

Tenant Driver's Training Guide

Buckeye Airport

Introduction

The Buckeye Airport Driver's Training Guide presents guidelines and procedures designed to enhance the safety and efficiency of vehicular operations on the apron and hangar areas. This program allows the Buckeye Airport to maintain a high level of safety for all who operate in the these areas.

This study guide contains basic information, which should be thoroughly understood by all persons who intend to operate in the Non-Movement and/or Movement Areas.

About Buckeye Airport

The Buckeye Airport is classified by the Federal Aviation Administration (FAA) as a general aviation (GA) field currently designed to accept up to a BII class aircraft. In 2023, it had over 100,000 aircraft operations (takeoff or landing), making it one of the busiest untowered fields in the Phoenix metro area. Buckeye has:

- Runway: 5,500' long x 75' wide
- Automated Weather Observation System (AWOS)
- Precision Approach Path Indicators (PAPI)
- 40 T-hangars and 50 tie down spots
- Active skydiving and glider operations
- On-site avionics and maintenance organization

Airport Operations Area (AOA)

The Airport Operations Area (AOA), also called the *Airside*, consists of all restricted ground areas of the airport, including taxiways, runways, and parking aprons. Vehicle access to the AOA is obtained through various automated and manual gates along the security fence. Extra attention should be given to assuring all gates close and secure behind you while entering and exiting the AOA. If a gate is found open it should be secured and/or Airport Management should be notified.

The AOA can be a confusing and congested place for a vehicle operator. Vehicle operations could have an adverse impact on aviation safety if a driver does not follow established safety procedures and practices on the AOA. All ground-based vehicles on the AOA, regardless of its size or purpose, shall yield to all approaching aircraft.

AIRCRAFT ALWAYS HAVE THE RIGHT OF WAY!

It is important to remember that you, as a vehicle operator, have the same level of accountability and responsibility as that of a pilot taxiing an aircraft.

The AOA is divided into two distinct areas: the non-movement area and the movement area.

Driving on the Non-Movement Areas

Non-movement areas include taxilanes, aprons, service roads, and other areas (Figure 1). Anyone authorized to operate a motorized vehicle in the AOA may do so on the non-movement areas. Taxilanes are paved areas used for taxiing aircraft in the non-movement area. Aprons are areas used for parking aircraft. Service roads are designated lanes intended for the movement of ground support vehicles (such as tugs, golf carts, and fuel trucks), and help establish the predictability of vehicle movements in congested areas and ensure their visibility to aircraft and other vehicles.

With few exceptions, the non-movement areas are the only authorized locations Buckeye Airport tenants may operate their vehicles. Prior coordination with Airport Management must be conducted before any tenant may operate a vehicle on a movement area. (Exception: The commercial maintenance tenant and staff have been trained and have enduring authorization.)

Operating within these areas require the vehicle driver to exercise extreme caution because aircraft are often moving, aircraft crew may be walking to and from an aircraft, and noise levels generated by aircraft engines can be very high. Furthermore, extra caution must be taken when driving around parked aircraft and when crossing or driving on a taxilane, especially when aircraft are taxiing.

Extra caution must be exercised in the vicinity of T-hangar taxilanes. There are additional risks present with blind corners and aircraft potentially taxiing from T-hangar rows.

Drivers in the non-movement area should:

- Conform to a speed limit not to exceed 15MPH.
- Watch cockpit blind spots—pilots typically cannot see behind or below the aircraft, and their ability to maneuver quickly on the ground is limited.
- Be aware and avoid moving propellers that can cause damage, injury, or death. In some instances, propellers and engine spinners are marked to indicate when the engine is operating.
- Be aware of other vehicle movements—you may not hear them approaching due to aircraft engine noise.
- Yield to aircraft, pedestrians, and emergency vehicles, which ALWAYS have the right-of-way on any portion of the airport.
- Remain vigilant of their surroundings and operating boundaries.
- Wear protective hearing equipment such as earplugs or earphones to prevent the reduction (or even loss) of hearing ability.
- Avoid jet blast or prop wash. Parked aircraft may still have their engines running, so be aware of the hazards of jet blast or prop wash. Before an aircraft engine is started, the aircraft's red flashing beacons should be on, but don't depend on that alone.



Figure 1: Buckeye Non-movement Areas

Driving on the Movement Areas

The FAA defines the movement area as “runways, taxiways, and other areas of an airport that are used for taxiing, takeoff, and landing of aircraft, exclusive of loading ramps and aircraft parking areas.” The movement area is the portion of the airport under the complete control of ATCT at towered airports, including runways, taxiways, and other areas of the airport that are used for taxiing, hover taxiing, air taxiing, and takeoff and landing of aircraft. Although the Buckeye airport is non-towered, all authorized and trained personnel who must operate in the movement area **are required to be in constant radio communication at all times on CTAF frequency 122.975**. More on radio communications will be discussed in greater detail later in this manual.

Driving on the movement area requires more training and vigilance as there are additional dangers associated with this area that are not present on non-movement areas. In addition to the principles for driving on the non-movement area, drivers who have access to the movement area must be cognizant of the meaning of airfield signs, markings, and lighting. To minimize the risk of collisions, only those vehicles necessary for airport operations may enter a movement area. Therefore, fuel trucks, personal vehicles, and other nonessential vehicles are not permitted to enter these areas without authorization and training.

Prior coordination with Airport Management must be conducted before any tenant may operate a vehicle on a movement area. (Exception: The commercial maintenance tenant and staff have been trained and have enduring authorization.)

Taxiways

Taxiways are pavement used by aircraft to get to and from the apron and the runway. Taxiways that are on non-movement areas are called *taxilanes*.

Taxiway Identification

Taxiways are identified by letters or letter/number combinations.

Taxiway Markings

Taxiway markings are yellow. They have a solid yellow centerline stripe and may also have solid or dashed double edge lines.

Taxiway Lights

Taxiway edge lights are blue (Figure 2).



Figure 2: Taxiway Edge Lights

Taxiway Hold Line and Enhanced Centerline

Each taxiway that intersects a runway will have the *hold position marking* also called “hold short lines” represented by a parallel set of double-dashed line and a double-solid line, shown in Figure 3. When approaching the runway, you must stop behind the double solid lines to remain clear of the runway; only proceed across the hold short line after making appropriate radio calls on CTAF and visually clearing the approach path.

Taxiway center lines may be enhanced when approaching the hold line with dashed lines painted on both sides of the solid center line. These markings extend 150 feet from the hold line.



Figure 3: Hold Short marking and Enhanced Centerline marking



Figure 4: Buckeye Airport Movement Area

Runways

Runways are long, paved surfaces designed for the landing and takeoff of airplanes. Only drive on runways when necessary for airport operations. Do not enter or cross a runway unless you have authorization from airport management. See Figure 5 for typical runway markings.

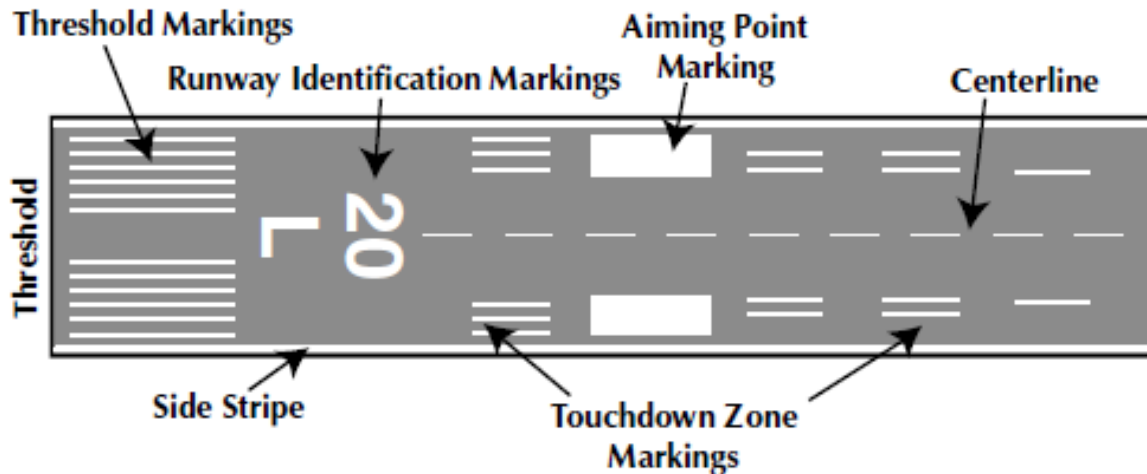


Figure 5: Runway Markings

Runway Identifications

Runways are numbered from 1 to 36 based on their magnetic direction rounded off to the nearest 10 degrees. For example, a runway aligned to the magnetic heading of 180 degrees would be Runway 18. Each runway will have two identifications based upon the direction of travel. At Buckeye, one end of the runway is numbered “17,” and the other end is numbered “35”.

Runway Markings

Runway markings are white. The runway has a centerline and a runway identification marking located at each end, as well as other markings such as side stripes, thresholds, aiming points, and touchdown zone markings.

Runway Lights

Edge lights on the runways are white. Threshold lights are located at the runway end; these are green on the approach side and red on the runway side.

Airfield Signs

There are four types of signs that you may encounter on the movement area—mandatory instruction signs, location signs, direction signs, and runway distance remaining (RDR) signs. These signs are color-coded for easy recognition and are located along the runways and taxiways.

Mandatory Instruction Signs

A **white inscription** on a **red background** is a mandatory instruction sign—**do not** proceed past one of these signs without appropriate radio communication. The most common form of this sign is the **runway hold position**. Both runway identifications are usually included on the sign with the numbers arranged to indicate the direction of each threshold. For example, 36-18 indicates that the threshold for runway 36 is to the left, and the threshold for runway 18 is to the right. These signs are also known as “aviation stop signs.”



Figure 6: Mandatory Instruction Sign

Location Signs

A **yellow inscription** on a **black background** is a location sign, which identifies the taxiway or runway that you are on. For example, in Figure 7, the sign tells you that you are on Taxiway A.



Figure 7: Location Sign

Direction Signs

A **black inscription** on a **yellow background** is a direction sign. These signs always have arrows that show the direction to turn onto the indicated taxiway. Direction signs may also indicate a direction to a destination on the airport such as a runway or terminal building. In Figure 8, the sign displays the directions of Taxiway B.



Figure 8: Direction Sign

Array Signs

Sometimes multiple signs will be co-located at an intersection of taxiways. These signs are referred to as *arrays*. Arrays are a combination of location and direction signs. Figure 9 shows a couple of arrays found on the airport. The one on the left tells you that you are located on Taxiway A4 while indicating which way Taxiway A runs; the one on the right tells you that you are on Taxiway A while indicating the directions of B and A3.



Figure 9: Signs lined up in an array

Runway Distance Remaining (RDR) Signs

A **white inscription** on a **black background** is a runway distance remaining sign. These signs are found exclusively on runways, indicating the amount of runway pavement ahead. The number on the sign represents the distance left ahead in thousands of feet. For example, in Figure 10, the '6' means there is 6,000 feet of runway left ahead.



Figure 10: Runway Distance Remaining sign

Communications

Any vehicle driving on the movement areas (runways and taxiways) must be capable of monitoring and transmitting on the Common Traffic Advisory Frequency (CTAF). The CTAF frequency at Buckeye airport is 122.975. Vehicle operators must always monitor the appropriate radio frequency when in the movement areas. Permission must be requested from airport management and authorization given prior to driving on a movement area.

Vehicle operators must communicate three things: WHO you are, WHERE you are, and WHAT your intentions are. Vehicle operators must always acknowledge all communications so that other ground traffic and other persons know that the message was received. Vehicle operators must always give aircraft priority unless an emergency exists.

CTAF Communication

The Buckeye airport is “uncontrolled.” The risk of a collision increases significantly compared to a field with a control tower. It is therefore even more critical to communicate effectively via radio. When needing to operate in the movement area, the CTAF frequency 122.975 must also be used. In this case, you are talking directly to the pilots themselves, who are flying in the vicinity and may want to land at the airport. You must always announce your identification, location, and intentions (just as you would to an ATCT controller) to alert other pilots of your presence on the airfield. If you intend to approach the runway or drive on it, you must also announce your intention to do so.

An example transmission over CTAF would go something like this:

Driver: “Attention Buckeye traffic, this is Airport 1 on Taxiway Hotel; Airport 1 is moving to Runway 17-35 via Taxiways Bravo.”

The Aviation Alphabet

The following is the International Civil Aviation Organization (ICAO) phonetic alphabet that is used in radio communications. Use the words in place of letters to reduce confusion. For example, Taxiway B would be referred to as Taxiway Bravo.

A	Alpha	AL-FAH	N	November	NO-VEM-BER
B	Bravo	BRAH-VOH	O	Oscar	OSS-KAH
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-TEL	U	Uniform	YOU-NEE-FORM
I	India	IN-DEE-AH	V	Victor	VIK-TEH
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-KEY
M	Mike	MIKE	Z	Zulu	ZOO-LOO

1	One	WUN	6	Six	SIX
2	Two	TOO	7	Seven	SEV-EN
3	Three	TREE	8	Eight	AIT
4	Four	FOW-ER	9	Nine	NIN-ER
5	Five	FIFE	0	Zero	ZEE-RO

Table 1: List of Phonetic Alphabet and Numbers

Aviation Phraseology

When operating on the airport and communicating with ATCT, it is important to understand the phraseology that controllers, pilots, and personnel all use on the radios. The list below outlines the meaning of the different words and phrases that you will need to know, and it is followed by the phonetic alphabet, which is also used in aviation.

Acknowledge — Let me know you have received and understand this message.

Advise intentions — Tell me what you plan to do.

Affirmative — Yes.

Confirm — My version is... is that correct?

Correction — An error has been made in the transmission, and the correct version follows. **Go**

ahead — State your message (**never means “proceed”**).

Hold — Stop where you are.

Hold short of... — Proceed to, but stop at that point.

Negative — No, or permission is not granted, or that is not correct.

Proceed — You are authorized to begin or continue moving.

Read back — Repeat my message back to me.

Roger — I have received all of your last transmission. (It should not be used to answer a yes or no question.)

Say again — Repeat what you just said.

Standby — Wait... I will get back to you. (Standby is not an approval or denial. The caller should reestablish contact if the delay is lengthy.)

Unable — Indicates inability to comply with a specific instruction, request, or clearance.

Verify — Request confirmation of information.

Wilco — I have received your message, understand it, and will comply.

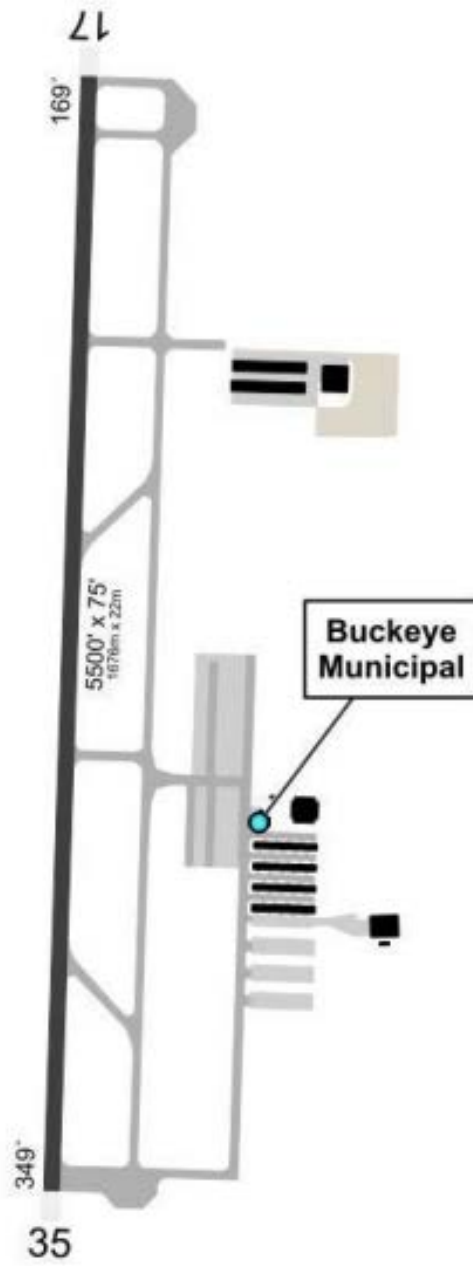


Figure 11: Buckeye Airport Diagram

Tenant Access Guidelines

The Buckeye Municipal Airport will have a secure airside area beginning January 2025. At that point, access controls will be in place to ensure a secured field. Security of the airfield and our valued tenants is of utmost importance. The following content shall outline some guidelines for tenants to follow in order to maintain the maximum flexibility of use, as well as the highest degree of security for the airfield.

Tenants will be issued access cards used for entry at the vehicular and pedestrian gates. These cards are intended for use only by the issued member.

The administrative procedures listed below shall be followed and are a requirement for both the issuance of an access card and the retention of such card.



Figure 12: Vehicular Entry Gate

Administrative Procedures

- Access card request forms are located on the airport web page at <https://www.buckeyeaz.gov/residents/buckeye-municipal-airport> and can be sent via email to airport@buckeyeaz.gov. Requests may also be submitted in person at the airport office.
- A limit of one card is issued per application. If there are co-owners of an aircraft, those personnel must submit their own individual card request.
- Any requestor not listed as a formal airport tenant must show adequate ownership/interest/need to be issued a card.
- Fees for lost/replacement cards will be charged as applicable.
- Visitors and non-card holders must be escorted by an authorized tenant with card access while on the airside.
- Pedestrian gates will be used for pedestrian access. Vehicular gates are not to be utilized for pedestrian transit for safety reasons (Figure 12).

- Unique situations for specific activities where access for non-tenants is needed shall be pre-coordinated with airport staff.
- No piggybacking of vehicles through vehicular gates.
- Card readers like the one shown in Figure 13 are located at each entry gate.



Figure 13: Card Reader