



**REDMOND MUNICIPAL AIRPORT
ROBERTS FIELD
NOISE ABATEMENT PROGRAM**

Frequently Asked Questions

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

A: The City has developed the airport's noise abatement program to help minimize noise impacts to the greatest extent possible over residential areas in the vicinity of the airport. 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 open ranchland areas around 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 which dictated which runway to use and air traffic management by the airport traffic control tower. Because safety is the #1 priority, it is sometimes necessary for aircraft to fly over residential areas in order to maintain a safe distance between any airborne aircraft.

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 Portland at (503) 355-1100. 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 the 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.

The minimum traffic pattern altitudes for Redmond Airport are:

- Light Aircraft - All Runways 6,045 Mean Sea Level (MSL) (1,000 Above Ground Level - AGL).
- Large Aircraft, all turbo prop/jet and high performance aircraft – All Runways 6,545 MSL (1500 AGL).

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

A: The City's implementation role is focused on education and communication. By continually communicating our recommended noise abatement practices with the appropriate parties, the City is

better able to influence cultural changes that impact the way pilots fly to & from the Redmond Airport. Our outreach efforts has been all encompassing and includes contact at various levels of the FAA, with Redmond-based pilots and itinerant pilots (pilots not based here), flight training schools, and aviation businesses to help educate and make them aware of our noise abatement program goals. This is a continuous, on-going effort.

Outreach has been accomplished via the Airport Webpage, meetings, workshops, written correspondence and materials.

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

A: You can go to our Web site at <http://www.flyrdm.com/?Noise-Abatement> for more information.

Q: Why doesn't the City of Redmond have curfews or rules similar to those at other airports such as Scottsdale, AZ or Burbank, CA?

A: In 1990, Congress passed the [Airport Noise and Capacity Act](#) that made it extremely difficult for airports to initiate curfews or to impose any kind of noise or airport access restrictions. The Airport Noise and Capacity Act made it extremely difficult for airports to impose any kind of noise or airport access restrictions (including curfews), though airports such as Burbank that had curfews in place when the Act was passed were allowed to keep them. No restrictions existed at Redmond prior to 1990.

Q: How can I submit an Aircraft Incident Comment?

A: The City provides residents with the opportunity to file noise and safety complaints via our Web site at rdm@flyrdm.com. Additionally, residents may to file by phone by calling 541-504-3499. Airport staff will review all comments received and perform the necessary follow-up based upon the findings of the review.

Q: What happens when I submit an Aircraft Incident Comment?

A: All comments (both online and phone) are entered into a database and correlated with a particular aircraft event, whenever possible. Currently, the City has limited resources to identify aircraft and specifics related to a reported incident (aircraft identification number, runway in use, aircraft operation – taking –off, landing, overflight). As such, the more accurate the information submitted to us during an incident report, the better chance we have of following-up and addressing a complaint.

Reports submitted to the City assist us in monitoring the effectiveness of the Noise Abatement Program and, if necessary, consider additional solutions to noise concerns. The comments also assist the City 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).***

Noise complaints will never eliminate aircraft noise, but your calls help staff manage our pilot education efforts to assist in minimizing airport noise impacts to the greatest extent possible. Note that while some complaints help identify pilots that could have used better noise abatement practices, many complaints are received for operations that produce noise events, but which are fully in compliance with FAA air traffic rules and the Airport's recommended noise abatement practices.

Q: What good does it do to call-in or complete an online noise complaint form when the noise abatement program is voluntary?

A: Pilot education is a major part of our noise abatement program and the complaints assist the Airport in this effort. The complaints allow the Airport to see trends which assist staff in enhancing the education program.

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

A: Federal law requires Redmond to remain open to the public 24 hours per day, 7 days per week on a non-discriminatory basis. This includes both civilian and military aircraft. The airport may close for repair, or maintenance. The airport's air traffic control tower is open daily from 6:00 a.m. to 7:00 p.m. daily. When the tower closes for the night pilots are responsible for communicating directly with each other on a common published radio frequency while flying and taxiing their aircraft.

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

A: Once a pilot communicates with the Air Traffic Control Tower and leaves the runway pavement, 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 over these areas as much as possible consistent with national air traffic control standards and *as long as safety is not jeopardized*.

Although it is impossible to completely shield residents from aircraft noise, the Airport has attempted to address this issue by issuing several recommendations aimed at reducing the effects of noise on neighborhoods. In general, the recommendations include the following:

- Using certain runways for training operations and thereby avoiding noise sensitive neighborhoods so long as weather and traffic conditions permit;
- Requesting pilots avoid conducting repetitive flight operations (touch & go's) during certain hours (10:00 pm to 6:00 am);
- Maintaining certain minimum altitudes when flying over populated areas (take-offs and landing excluded);
- Flying high, tight rectangular patterns, consistent with safety regulations and when traffic conditions allow;
- Making certain engine power reductions after takeoff and during landings to avoid creating a sudden noise event.

These and other recommendations are all aimed at reducing the effect on noise on area residents. Additional potential noise abatement measures are constantly being evaluated for use at Redmond.

Q: What are the City's development plans for Redmond? How big will the airport grow?

A: The City completed and approved an update to the Airport Master Plan in 2018. The Airport Master Plan is the guiding document used by the City to plan for future growth of the airport in conjunction with other City plans for the areas surrounding the airport. The 2017 Airport Master Plan is available for review on the airport website at: <http://www.flyrdm.com/?Airport-Publications--Policies>. The City will update the Airport Master Plan subject to project and funding availability.

Q: Can the City fine "problem" pilots? Can the City prevent them from using the airport?

A: Since the Airport's noise abatement program is voluntary, the City itself cannot fine or prohibit a pilot from flying into and out of the airport. Because safety is the #1 priority, pilots are sometimes

unable to comply with the recommended noise abatement practices for safety of flight reasons such as aircraft weight or muggy and hot weather conditions which make takeoff rolls 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 Air Traffic Control Tower manages the airspace at and around the airport. Because the total amount of airspace near the airport is limited, the flight patterns used are consistent with FAA's nationally-used standards to and from Redmond much like highways in the sky. These "highways" often fall over homes located in the vicinity of the airport.

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

A: Federal law requires Redmond to remain open to the public 24 hours per day, 7 days per week on a non-discriminatory basis. This includes both civilian and military aircraft. 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 or not their aircraft can safely land and take off from Redmond.

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

A: Most capital improvements at the airport are costly. The City is not in a position to fund all of these improvements itself and, therefore, must seek financial assistance from the FAA and the State to design and construct improvements that are often safety-related.

Q: I'm a citizen of Redmond. Why don't you care about me?

A: The City cares about you and appreciates your well-being and safety. That 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 incident report filed with this City contains enough information to allow the airport to follow-up on a noise or safety claim. We must rely heavily on the information provided by residents when filing a report. Some complaints 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 issues.

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 airlines, aircraft maintenance and repair facilities, flight training schools, and air traffic control tower personnel. Failure to comply with FAA rules and regulations has substantial consequences including up to the loss of their pilot or operating licenses and/or substantial fines.

The Airport is essential to the Central Oregon region's daily commerce and connects residents and businesses to state, regional, national and international markets. Redmond Airport's tenants and users, surrounding businesses, and visitors contribute an **estimated \$68 million 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 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 warmer months (spring and summer) when 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. They stay lower for longer, and more power is required for the aircraft to gain altitude. A low cloud cover will also create more noise because the sound resonates back to the ground instead of dispersing throughout the atmosphere. As air density becomes thicker and the air is cooler and dryer, the air molecules are closer together, resulting in the sound conducting better, traveling longer distances and appearing louder to the common ear. Air tanker traffic during the summer wildfire season can also be a contributing factor.

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. As a whole, Redmond receives most of its noise complaints from light aircraft and low flying helicopters. While there has been a growing number of corporate jets using the field on our field many of these aircraft have been built recently in the last 10 – 15 years with state of the art engines which are designed to greatly limit their noise output. Military aircraft and helicopters are designed to a different standard than civilian aircraft.
- **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 also 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. The same noise level and operation may actually seem worse during these hours due to this increased sensitivity. Aircraft noise may also appear to be louder because of the absence of other sounds heard throughout the day from things such as automobiles, trucks, motorcycles, lawn mowers, televisions, and loud music.
- **Season.** Aircraft noise is often a greater nuisance during seasons when residents leave their doors and windows open. During the summer and winter months, homes usually have the doors and windows closed, limiting the exposure to outside noise sources. During the spring and fall, when temperatures are more moderate, residents often have the doors and windows of their home open. During these times, people may be more sensitive to outside noise.
- **Human Factors.** Noise affects different people in different ways. Some are more sensitive to noise in general. Different people may be more or less sensitive to certain types or sources of noise. Individuals living in the same neighborhood or even within the same home may also have different levels of sensitivity to noise.

Q: Who is responsible for aircraft noise?

A: The Redmond Airport is part of the National Air Transportation System and plays a vital role in the local, regional, and national aviation system. However, many different organizations share responsibility for various elements of a noise abatement program, and airport operators are just one of many

responsible parties. The various participants in the aircraft noise abatement issues and their roles include:

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. They exercise control of aircraft noise 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; however, some noisier "Stage 2" business jet aircraft are still permitted to operate without mandatory noise-reducing "hush kits", however, these aircraft are quickly diminishing from use. There is an ongoing international dialogue about developing a new quieter "Stage 4" standard. Military aircraft are also exempt from these federal regulations.
 - **Managing the Air Traffic Control System.** The FAA has been tasked as the agency responsible for operating the airspace safely and efficiently. Airspace in the Redmond area is controlled primarily by the Seattle Hub & Terminal Radar Approach Control (TRACON), which supervises the Redmond air traffic control tower. This airport and users meets periodically with the Tower to discuss and resolve technical airspace issues.
 - **Noise Compatibility Studies.** The FAA oversees, reviews, and either approves or disapproves [FAR Part 150 airport noise compatibility studies](#) that are conducted by airports. It also approves or disapproves airports' decisions to implement aircraft noise regulations.
 - **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 Portland, regulates this activity and enforces pilot compliance with air traffic control instructions and flight regulations.
2. **State of Oregon.** State regulation of aircraft in flight is preempted by federal law. However, State regulations affect disclosure of aircraft flight paths and noise. [The Oregon department of Aviation](#) 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 Redmond, Deschutes County).** 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 Redmond) are responsible for the planning, development and maintenance of the airport.
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 Redmond Airport Traffic Pattern Airspace with the Deschutes County and City Recorder's Office. Recorded noise disclosure maps for the Redmond Airports may be viewed at <http://www.flyrdm.com/images/uploads//Policies/RDM%20Noise.pdf>

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

Q: Has the airport changed its flight patterns? Is that why I notice increases or decreases in the number of airplanes over my house?

A: The Federal Aviation Administration (FAA) through the Air Traffic Control Tower located on the airport controls the movement of all aircraft on the ground and in the airspace over and around the airport. The FAA has NOT changed or attempted to change any flight patterns into or out of the airport. As discussed above, flight patterns may change due to bad weather, wind conditions, and wildfire season. These patterns are generally used only temporarily until the wind, fire, or weather condition subsides.

The following diagram represents a typical flight pattern:



