airport Rules and Regulations, and Airport Advisory Circulars.

General Information

Each individual whose job duties require that he/she operates motor vehicles and/or equipment on the AOA at PSHIA is required to obtain an ADP before operating a vehicle on any portion of the airfield. Permit use is limited to **work-related areas during work hours only**. Each driver must also possess a valid U.S. state-issued driver's license and have it on their person while operating a vehicle on the AOA.

It is the responsibility of all companies operating at the airport to inform their employees of the ADP program and the need to obtain a driving permit. In addition, companies operating vehicles on the airfield are required to be properly insured in accordance with the "Insurance Requirements" section of this manual.

New employees will not be allowed to operate a vehicle or any equipment on the airfield unless escorted by an experienced employee who holds a valid airport security badge with ADP endorsement, and an escort icon on their badge. If your company cannot provide escort, contact the Airside Operations Supervisor at (602)273-2008 at least 24 hours prior to the operation to arrange for an escort.

Employees, who receive a security badge with an Airfield Driver's Permit, will have the permit included on their badge in the shape of a car on the lower left corner on the front of the badge.

Policy and Goals

The goal of this program is to provide for a safe operating environment through strict compliance with airfield rules and regulations. Accomplishing this goal requires airlines, tenants and other users of the airfield to work closely with the Aviation Department in order to promote strict adherence to all applicable airfield rules and regulations. An **Enforcement Program** is in place to ensure compliance with these regulations.

Other major goals of the program are to:

- Provide initial training for new employees and refresher training for all current employees in vehicle operations on the airfield.
- Stress the importance of safety procedures to prevent personal injury and property damage accidents.

Authority

A driver may be required to prove his/her authority to operate a vehicle or equipment on airport property. All airport security badges must be worn on the outermost garment above waist level at all times. The driver must produce a current and valid airport security badge, a valid ADP endorsement, and a valid state-issued driver's license to an Aviation Department representative or law enforcement upon request.

If the driver fails to show an ADP and license, or if the ADP or license is expired or invalid, he/she will not be allowed to continue operating a vehicle or equipment on the AOA. The employee's airport security badge may be confiscated, and the employee will be subject to a Notice of Violation (NOV).

Application

Applications and study materials for the Airfield Driver Permit test may be obtained at the Security Badging Office located at the Airport Operations Center. Security Badging Office hours and further information may be obtained by calling (602) 273-2036, or emailing security.badging@phoenix.gov.

Permit Process

A. Prerequisites

1. The Aviation Department's "Airfield Driver Permit Study Guide" booklet is recommended reading prior to taking the certification course and exam.
2. Applicants must possess a current and valid U.S. state-issued driver's license.
3. Applicants must either be in possession of, or be concurrently applying for an airport security badge when applying for the Airfield Driver Permit.

B. Training

The Aviation Department, through the ADP Program, will provide computerized airfield familiarization training to all employees needing an airfield driver permit. It is the responsibility of each company to provide their employees with training on how to operate each specific vehicle or type of equipment. Companies are encouraged to provide each employee with training and familiarization rides prior to sending them to Airport Operations for formal training and testing. The Aviation Department reserves the right to monitor and/or spot check training methods used by companies to ensure program integrity.

C. Testing

1. Testing Responsibility

The Airport Security Badging Office will conduct testing of all applicants. Testing is open access, first-come first served daily, Monday through Friday, from 8:00 a.m. to 3:00 p.m.

2. Examination Content

The examination consists of an interactive computer based training module with instructional video footage and embedded multiple choice questions. Questions will cover material from this study guide.

3. Exam Failures

Answering three questions incorrectly in a row shall constitute failing the exam. Applicants who fail the initial test will be required to retake. Retests will not be administered the same day. Individuals who fail the retest will be instructed to take a few days to thoroughly study the information in this Airfield Driver Permit Study Guide and will then be allowed to take the test again. These individuals will not be permitted to operate a vehicle on the airfield until they have successfully passed the examination and have been issued the Airfield Driver Permit.

D. Issuance of Permit

The Security Badging Office will issue all Airfield Driver Permits after an employee successfully passes the examination.

Tenure of Permit

The expiration of the Airfield Driver Permit will coincide with the expiration of the airport security badge, or upon termination or separation from employment if prior to the expiration date. Airport security badges with ADP endorsements may also be suspended or revoked as a result of the issuance of a Notice of Violation.

Lost Badge with ADP

A driver who loses his/her airport security badge is responsible for immediately reporting the loss to the Security Badging Office (602) 273-2036. A replacement badge may then be acquired from the Security Badging Office during business hours. A new badge application will be required for replacement badges and the employee will be responsible for payment of all applicable replacement fees.

Any driver who has lost a badge with the ADP endorsement will not be allowed to operate any vehicle on the airfield until the badge is replaced. If the person finds the badge after reporting the loss, he/she MUST return the badge to the Security Badging Office as it has been deactivated and will no longer be valid. Operations Division staff will conduct random badge/permit checks to guarantee program integrity.

Badge/ADP Renewal

Employees may renew their badge and ADP up to 30 days prior to the badge expiration date. The badge is considered expired the day before the date printed on the badge. If an employee allows their badge to expire, the ADP shall also be considered expired, and the employee will be required to retake all applicable training courses and certification exams prior to renewing their badge.

A retest may also be conducted:

- After an accident or incident involving injury to persons and/or damage to property and upon the determination of the Deputy Aviation Director of Operations or his/her designee;
- At the request of the individual's employer;
- If an individual leaves his/her employment and then becomes reemployed by the same or another employer at the airport;
- Upon issuance of an NOV as determined by the Aviation Department.

AIR OPERATIONS AREA (AOA)

Description

The AOA can easily be divided into two separate areas: the **Movement Area**, and the **Non-Movement Area**.

A. The non-movement areas consist of aprons, aircraft parking areas, and vehicle service roadways. No clearance is required from Airside Operations or FAA Air Traffic Control Tower to operate in a non-movement area.

- B. Movement areas consist of runways and taxiways. To operate a vehicle in the movement area, clearance must first be obtained from the Airside Operations Supervisor (602) 273-2008 and the FAA Air Traffic Control Tower (ATC). You must either have a movement area certification or be under the escort of someone who is certified to be in the movement area. In either case, you must always contact Airside Operations and ATC for approval prior to accessing any movement area. Movement Area certification is designated by an airplane icon in a lower left corner of the security badge.

Non-Movement Areas

Before driving anywhere on the AOA, you must know the location of the boundary between the non-movement area and the movement area. This can be identified by a single solid yellow line and a single dashed yellow line, which is called a "Non-movement Area Boundary Marking." You may not cross into a movement area (dashed side of line) without permission from Airside Operations and Air Traffic Control (ATC).



Ramps/Aprons

Ramps and aprons are areas where aircraft are parked, loaded and unloaded, and serviced between flights. Vehicles and aircraft operate in close proximity in these areas, so it is vital to maintain a safe distance between your vehicle and aircraft.

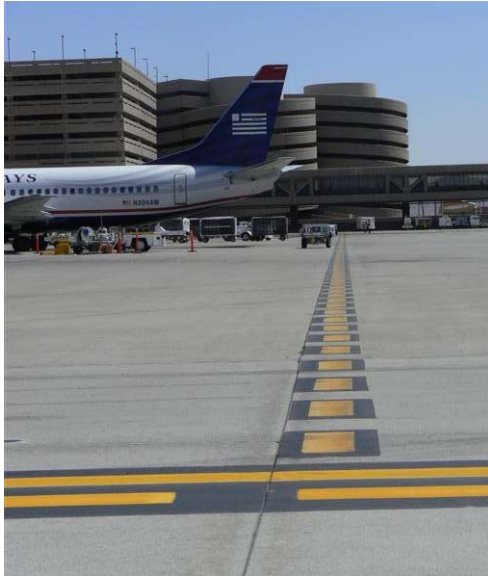
You must always yield to aircraft and never drive under any part of an aircraft, including its wings. Slow speed and extreme caution are required in these areas. Always drive in vehicle lanes if they are marked.

Vehicle Service Roads (VSR)

Vehicle Service Roads provide vehicle access from one area of the airfield to another. Even though the travel distance and time may be longer, **always** use a vehicle service road when it is available. Aircraft pilots and other employees are more likely to see vehicles that are traveling along defined roadways. This increases safety and provides for orderly flow of traffic on the airfield.

Markings on Non-Movement Areas

Ramps may contain a variety of markings to indicate aircraft parking, tiedowns, vehicle lanes, speed limits, etc. It is important to know what the markings mean, and to comply with them at all times. You have already read about the Non-movement Area Boundary Marking. Another such marking is the "Aircraft Tail Limit Line." This single dashed yellow line can be found behind aircraft parking positions at the terminals. The line provides adequate separation between parked equipment at the gate and the taxi lane where aircraft taxi to and from the gates. Never park equipment outside of the aircraft tail limit line.



Aircraft Tail Limit Line

Tips for Driving in Non-Movement Areas

- Know where the boundary is between movement and non-movement areas.
- Always use vehicle service roads.
- The speed limit is 15 mph or less, unless otherwise posted.
- Never drive behind an aircraft that is being pushed back. This can be identified by beacon, wing walkers, chocks pulled, jetway pulled back, etc.
- Do not drive through fuel spills—they can ignite.
- Do not block fire lanes.
- Beware of the danger of jet blast and prop wash—watch for flashing beacons on aircraft to indicate the engine is running or about to start.

Movement Areas

Employees holding the ADP endorsement are not authorized to enter movement areas unless certified by Airport Operations or under escort by another employee who is authorized to enter such areas. This study guide will briefly describe movement area features to assist employees with understanding when they may have crossed into an unauthorized area. **If you realize you have entered an area that you are not authorized to be in, call Airside Operations immediately to get help (602) 273-3302.**

Taxiways

A taxiway is a prepared strip used for the movement of aircraft on the airport surface to transition from the runway to the apron and vice versa.

A. Taxiway Markings

All taxiways have a yellow centerline stripe, yellow lead-in lines, double yellow edge stripe and double yellow lines abutting an apron.



B. Taxiway Lighting

At night and during inclement weather, the taxiway edges are illuminated by blue lights.



C. Taxiway Signs

The taxiway entrance from an apron is identified by a directional guidance sign that is yellow with black letters and states the name of that taxiway preceded by a location guidance sign with yellow letters on a black background, indicating the taxiway intersection. Also, a taxiway guidance sign shows the way to another taxiway by stating the taxiway letter and a directional arrow.



Runways

A runway is a defined rectangular strip used for the takeoff and landing of aircraft.

A. Runway Markings

All runways have white dashed centerline stripes, and solid white edge lines.



All runway entrances are clearly marked with Hold Position Markings. The hold position marking consists of two solid yellow lines to indicate the taxiway side of the marking, and two dashed yellow lines to indicate the runway side of the marking. You must never cross this marking without clearance from Operations and ATC.



B. Runway Lighting

At night and during inclement weather, the runway edges are illuminated by white lights. The last 2,000 feet of available runway have amber edge lights.

C. Runway Signs

The runway entrance from a taxiway is identified by a hold position sign that is red with white letters. The sign states the name of the taxiway you are on and the runway you are about to enter. NEVER go past this sign without permission from ATC.



Safety Areas/Object Free Areas

A safety area is a designated area abutting the edges of a runway or taxiway, intended to reduce the risk of damage to an aircraft inadvertently leaving the runway or taxiway. These areas are required to be kept free of all unnecessary obstructions.

Vehicle service roads are located in some areas where it is not possible to obtain standard safety areas and object-free areas. The airport has identified impacted areas with zipper markings as seen in the following pictures. The vehicle lane entering the safety area or object-free area is marked with a white bar and the letters "RSA" (Runway Safety Area) or "OFA" (Object Free Area). The zipper markings on the roadway edges continue until the vehicle exits the RSA/OFA.

Employees entering these areas must exercise extreme caution. They should expedite at a safe speed through the area, and should never stop or park their vehicle in these areas. Employees must give way to aircraft at all times. Doing so may require deviating off of the vehicle roadway if necessary. Please contact an Airside Operations Supervisor with any questions about these markings (602) 273-2008.

Zipper markings on service roads in object-free areas



Foreign Object Debris (FOD)

Foreign Object Debris is any foreign object or material on the airfield that can cause damage to an aircraft. A few examples include tools, plastic packing material, cans, rocks, or discarded parts from maintenance activities. Any of these objects can shred internal parts if sucked into a jet engine and can become deadly projectiles.

FOD costs the aviation industry an estimated \$4 billion per year and can be hazardous during taxiing, takeoff, and landing. Therefore, it is crucial that everyone on the airfield be alert to FOD and dispose of it immediately. Your assistance with FOD prevention is critical to the safety of everyone who travels in and out of Phoenix Sky Harbor International Airport.

Remember: FOD awareness and prevention is everyone's business.



AOA SECURITY

Authorized Vehicles

All vehicles on the AOA must be marked with the company name and/or logo, or display a numbered top hat, in a manner approved by the Deputy Director of Operations or his/her designated representative. The company name must be displayed in at least 4" high lettering and/or the company logo must be a minimum 12" in diameter or a minimum of 144 square inches including logo and name. Logos must be displayed on both sides of the vehicle.

Operators of vehicles with magnetic or temporary logos must apply for a special vehicle permit in the Security Badging Office. This permit is required to be displayed on the dashboard of the vehicle, and the temporary logos must

be in place on the sides of the vehicle while it is on the airfield.

Unmarked vehicles must be escorted, and will be identified with a numbered top hat while on the AOA. This hat will be issued when the vehicle is registered at the staffed vehicle gate.

Insurance Requirements

No one may operate a motor vehicle on or within the AOA at Phoenix Sky Harbor International Airport without having a valid automobile liability insurance policy to provide coverage for liability arising from bodily injury and/or property damage. The City of Phoenix must be named as certificate holder and additional insured on the policy. Anyone violating this regulation could be guilty of a Class 1 misdemeanor and will be subject to: (a) fine not exceeding one thousand dollars (\$1,000), (b) imprisonment for a term not exceeding six (6) months, or (c) both. Contact the Security Badging Office at (602) 273-2036 for more information.

Vehicle Access

Vehicle access to the AOA is obtained through staffed vehicle gates. All vehicles are subject to search. It is important that you comply with all security guard instructions. Firearms and weapons are prohibited by law from being carried or transported onto the airfield. Employees must not bring anything onto the airfield that is not needed for business reasons. All tools and other restricted items must be kept in the employee's immediate possession. These items must be safeguarded so they are not accessible to passengers or other employees.

When accessing or leaving the AOA the driver must wait until the gate is closed before driving away from the gate. Failure to wait for the gate to close is a security violation and could result in revocation of the driver's security badge.

Vehicle Escorts

The following procedures must be adhered to when providing an escort on the AOA:

- A. All vehicle escorts must process through the staffed security gates. Currently, the staffed gates are 103, 116, 141, 220, and 248.
- B. The person providing the escort must make contact with the security guard prior to taking the company/individual airside and register showing their valid Drivers License and current SIDA (Security Identification Display Area) badge with ADP icon and "Escort" endorsement.
- C. The company/individual to be escorted must arrive at a staffed gate and inform the security guard of their destination on the AOA. The vehicle will be searched in accordance with current security directives.
- D. The driver of the escorted vehicle must exchange their valid U.S. state-issued driver's license for a vehicle top hat. All other passengers in the vehicle will need to show either their valid airport security badge or valid government issued photo identification.
- E. The individual providing escort must remain with the company/individual being escorted in the AOA at all times. Any movement on the AOA without proper escort will result in an NOV and/or a citation.
- F. When the work is completed, the individual performing the escort will escort the company/individual back to the same staffed gate they entered.
- G. The company/individual being escorted will return the numbered top hat to the security guard and his/her ID will be returned.

Note: Vehicles delivering hazardous materials will not be escorted through tunnels and underneath bridges or buildings. Drivers of these vehicles must contact

Airside Operations at (602) 273-2008 to be escorted via different routes.

AOA GROUND VEHICLE OPERATIONS

General Procedures

- A. All motor vehicles and ground support equipment on the AOA of Phoenix Sky Harbor International Airport must be maintained in generally sound mechanical condition so as to prevent breakdowns, excessive leaking of fluids or inability to comply with any other safety requirements or procedures.
- B. No vehicle will be permitted on any portion of the AOA unless equipped with adequate lights, horn, and brakes. Clear vision must also be maintained from the driver's seat.
- C. Motor vehicles will be operated only in those areas of the airport as may be authorized from time to time by the Aviation Director or his/her designee and then under the currently established rules.
- D. No one will clean or make any repairs to motor vehicles or equipment anywhere on the airport other than in a designated shop area, except minor repairs necessary to remove such disabled vehicles from the airport. No one will move, interfere, or tamper with any motor vehicle part, instrument or tool without the permission of the owner or have satisfactory evidence of the right to do so by the owner or as approved by the Aviation Director or his/her designee.
- E. All vehicles operated in any portion of the AOA will continuously display headlights and tail lights at night and during periods of low visibility. Headlights should be on low beam.

- F. All motor vehicles and/or ground support equipment shall display a rotating amber beacon or flashing light at all times while operating in movement areas.
- G. All drivers operating motor vehicles during nighttime hours will display courtesy to taxiing aircraft by angling their vehicle so that headlight beams do not directly impact aircraft cockpit areas.
- H. No vehicle except aircraft handling and servicing equipment will be driven between an aircraft and a ground loading gate, or under any portion of an aircraft.
- I. No motor vehicle or piece of ground support equipment will be permitted to stand unattended in any portion of the AOA, except in authorized parking areas. If a vehicle or equipment can be moved so as to present no safety hazard to taxiing aircraft, it will be considered as being adequately attended.
- J. For security reasons, never leave keys in unattended vehicles! If a vehicle is not under the direct control of an authorized employee, the vehicle should be turned off and the keys are to be removed. In addition, vehicles parked for extended periods of time, such as overnight, should be locked.
- K. All non-motorized ground support equipment shall be prominently marked with reflective tape.
- L. All passengers must be seated in approved seats while a vehicle is in motion.



Parking Restrictions

No person shall park a vehicle anywhere on the AOA except in such places and for such periods of time as may be authorized by the Aviation Director or his/her designee. Aircraft refueling vehicles will be parked only in areas as designated by the Aviation Director or his/her designee.

Vehicle Removal

Any unauthorized vehicle which has been parked in a space reserved for specific parking may be removed by the Aviation Department as provided in the Phoenix City Code. Vehicles that are not operational, and/or have been designated as abandoned may also be removed by the Aviation Department in accordance with Phoenix City Code.

Right-of-way

All motor vehicles and ground support equipment must yield within five hundred (500) feet of any moving aircraft while in any area of the AOA. **Aircraft always have the right of way.** Never drive into the path of any moving aircraft, and always use caution for jet blast when passing behind an aircraft.

All vehicles will yield the right-of-way to all authorized vehicles responding to emergency situations.

Prohibitions

No vehicle shall be operated in any portion of the AOA:

- In a careless or negligent manner.
- In disregard of the rights and safety of others.
- Without due caution, or at a speed or manner which could endanger persons or property.
- While the driver is impaired or under the influence of alcohol or any illegal substance.
- If it is equipped in a hazardous way or loaded in a manner that could endanger persons or property.

Baggage Carts

At no time will more than six (6) baggage carts be towed behind tug vehicles when operating on or about the AOA. No more than four (4) baggage carts shall be towed in the Terminal 4 basement.



Construction Vehicles

- A. Construction vehicles on the AOA should be marked and display a three (3 ft) foot by three (3 ft) foot flag with alternating one (1 ft) foot by one (1 ft) foot orange and white checkers or a flashing/rotating amber beacon for high daytime visibility. During nighttime operations construction vehicles shall be lighted with an amber flashing/rotating beacon and front and rear lights.
- B. Vehicles not meeting these requirements must be escorted by a vehicle that meets the requirements.

Use of Roadways

- A. All vehicles must drive within the marked vehicle/tug roadways to reach their destination (roadway markings are white). Never drive on runways or taxiways.
- B. Employees are only authorized to use vehicle service roadways for business reasons. Additionally, the vehicle service roadway along the south perimeter between the Southwest Airlines Hangar and the South Cargo Building is restricted to authorized vehicles only. Driving in areas that are outside of an employee's work area will be grounds for issuance of a Notice of Violation.
- C. Vehicles may be operated in open ramp areas to service aircraft when vehicle roadways are not available. Operators of these vehicles must use "ramp rules" by driving at a safe speed, and giving way to all other traffic.
- D. At areas where vehicle service roads encroach on aircraft object-free areas, vehicles must always give right of way to aircraft. Example: Taxiway S & T Bridges.



Operating Speeds

- A. Vehicle Service Roads – The maximum speed for all vehicles and equipment, with the exception of authorized emergency vehicles during emergency functions, operated within the vehicle/tug roadways is 25 miles per hour unless otherwise marked.
- B. Open Ramps & Aprons – Vehicles and equipment operated in all other apron and terminal service areas must not exceed 15 miles per hour, with the exception of authorized emergency vehicles during emergency functions.
- C. Aircraft Service Areas / Tug Drives – The maximum speed for vehicles operated near parked aircraft, in the baggage sort areas, around hangars and on the West and East Bridge Drives at Terminal 3 is 5 miles per hour.
- D. Safety Areas / Object-Free Areas – The maximum speed for all motor vehicles and ground support equipment operated in aircraft safety areas, such as runways and taxiways, will be determined by the operator in

accordance with operational necessity and safe operating practices.

- E. Construction Sites – The maximum speed for construction vehicles will be determined by the Deputy Director of Operations or his/her designee and will be based on the construction site location and operational necessity.
- F. Terminal Basements – The maximum speed in Terminal basement areas must not exceed 10 miles per hour unless otherwise marked.

Note: The above referenced speed limits may never be exceeded. Keep in mind that normal operational speeds may be lower than the speed limit based on weather conditions and other factors. Authorized Emergency Response vehicles may exceed posted speed limits to the extent necessary to meet the needs of the emergency.

Air National Guard Base

The Air National Guard Base area is separated from the AOA by a red and white solid line and surface painted signs. The Air Guard is authorized to use “Deadly Force” to protect their base and assets. Unauthorized crossing of the red line, whether inadvertent or intentional will result in suspension of Airport Badge privileges for a minimum of 90 days. Never cross the red line without having first coordinated with the Air National Guard and Airport Operations.



Terminal 3 Bridge Drives

The bridge drive situated on the west end of the Terminal 3 service level is intended to be utilized by Aviation Department employees. Other users of this bridge will include vendors delivering goods to the Terminal 3 concessionaires. Though this bridge is not intended for use as a traffic route for air carrier tugs and baggage carts, practicality dictates that some use of the bridge drive by the airlines is appropriate. Use extreme caution, watching for pedestrians and unloading operations while crossing this bridge.

The bridge drive situated on the east end of the Terminal 3 service level is designed to be utilized for local baggage cart movement. Terminal 3 airlines are encouraged to use this drive whenever possible. Use of this bridge drive by others is restricted.

Vehicle Accidents

The driver of any motor vehicle involved in any accident no matter how small while on the AOA must immediately report the accident by calling Airport Emergency Services (602) 273-3311. In the event of injury the driver shall render assistance as needed until emergency vehicles arrive.

HAZARDOUS MATERIAL OPERATIONS

General

Any vehicle carrying hazardous materials is prohibited from driving under any portion of the terminals. Contact Airside Operations (602) 273-2008 to arrange for an escort using an alternate route.



Fuel Handling

- A. Employees must attend additional training and receive a fuel handler's certification to be eligible to dispense fuel at Phoenix Sky Harbor International Airport.
- B. During all fuel handling operations involving fuel dispensing or the draining of fuel from aircraft, the aircraft and apparatus must be bonded to prevent the possibility of static ignition of hazardous liquids.
- C. Refueling units will be stored outside, not less than fifty (50) feet from a building or aircraft, or such other distance as shall be approved by the Aviation Director or his/her designee. Exceptions to this rule apply only when minor adjustments or repairs are necessary to move such units to a storage area when failure occurs elsewhere on the airport. No fuel vehicle, empty or otherwise, will be brought into or stored within any building at the airport.

- D. All fuel vehicles must be parked so that they may be readily driven or towed away from the aircraft in case of emergency. They must be parked:
1. In a clear space
 2. 10 feet apart from each other
 3. 50 feet from building or parked aircraft
 4. In a manner to prevent fuel from leaking into storm drains

Fuel Spills

All fuel spills must be reported to Airport Emergency Services (602) 273-3311 regardless of the amount spilled or who will be providing the cleanup. The Fire Department will either apply a flash inhibitor or stand by while the spill is being cleaned up. This activity may leave a wet and messy residue, so further cleanup may become necessary. These activities require extensive labor and equipment which is very costly. Charges for any labor and materials will be directly billed to the organization responsible for the incident. A company that fails to notify the City of a fuel spill will be assessed an additional charge of three hundred dollars (\$300) in accordance with Phoenix City Code §32-106(e).



Fuel Spill Control

The reporting party shall immediately initiate the following:

- Place a fire extinguisher upwind from the spill.
- Set up a barrier by retaining or diking, thus preventing the passage of the materials into areas such as drains or swales where it is more hazardous.
- If the spill poses no danger to you or others...stop the spill.
- Report all spills to Airport Emergency Services and to your supervisor.

Fuel Spill Kits are stored at convenient locations on the terminal ramps. These kits are easily identifiable as they are in large, yellow, plastic containers marked "FUEL SPILL KIT". These kits have approved absorbent materials which should control the spread of fuel until the appropriate clean up measures have been determined. Keep all spills from flowing into storm drains or sanitary drains. Used absorbent should not be returned to the containers. The City will dispose of the absorbent material.

Storm Drain Issues



The storm drain system at the airport is regulated under the Clean Water Act (CWA) by the Environmental Protection Agency (EPA) to protect the water table.

With the exception of unpolluted storm runoff, any discharge into storm drains or catch basins is a violation of the Clean Water Act (CWA). Activities that have the potential to release pollutants into storm drain systems include: outdoor open storage of materials and chemicals, aircraft or vehicle washing in unapproved areas, fuel spills, and deliberate dumping of wastes or chemicals.

Smoking

While on the AOA, smoking is expressly prohibited except in designated smoking areas. Smoking is also prohibited in vehicles while on the AOA. No person will smoke on any ramp area, in any shop area, hangar area, or other building where it is considered dangerous to do so and which has been specifically prohibited by the Aviation Director or his/her designee.

No person will smoke or carry lighted cigars, cigarettes, pipes, matches, or any item with open flame in or upon any place where smoking is specifically prohibited by signs.

Penalties may range from the issuance of a NOV to civil penalties in accordance with Smoke-Free Arizona Act A.R.S. §36-601.01



AIRCRAFT OPERATIONS

To operate safely around aircraft one must have a basic understanding of how they operate while in the airport environment. Aircraft can be divided into three categories:

- Air carrier and other large aircraft;
- General aviation aircraft;
- Helicopters

Air carrier aircraft are very visible during daytime operations, but may be difficult to see during nighttime operations. General aviation aircraft and helicopters are typically much smaller and may be difficult to see during nighttime and daytime operations. The airfield driver must be knowledgeable of the various types of aircraft operating at the airport, and be watchful for any possible encounter with an aircraft.

Takeoffs and Landings

All aircraft flight operations must originate and terminate from an active runway surface. However, you may see helicopters land directly at their apron parking area.

Taxiing

Taxiing is defined as aircraft moving under power between parking areas and runways. This is done on aprons, taxiways, and non-active runways. Employees are most likely to encounter aircraft while they are taxiing. Pay close attention to aircraft when crossing Taxiways R, S, and T on the vehicle service roadways.

Parking

All aircraft will park at the termination of their flight in an approved parking area, such as a gate, apron, FBO, private hangar, or tiedown.

Aircraft Push Backs

Aircraft will typically leave the gate or parking area by being pushed back by a tug or by powering out, if space exists directly in front of the aircraft.

Engine Run-Ups

Before takeoff, smaller aircraft may conduct an engine run-up at high RPM. This can create strong gusts of air behind the aircraft. Be on the lookout for jetblast and FOD.

Helicopter Operations

Because of the unique capabilities of helicopters, special precautions must be taken when operating around them. Be aware of the main rotor and the tail rotor which are turning at high speeds. It is best to maintain a safe distance from the helicopter, and stay in sight of the pilot until the rotors have come to a complete stop. Always approach a helicopter from the front.



Key Points to Remember

- Aircraft **always** have the right-of-way.
- Always know your exact location and be aware of activity around you.
- Never drive under any part of an aircraft or allow its wing to pass over your vehicle.
- Maintain a safe distance from parked or taxiing aircraft.
- Always display your airport security badge on your outermost garment above waist level.
- Pilots have a limited field of view from the cockpit. Don't assume they can see you.
- Be aware of emergency vehicles. Always yield to them.
- Immediately report any accident, no matter how minor, to your supervisor and Airport Emergency Services at (602) 273-3311.
- Use extreme caution when driving at night and/or in poor weather conditions.
- Realize that you can become disoriented even in the best conditions. When disoriented, stop and request assistance.
- Be alert to any foreign object debris (FOD). Either pick it up or notify someone who can.

ENFORCEMENT

The Aviation Department has authorized the Operations Division and the Phoenix Police Department to conduct inspections and enforce violations regarding safety on the airfield ramps. All violators will be subject to citation and/or Notice of Violation (NOV).

Notice of Violation (NOV)

An NOV will be issued for observed violations of any rules, regulations and laws governing or established for the safe and orderly conduct while on the airport.

The NOV will be monitored and issued by the Deputy Aviation Director of Operations or his/her designated representative.

City of Phoenix AVIATION DEPARTMENT

NOTICE OF VIOLATION

THIS IS TO NOTIFY: _____ DATE WRITTEN: _____ TYPE: _____ CLASS: _____ NOTICE NO.: _____

SUPERVISOR'S NAME: _____ SUPERVISOR PHONE NUMBER: _____ DATE OF VIOLATION: _____ AIRPORT: PHX DVT GYR

COMPANY NAME AND PHONE NUMBER: _____ COMMENTS: _____

LOCATION OF VIOLATION: _____

TYPE OF VIOLATION DESCRIBED:

<input type="checkbox"/> 49-CFR § 1542.201: Exposed A-Not Lighting	<input type="checkbox"/> P.C.C. 65-40 (2): Failure to Stop at Designated Stop
<input type="checkbox"/> 49-CFR § 1542.201: Access to AOA (PHS)	<input type="checkbox"/> P.C.C. 65-40 (3): Exceeding 25 mph. Max Service Filter
<input type="checkbox"/> 49-CFR § 1542.201: Failure to correctly secure PHO	<input type="checkbox"/> P.C.C. 65-40 (4): Exceeding 25 mph. Max Service Filter
<input type="checkbox"/> P.C.C. 64-2: Airfield Access	<input type="checkbox"/> P.C.C. 64-49 (2): Failure to Yield to Aircraft
<input type="checkbox"/> P.C.C. 64-2: Minimum Standards	<input type="checkbox"/> P.C.C. 64-50: Not Properly Logged (PHO)
<input type="checkbox"/> P.C.C. 64-2: Aircraft Fueling Safety & Disposal	<input type="checkbox"/> P.C.C. 64-50: Security Management Violation
<input type="checkbox"/> P.C.C. 64-2: Vehicle-Operated Aviation Handbook	<input type="checkbox"/> P.C.C. 64-154: Endangering Persons or Property
<input type="checkbox"/> P.C.C. 64-12: Damage to Airport Property	<input type="checkbox"/> Other - See comments
<input type="checkbox"/> P.C.C. 64-22: Negligent Operator of Aircraft	

OPERATIONS: _____ SKY HARBOR: _____ DEER VALLEY: _____ GOODPASTER: _____

VIOLATION OF AN EMPLOYEE. VIOLATOR'S SUPERVISOR: _____

Signature: _____ Print Name: _____ Issued By: _____ Position: _____

NOV Hearing

After receiving a Notice of Violation, an employee has five (5) business days to call (602) 683-3646 to schedule an administrative hearing. Failure to schedule a hearing within five (5) business days will result in the deactivation of the employee's security badge. Employees must attend the hearing with their immediate supervisor.

The hearing serves as an opportunity to identify the nature of the infraction, and to educate employees about airport rules and regulations. Penalties may range from remedial training to badge suspension or revocation depending on the severity of the offense and the employee's prior record.

Suspension/Revocation of Permit

A. Severe Violation

Any driving violation of a severe nature (i.e., a violation resulting in property damages and/or injury, runway incursions, trespass on Air National Guard ramp, etc) will warrant immediate suspension of the permit as determined by the Deputy Aviation Director of Operations or his/her representative.

B. Three NOVs

Three (3) NOVs issued to an individual during a twenty-four (24) month span will be considered grounds for suspension of an individual's airport security badge with ADP endorsement.

C. Length of Suspension

Suspensions can range from one (1) day up to one hundred and eighty (180) days depending on the severity of the incident and the employee's record. Employees may not be escorted into a restricted area during the timeframe their badge is suspended. The Aviation Department is authorized to permanently revoke an airport security badge for repetitive violations or acts of gross negligence.

DEFINITIONS

The following collection of aviation terms may be helpful to those working at Phoenix Sky Harbor International Airport.

A

Advisory Circular - Publication issued by the FAA to provide guidance and information in its designated subject area or to show an acceptable method for complying with a related Federal Aviation Regulation.

Air Cargo - Terminals and aprons used for handling of air freight. South Cargo is located to the south of 7R/25L and East/West Cargo is located north of 7L/25R.

Air Carrier - An aircraft operator granted operating authority by the FAA under FAR Part 121 providing scheduled service with aircraft having 30 or more seats.

Air Operations Area (AOA) - The areas on the airport intended for the movement, parking and servicing of aircraft

Air Traffic Control (ATC) - A service to promote safe, orderly, and expeditious movement of air traffic.

Aircraft - A machine or device, such as an airplane, helicopter, glider, or dirigible, that is capable of atmospheric flight.

Airfield - The area inside the airport perimeter fence. Includes runways, taxiways, aprons and safety areas.

Airport - An area used for the landing and takeoff of aircraft. Includes its buildings and facilities.

Airside Operations - Section of the Aviation Department responsible for the enforcement of Rules, Regulations and Safety Procedures on the AOA.

Apron - A defined area on an airport accommodating aircraft for the purpose of loading or unloading passengers or air cargo, also known as the ramp or tarmac.

Aviation Department - City of Phoenix Aviation Department, the operator of Phoenix Sky Harbor International Airport.

Aviation Director - Chief aviation representative for the City of Phoenix. Head of the Aviation Department.

B

Baggage Cart - A non motorized vehicle used to transport baggage.

Baggage Tug - A small powered vehicle used for towing baggage carts.

Blast Fence - A structure used for the redirection of jet blast to protect the public and assets.

D

Driver - Any person responsible for the direct control of vehicle/equipment while the vehicle/equipment is in operation.

E

Emergency Vehicle - Vehicles of the Police and Fire Departments, Ambulances and Aviation Department vehicles responding to an emergency.

Escort - An individual, meeting security requirements, taking responsibility for another individual not meeting security requirements while on the restricted area.

F

Federal Aviation Administration (FAA) - A division of the Department of Transportation charged with regulating air commerce to promote safety and development in the aviation industry.

Federal Aviation Regulation (FAR) - Administrative regulations promulgated by the FAA. Includes regulations on aircraft, airmen, airspace, air carriers, and airports.

Fixed Base Operator (FBO) - An on airport business providing general aviation services usually including aircraft parking/storage, aircraft fueling, aircraft rental, flight instruction, maintenance, parts, and charter services.

Foreign Object Debris (FOD) - Any loose objects or debris on the AOA that could create a hazard to aircraft, person or property.

Fuel Truck - A specialized vehicle used for dispensing jet fuel or aviation gasoline.

G

General Aviation – Segment of civil aviation excluding air carriers and military aircraft.

Ground Support Equipment (GSE) – Equipment used to supply auxiliary needs to parked aircraft.

H

Hangar - Building used to house or maintain aircraft.

Hold Bar - Double solid and double dashed yellow lines painted on taxiways to mark a designated stopping point prior to runway.

I

Instrument Landing System (ILS) Critical Area – An area where ILS signal interference may occur from a surface vehicle, aircraft or both.

J

Jet Blast - High velocity exhaust from jet aircraft engines.

Jetway - A brand of passenger loading bridge used to connect an aircraft to a terminal building.

M

Movement Area - The airport runways, taxiways, and associated safety areas. Does not include aircraft parking areas. Approval from Airside Operations and ATC must be obtained prior to operating in this area.

N

Non-Movement Area - Aprons and Parking areas. No ATC clearance is required for operation in this area.

Notice of Violation (NOV) – An administrative form issued for safety, security or driving infractions.

P

Perimeter Roadway – Vehicle roadway established along the perimeter of the airport. Same as vehicle service roadway.

R

Restricted Area - The area of the airport inside the perimeter fence where personnel must display an approved airport security badge on their outermost garment above the waist.

Runway - A defined rectangular surface used for aircraft takeoffs and landings.

S

Safety Area - A defined rectangular area extending beyond runways and taxiways. Objects placed in safety areas must be necessary for aircraft operations and be frangibly mounted.

T

Taxiway - Paved area for aircraft movement between the runway and parking area.

Terminal - A building for the efficient movement of passengers in transit between ground and air transportation.

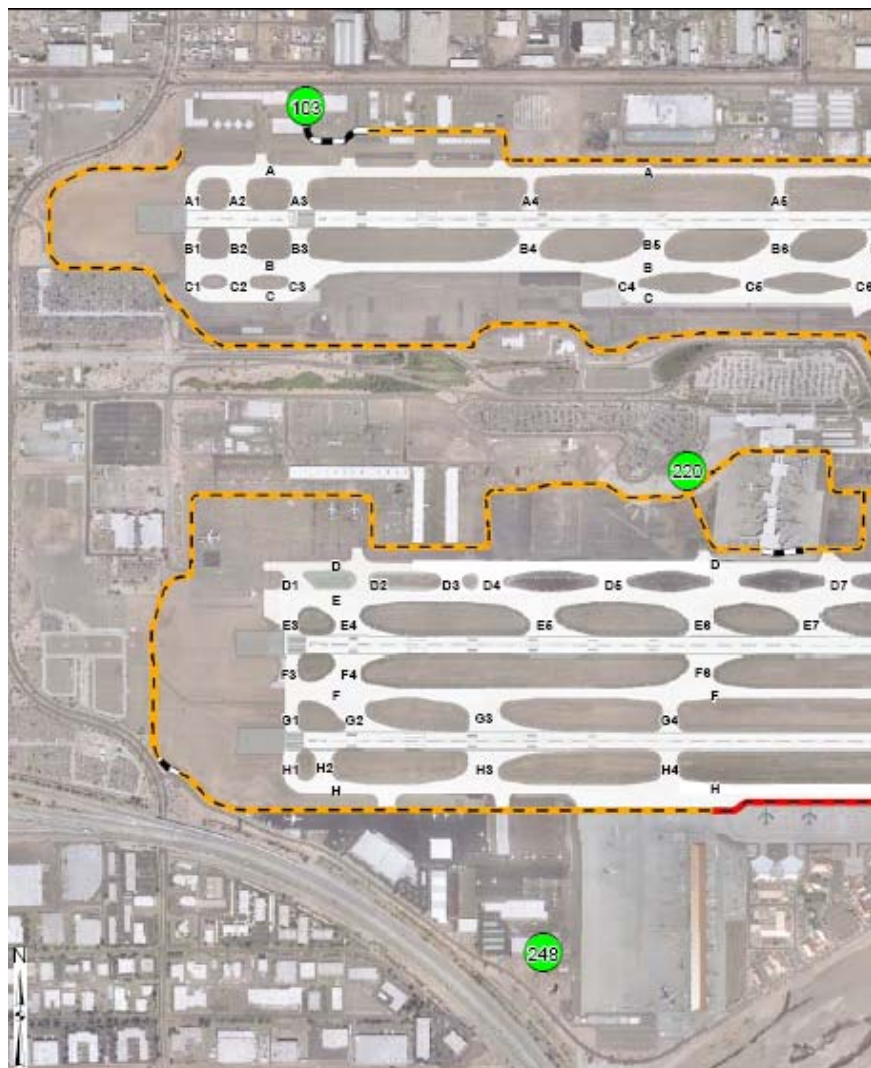
Tow - The movement of an aircraft on the airport surface under power of a ground vehicle.

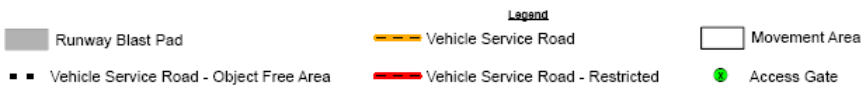
V

Vehicle Service Roadway (VSR) – Painted roadways on aircraft aprons for the purpose of vehicle travel.



Vehicle Service Roadway Map





PHONETIC ALPHABET

The Phoenix Sky Harbor International Airport uses the International Civil Aviation Organization (ICAO) Phonetic Alphabet for all communications on the AOA. For example, if you are near Taxiway B, you would refer to it as Taxiway "Bravo", not Taxiway "Bee". The official ICAO Phonetic Alphabet is listed below:

A - Alpha (AL fah)	N - November (no VEM ber)
B - Bravo (BRAH voh)	O - Oscar (OSS car)
C - Charlie (CHAR lee)	P - Papa (pah PAH)
D - Delta (DELL tah)	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)	T - Tango (TANG go)
H - Hotel (hoh TELL)	U - Uniform (YOU nee form)
I - India (IN dee ah)	V - Victor (VIK tah)
J - Juliett (JEW lee ett)	W - Whiskey (WISS key)
K - Kilo (KEY loh)	X - X-ray (ECKS ray)
L - Lima (LEE mah)	Y - Yankee (YANG kee)
M - Mike (MIKE)	Z - Zulu (ZOO loo)

REFERENCES

Information used in the development of this guide was extracted from:

Federal Aviation Regulations (FAR)

14 CFR Part 139 Certification of Airports

<http://www.faa.gov/>

State of Arizona – Arizona Revised Statutes (ARS)

Title 28 Criminal Code

<http://www.azleg.state.az.us/ArizonaRevisedStatutes.asp>

Smoke-Free Arizona

Arizona Revised Statute (A.R.S. §36.601.01) governing the locations of designated smoking areas in relation to buildings, entrances, open windows and ventilation systems.

<http://www.smokefreearizona.org/>

City of Phoenix Code of Ordinances

<http://www.municode.com/Resources/gateway.asp?pid=13485&sid=3>

Phoenix Aviation Rules and Regulations

Airport Rules and Regulations may be found at:

<http://www.phxskyharbor.com/>

Phoenix Airport Security Badging Office

Instructions, Applications, and Forms:

<http://phoenix.gov/skyharborairport/about/airsec-badging.html>

