



# **Falcon Field Airport (FFZ)**

## **Fly Friendly Program**

### **Frequently Asked Questions**

**(Updated September 2019)**

**Q: What is the City doing to decrease noise over residential areas?**

**A:** The City has developed the Fly Friendly noise abatement program to help minimize noise impacts to the greatest extent possible over residential areas. In 2009, a set of 20 voluntary noise abatement practices were developed as the result of a City-sponsored Task Force comprised of key airport stakeholders, which included representatives from the community. The Falcon Field Ad Hoc Task Force developed the Fly Friendly guidelines for the aviation community to use when utilizing the airport and the partnership with stakeholders is an ongoing process. Unfortunately the proximity of the residential areas surrounding the airport makes some level of exposure to aircraft noise inevitable. However, the City is striving to minimize aircraft noise exposure as much as possible, while still serving the needs of the airport tenants and users.

**Q: Why don't aircraft always fly over the desert to the north and northeast of the airport instead of over residential neighborhoods?**

**A:** Specific flight paths are determined based on several factors, including weather conditions, the direction of the prevailing wind and airspace constraints due to other aircraft flying in and out of Phoenix Sky Harbor, Phoenix-Mesa Gateway, and Chandler airports. Since safety is the #1 priority, it is necessary for aircraft to fly over residential areas in order to maintain a safe distance between any airborne aircraft.

The Falcon Field Ad Hoc Task Force Recommendations have designated Runways 4R/4L as the “calm wind” preferred runways. “Calm wind” refers to the use of a preferred runway direction when weather conditions permit (typically winds less than 5 knots). Runways 4R/4L are selected as preferred because they allow aircraft to minimize impacts to residential areas by flying northeast over the Longbow Golf Course, industrial areas and the Loop 202 Freeway on take-off.

**Q: Who can do something about low-flying planes? My concern really isn't noise; it's safety. Who should I contact?**

**A:** Specific safety comments should be filed with the Federal Aviation Administration (FAA) Flight Standards District Office located in Scottsdale at (480) 419-0111. This office investigates low-flying or potentially unsafe flight incidents.

**Q: What are the rules regarding how low an aircraft can fly over a residential area? Is there a legal minimum altitude that airplanes can fly over residential areas?**

**A:** Aircraft altitude is established by [Title 14, Code of Federal Regulations Section 91.119](#). It is important to be aware of two aspects of this regulation which address minimum safe altitudes. First, most aircraft operating in the vicinity of Falcon Field Airport are in the process of landing or taking off. In these cases, this regulation does not apply. Second, helicopters are exempted from this federal regulation. Helicopters are not subject to the minimum altitude restrictions required of fixed wing aircraft provided that the operation of the helicopter is conducted safely.

According to the FAA, when not landing or taking-off, the minimum traffic pattern altitudes for Falcon Field are as follows:

- Small Single-Engine & Multi-Engine Aircraft: 1,006 Feet Above Ground Level
- High Performance Aircraft: 1,506 Feet Above Ground Level
- Helicopters: 506 Feet Above Ground Level

**Q: What can the airport do to restrict noisy planes?**

**A:** In April 2009, in response to a demand from various stakeholders for increased involvement by City officials, the City convened the Falcon Field Ad-Hoc Task Force. The mission of the Task Force was to suggest reasonable compromises that balance and respond to varying interests regarding how aircraft operations should be conducted at Falcon Field while ensuring the airport's long-term success. Task Force members included neighbor and community members, airport business and tenant members, and the airport's largest flight training facility.

After several months of input and discussion, the Task Force presented a list of 20 recommendations in August 2009 that addressed a number of flight operations issues considered unresolved by stakeholders. These recommendations were presented to the public by the City Manager during a community forum on September 30, 2009 and can be found at: <http://www.falconfieldairport.com/home/showdocument?id=14816>. While the goal of the Task Force was to find reasonable ways to help reduce noise concerns, safety is always the highest priority of the City.

**Q: What has the City already done to mitigate the effects of noise on area residents?**

**A:** The City has initiated several outreach projects designed to spread the word about the Fly Friendly procedures. Some of the outreach projects were part of the recommendations made by the Falcon Field Ad Hoc Task Force, and some were already part of Falcon Field's on-going Fly Friendly Program efforts. Examples of some initiatives are:

**CAE Oxford Aviation Academy (CAE) Initiatives:**

- CAE has formally notified the FAA air traffic control tower that they have no issues with allowing larger corporate jets to have take-off and landing priority. This has been a concern expressed by corporate tenants who bring jobs and commerce to Mesa.
- The recent purchase of additional state-of-the-art flight simulators to use in its curriculum. Because these simulators replicate so closely the actual flying of an aircraft, the students will be able to spend more time learning in the simulator and less time actually flying in aircraft.
- In-flight aircraft proximity warning systems have been installed in CAE's aircraft, which notify the pilot of other aircraft in the vicinity, help to improve safety in busy air space. The systems also help monitor aircraft locations so that CAE can re-locate their aircraft to other flight training areas when the Falcon Field air space becomes congested.
- CAE is transitioning its fleet to four-seat aircraft that will allow them to carry more students at one time. This will result in decreased flights in and out of Falcon Field because the aircraft can land at other airports, change student pilots and continue training without returning to Falcon Field to switch out students.
- In addition to limiting touch-and-go operations to 8 a.m.-5 p.m., CAE flight instructors and students are advised to go to other airports for touch-and-go activities when their curriculum and student proficiency allows.
- CAE adjusts aircraft propeller rotations (RPMs) earlier in the landing process to help reduce noise when aircraft are on their final approach to the runways.

Some members of the community have expressed a strong desire for CAE to install noise mufflers on their aircraft. CAE has volunteered to work with the City, the Aircraft Owners and Pilots Association (AOPA), and community members to further explore the required process to have noise mufflers certified by the FAA for use on aircraft owned by CAE. To date, the FAA has not certified the use of mufflers on the specific type of aircraft owned and operated by CAE.

## City Initiatives:

- The Precision Approach Path Indicator (PAPI) lights located on each runway have recently been replaced. The lights are used by pilots to help ensure that they are approaching the runway at a safe angle when they are landing. The City received approval from the FAA to set the new PAPIs for Runways 4L/4R to 4 degrees versus the previous 3-degree setting. By adjusting the lights higher by one degree, this increases an aircraft's altitude (and thus reduces associated aircraft noise) by approximately 92 feet when it is one mile away from the end of the runway.
- The City sends email notifications to neighbors who have provided us their contact information, when runways are expected to experience higher-than-normal use, such as when one of the two runways is closed for construction, causing increased use of the second runway or for special events that attract more aircraft than usual.
- Community/Airport Tenant Check-In Meetings are held several times each year to ensure that residents and Falcon Field tenants and users can continue to communicate and work together to reach and maintain a healthy balance between the needs of neighbors and airport users.
- By continually communicating our Fly Friendly initiatives, the City is better able to influence cultural changes that will impact the way pilots fly to & from Falcon Field. Outreach efforts include contact at various levels of the FAA, with Falcon Field-based pilots and itinerant pilots (pilots not based here), other Arizona airports, fixed base operators (FBOs), flight training schools, and aviation businesses to make them aware of our noise abatement program goals.

### **Q: Where can I find more information on the Airport's Fly Friendly Program?**

**A:** Visit [www.falconfieldairport.com](http://www.falconfieldairport.com) for more information. Occasionally we post information about the Fly Friendly Program to [Facebook](#) and [Twitter](#).

### **Q: Why doesn't the City of Mesa have curfews or rules similar to those at other airports such as Scottsdale, Burbank, and Orange County Airport?**

**A:** In 1990, Congress passed the [Airport Noise and Capacity Act](#) that made it extremely difficult for airports to initiate curfews or other noise and access restrictions. However, restrictions that were already in place prior to the Act becoming law were "grandfathered" in. Since some airports, such as those listed above, already had restrictions in place prior to 1990, those restrictions were allowed to remain in effect. No restrictions existed at Falcon Field prior to 1990. Aircraft noise has only become an issue recently due to an increase in the number of aircraft operations that are occurring and the expansion of residential neighborhoods surrounding the airport.

**Q: How can I submit an aircraft noise/safety comment?**

**A:** Concerns about aircraft noise and safety can be shared with the City at <http://apps.mesaaz.gov/FalconField/Comments> or by calling the Airport comment line at 480-644-6647. City staff will review all comments received and will follow-up based upon the findings of the review.

**Q: What happens when I submit an aircraft safety/noise comment?**

**A:** All comments received are entered into a database and correlated with a particular aircraft event, whenever possible. Currently, the City has a limited number of tools to identify aircraft and specifics related to a reported incident (aircraft identification number, runway in use, aircraft operation such as taking-off, landing, overflight). Therefore, we rely heavily on the information provided by residents. The more complete and accurate the information submitted, the better the City can address a concern.

Reports submitted assist the City in monitoring the effectiveness of the Fly Friendly Program and, if necessary, consider additional solutions to noise concerns. The comments also assist in educating pilots and aviation businesses about the importance of flying friendly. Please note that all reports made to the City are subject to public inspection through the Freedom of Information Act (FOIA).

**Q: How busy is the airport? How is the level of activity at the airport measured?**

**A:** Activity levels at airports are measured by the FAA based upon the number of aircraft operations in and above the airport area. An operation is defined as one takeoff, one landing or aircraft flying through Falcon Field's airspace, as defined by the FAA. Between 1990 – 2015 Falcon Field Airport averaged 243,968 aircraft tower operations. In 2018 Falcon Field Airport had 294,194 operations.

**Q: What are the airport's hours of operation?**

**A:** The FAA requires Falcon Field to remain open to the public 24 hours per day, 7 days per week on a non-discriminatory basis. The FAA air traffic control tower is open daily 5:30 a.m.-9 p.m. May-August; and 6 a.m.-9 p.m. September-April. When the tower closes for the night, pilots communicate directly with each other on a common published radio frequency while flying and taxiing their aircraft.

The Falcon Field Ad Hoc Task Force Recommendations request that pilots avoid conducting repetitive training operations at Falcon Field between 10 p.m. and 5:30 a.m. to the fullest extent possible. All training flights that originate at other airports are discouraged during this time, as well.

**Q: Why do so many airplanes take off and land in the same direction?**

**A:** Airplanes must take off and land into the wind for safety reasons. The primary wind direction at Falcon Field is from the northeast and the southwest. The runways are oriented accordingly.

The Falcon Field Ad Hoc Task Force Recommendations have designated Runways 4R/4L as the “calm wind” preferred runways. Calm wind refers to the use of a preferred runway when weather conditions permit. Runways 4R/4L are selected as preferred because they allow aircraft to minimize impacts to residential areas by flying over the Longbow Golf Course, industrial complexes and the Loop 202 Freeway.

**Q: What can the City do to keep airplanes from flying over my neighborhood?**

**A:** Once a pilot communicates with the FAA air traffic control tower and takes off, the aircraft is under the authority of the FAA and the pilot. However, through feedback received from the community, the City can monitor noise-sensitive areas and work with the air traffic control tower and pilots to try to avoid flying flights over these areas as much as possible ***as long as safety is not jeopardized.***

Although it is impossible to completely shield residents from aircraft noise, the Falcon Field Ad Hoc Task Force issued several recommendations aimed at reducing the effects of noise on neighborhoods. In general, the recommendations include the following:

- Use certain runways for training operations and thereby avoiding noise sensitive neighborhoods as weather and traffic conditions permit;
- Request that there be no repetitive flight operations during certain hours (10 p.m. to 5:30 a.m.);
- Maintain maximum allowable altitudes when flying over populated areas (take-offs and landings excluded);
- Fly high, tight rectangular patterns, consistent with safety regulations and when traffic conditions allow;
- Avoid early turnouts over homes when departing; and
- Request engine power reductions after takeoff and during landings to avoid creating a sudden noise event.

These and other recommendations are aimed at reducing the effects of noise on nearby residents. The City continually encourages pilots to avoid noise sensitive areas around the airport.

**Q: What are the City’s development plans for Falcon Field? How big will the airport grow?**

**A:** Falcon Field Airport consists of approximately 784 acres of land. The airport does not have room to expand from its current geographical size. However, the undeveloped land within the

airport boundaries is currently being marketed to the private sector for development of aircraft hangars and other aviation uses. The Airport Master Plan (updated in 2009) is available for review on the airport website at: <http://www.falconfieldairport.com/about-us/documents-forms/airport-master-plan>

**Q: Will Falcon Field ever offer scheduled commercial airlines services in the future?**

**A:** No, the long-term plan is for Falcon Field to continue serving general aviation air traffic. Phoenix Sky Harbor and Phoenix-Mesa Gateway airports currently provide services for scheduled commercial airlines and air cargo operators. Aviation Forecasts indicate that these two airports have the capacity to serve these commercial operators' needs long-term. Therefore, the need for a third commercial service airport in the metro Phoenix area is not necessary.

**Q: Can the City take action against pilots who don't comply with the Fly Friendly Program? Can the City prevent them from using the airport?**

**A:** Since the Fly Friendly Program is voluntary, the City cannot fine or prohibit a pilot from flying into and out of the airport. Because safety is the highest priority, pilots are sometimes unable to comply with the recommended noise abatement practices for safety of flight reasons such as aircraft weight or hot weather conditions that make takeoffs longer and less efficient.

**Q: Why can't aircraft be diverted away from where I live so that they don't fly over my house?**

**A:** The FAA Air Traffic Control Division manages the airspace at and around the airport. Because we live in a large metropolitan area, there are several other airports near Falcon Field (Phoenix Sky Harbor, Phoenix-Mesa Gateway, Chandler, and Scottsdale). Each of these airports is assigned a specific area of airspace so that they don't overlap with each other. Because the total amount of airspace is limited, the FAA has little choice but to establish flight patterns to and from Falcon Field much like highways in the sky. These highways often exist over homes located in the vicinity of the airport. See the [Airport Master Plan](#) for a variety of airport views according to our master plan.

**Q: Why are there so many airports in the Phoenix area?**

**A:** The Phoenix metropolitan area is growing, and there is a greater demand for airport facilities. The FAA encourages cities to operate and maintain airports like Falcon Field and Phoenix-Mesa Gateway to relieve the amount of air traffic and congestion that would otherwise occur if there were only one or two airports in the Valley. Without airports such as Falcon Field, the airspace for other airports would become overcrowded, causing arrival and departure delays and safety hazards for both travelers and pilots.

**Q: Why can't the City limit the kinds of aircraft that fly into and out of Falcon Field? Why can't the City limit the times when aircraft can land and take off from the airport?**

**A:** Because Falcon Field receives federal and state grant funds to construct airport improvements, it is required to remain open 24 hours per day, 7 days per week. While the Airport publishes information about the length, width, and strength of its runways to all pilots, it is ultimately the pilot's decision whether their aircraft can safely land and take off from Falcon Field.

**Q: Why does the airport need federal and state grant funds?**

**A:** Airports are capital intensive, requiring continuous maintenance and improvements to runways, taxiways and other infrastructure. Most capital improvements are costly. The City is not in a position to fund all necessary improvements itself and seeks financial assistance from the FAA and the State to design and construct improvements that are often safety-related.

**Q: I'm a citizen of Mesa. What can you do to improve my well-being and safety?**

**A:** The City values your well-being and appreciates your safety concerns. This is why it is doing everything within its control to make sure that aircraft have the opportunity to take-off and land safely from the airport.

Unfortunately, not every aircraft concern filed with the City contains enough information to allow the airport to follow-up on a noise or safety claim. We rely heavily on the information provided by residents when filing a report. Some complaints that are filed are very general in nature, but that does not make them any less important. The City collects the information and enters it into a database that is used to track noise and safety concerns.

In addition to regulating the airport, the FAA also regulates pilots. They must complete a certain amount of training before the FAA will issue a pilot's license. The FAA also regulates aircraft manufacturers, aircraft maintenance and repair facilities, flight training schools and academies, and even its own FAA air traffic control tower personnel. Failure to comply with FAA rules and regulations has substantial consequences for both the City and these other parties. In the City's case, it could result in the loss of federal and state grant funding, which is needed to construct capital improvements at the airport. For the others, it could result in the loss of their pilot or operating licenses and/or substantial fines.

Privately-owned and corporate-owned aircraft and helicopters use the airport as an alternative to Phoenix Sky Harbor International Airport and Phoenix-Mesa Gateway Airport. It is essential to the City's daily commerce and connects residents and businesses to state, regional, national and international markets. Falcon Field's tenants and users, surrounding businesses, and visitors contribute an estimated \$8.1 billion to the community's economy every year. The airport plays an important part in attracting and sustaining economic growth and development in the area. Many companies consider the adequacy and efficiency of nearby airport facilities when they are establishing, relocating or expanding their business operations.

**Q: How does the weather and season affect aircraft noise?**

**A:** Individuals will usually notice an increase in aircraft noise during cooler months (spring & fall) when their windows are more likely to be open and people are outside. During the hotter summer months, an aircraft's ability to gain altitude quickly decreases due to the heat, and more power is required for the aircraft to gain altitude. Low cloud cover will also create more noise because the sound resonates back to the ground instead of dispersing throughout the atmosphere.

**Q: When does an aircraft make the most noise?**

**A:** Most noise comments originate from aircraft operations during the initial phase of their take-off or during the final phase of landing. Since individuals have a wide range of sensitivity to noise, the extent of noise impact varies greatly among individuals. The noise level perceived at any given point on the ground can vary widely based on a number of factors. These include but are not limited to:

- **Aircraft type and size.** A common misconception is that the larger the aircraft the louder they become; however, this is not necessarily the case. Falcon Field receives noise complaints about small aircraft as well. However, many newer aircraft built in the last 10-15 years include state-of-the-art engines which are designed with features that significantly limit their noise output.
- **Aircraft load.** Passenger and aviation fuel loads can affect noise levels. Heavier loaded aircraft generally climb at a slower rate and require the use of more engine power, increasing the noise exposure to residences near the airport.
- **Weather.** Weather can affect noise levels. Dense low cloud cover may reflect noise back to the ground, producing an "echo" effect, which may intensify noise levels.
- **Time of day.** Aircraft operations during nighttime or early morning hours may have a greater noise impact due to the time of day. People are often more sensitive to noise during normal "sleeping" hours. Aircraft noise may also be perceived as louder because of the absence of other sounds during the day from things such as vehicles, lawn mowers, televisions, and loud music.

**Q: What organizations are involved in regulating aircraft noise?**

**A:** There are several organizations that are involved in the regulation of aircraft noise:

**1. The Federal Government**

The National Air Transportation System exists primarily through the creation of federal legislation. [The Federal Aviation Act of 1958](#) established the management of navigable airspace as a federal responsibility. Every facet of it is governed by the FAA. Control of aircraft noise is exercised through:

- **Establishing aircraft noise emissions standards.** Aircraft are certified by the FAA for various levels of noise emissions. All newly manufactured jet aircraft are certified to quiet "Stage 3" standards. Military aircraft are exempt from these federal regulations.
  - **Managing the air traffic control system.** The FAA has been tasked as the agency responsible for operating U.S. airspace safely and efficiently. Airspace in the Phoenix metro area is controlled primarily by the Phoenix Hub & Terminal Radar Approach Control (TRACON), which supervises the Falcon Field air traffic control tower and other Valley airport air traffic control towers.
  - **Noise Compatibility Studies.** The FAA oversees, reviews, and is the approving authority for FAR Part 150 airport noise compatibility studies that are conducted by some airports.
  - **Licensing of Pilots & Enforcement of Flight Regulations.** Pilots are trained in procedures that are intended to be uniform at airports across the country. Noise abatement awareness is part of the required pilot training curriculum. The FAA Flight Standards District Office (FSDO,) located in Scottsdale, regulates pilot activity and enforces pilot compliance with air traffic control instructions and flight regulations.
2. **State of Arizona.** State regulation of aircraft in flight is preempted by federal law. However, State regulations affect disclosure of aircraft flight paths and noise. [Arizona Revised Statute 28-8486 Public Airport Disclosure](#) requires the recording of public airport disclosure maps. The maps provide information to prospective homebuyers, as well as current homeowners, regarding flight patterns at or near an airport.
  3. **Local Government (i.e. the City of Mesa).** Local governments have authority that governs land use planning, zoning and other local building codes. Prior to 1990, some local governments passed regulations on local aircraft operations at airports. However, Congress severely limited local governments from enacting any new mandatory regulations by passing the [Airport Noise and Capacity Act of 1990](#) (ANCA). This has resulted in only a small number of airports having local "grandfathered" mandatory noise regulations that were in place prior to 1990.
  4. **Airport Operators.** Airport operators (in this case the City of Mesa) are responsible for planning, development and maintenance of the airport. Falcon Field Airport has implemented a Fly Friendly Program which is intended to find reasonable solutions to lessen the impact of aircraft noise around Falcon Field.
  5. **Pilots.** Pilots are responsible for operating their aircraft safely, while complying with all FAA rules governing flight and air traffic control instructions. National, state, and local pilot associations actively encourage their members to "fly friendly" and use noise abatement procedures whenever possible, consistent with safety.
  6. **Residents.** [The Federal Aviation Noise Abatement Policy 2000](#) states that "current and prospective residents in areas surrounding airports should seek to understand the aircraft noise problem and what steps can and cannot be taken to minimize its effects.

Prospective home buyers should research the location of airports and flight paths and determine if aircraft noise would affect their quality of life."

**Q: Where can I find a copy of the Airport Disclosure Map?**

**A:** The City has recorded a map of the Falcon Field Airport Traffic Pattern Airspace with the Maricopa County Recorder's Office. Recorded noise disclosure maps for Falcon Field and other Arizona airports may be viewed at the Public Airport Maps section of the [Arizona Department of Real Estate](#)'s website.

Airport noise contours indicate what areas around an airport experience aircraft noise as measured by FAA standards. The federal guidelines for residential compliance with aircraft noise is an average of 65 decibels or lower during a 24-hour period.

For many years, the City has provided disclosure to prospective home buyers by requiring aviation easements for new property developments near the airport.

**Community Outreach - Bringing Falcon Field Airport to YOU!**

Falcon Field will come to you to answer your questions. An airport speaker can visit your homeowner's association, community group, or civic organization. Airport tours also are available at no cost.

Here are some examples of topics you may be interested in hearing about:

- Airport history
- Airport operations
- Economic impacts of the airport
- Airport plans for the future
- What the airport is doing to protect the community & environment
- How we educate local pilots about our Fly Friendly Program

For more information, contact the Airport Administration Office at 480-644-2450.