

APPENDIX B
RENTON MUNICIPAL AIRPORT
VOLUNTARY AIRPORT NOISE ABATEMENT PROCEDURES
ADOPTED 2001

1. Noise abatement procedures at the Renton Municipal Airport are **voluntary measures by pilots to "fly friendly" and be good neighbors** to the citizens who live under aircraft flight paths. Pilots should deviate from these procedures only when necessary to comply with any Air Traffic Control requests or in the interests of safety. **Pilots of large or turbine-powered aircraft must comply with the provisions of FAR 91.129(e), rather than these procedures.**
2. **For aircraft with a constant speed propeller:** After takeoff, Pilots should reduce power and propeller RPM when at a safe altitude at or below 700'. The power and propeller may be increased when clear of noise sensitive areas or 2,000'. On approach for landing, pilots should not increase the propeller to full RPM until the power has been reduced to final approach power.
3. **For departures which remain in the traffic pattern:** Pilots should climb at Best Rate of Climb (Vy) or Best Angle of Climb (Vx), or a combination thereof, to at least 700' before turning crosswind, reduce pitch to Cruise Climb speed during crosswind, reduce power to pattern power at 1,000', and fly a close-in downwind West of I-405. Pilots should avoid descent over Kenndale and Renton East Hill below 800', turning base before these areas or maintaining altitude as necessary to fly over them at or above 800'.
4. **For departures leaving the traffic pattern:** Pilots should climb at Best Rate of Climb (Vy) or Best Angle of Climb (Vx), or a combination thereof, until reaching 1,000' and thereafter at Cruise Climb speed to departure altitude.
 - a. **For North Flow East Channel Departures:** Pilots should fly the centerline of the East Channel to the East Channel Bridge.
 - b. **For North Flow Downwind Departure:** Pilots should fly the centerline of the East Channel to 1,000' before turning crosswind.
 - c. **For a South Flow Southeast Departure:** Pilots should fly runway centerline to 1,000', then left heading 130 degrees and continue to climb to at least 1,500' before turning on course.
 - d. **For a South Flow Downwind Departure:** Pilots should fly runway centerline to 1,000' before turning crosswind.

5. **For approach and landing:** Pilots should approach the traffic area as high as practical at minimum power and minimum prop RPM, descending to arrive at the traffic pattern at traffic pattern altitude.
6. **For South Flow arrivals from the North:** Pilots should cross the East Channel bridge at or above 1,500', maintain the centerline of the East Channel until South Tip of Mercer Island, descend to intercept final approach course at 1,000', and avoid any over flight of Mercer Island.
7. **For South Flow arrivals from the South:** Pilots should enter the traffic pattern at 1,000' on the ATC designated path or location and fly a close-in downwind, West of I-405. Pilots should avoid descent over Kenndale below 800'. Turn base before Kenndale or maintain altitude as necessary to fly over Kenndale at or above 800'.
8. **For North Flow arrivals from the South:** Pilots should maintain 1,500' until intercept of visual glide slope and then fly at or above the glide slope to a straight-in landing.
9. **For North Flow arrivals from the North:** Pilots should maintain at at-least 1,500' as long as practical, descending to cross over the "white water tower" at 1,200' or Kenndale at 1,000', as designated by ATC. Pilots should fly a close-in downwind, West of I-405. Pilots should avoid descent over Renton East Hill below 800'. Turn base before the hill or maintain altitude as necessary to fly over the hill at or above 800'.

APPENDIX C

SAFETY PROCEDURES AND LOCAL AIRSPACE

This Appendix provides information on the different types of airspace above Renton and the procedures used to avoid midair collisions. It also outlines the tools FAA has in dealing with pilots who do not follow the procedures that are in place.

- Types of airspace
- Renton airspace
- Air traffic control procedures
- Communication procedures

1. AIRSPACE

Airspace means different things to IFR and VFR pilots. Flight within any airspace is dependent upon existing weather conditions and communications requirements.

Throughout this discussion of airspace two pairs of terms are used: VFR flight and IFR flight, and controlled and uncontrolled airspace. Since understanding these terms is critical to understanding the rules governing flight, a brief definition of each term is presented below.

- **VFR (Visual Flight Rules)** – flight conducted by reference to the ground
- **IFR (Instrument Flight Rules)** – flight conducted by reference to instruments
- **Controlled Airspace** is airspace within which air traffic control service is provided to IFR flights, as well as to VFR flights (depending on the type of controlled airspace).
- **Uncontrolled airspace** is the airspace outside controlled airspace.

Distilled to the basics, there are two kinds of airspace: uncontrolled and controlled. All of the airspace in the vicinity of Renton is controlled.

Controlled airspace does not mean that all flight within it is controlled. It means that IFR services are available to qualified pilots who choose to use them. Pilots operating under VFR may fly freely in controlled airspace as long as weather conditions will permit them to see and avoid other aircraft.

Except when flying in clouds, the pilot in command is responsible at all times for aircraft separation, even when operating in a radar environment or on an IFR flight plan. This is true of both VFR and IFR flights.

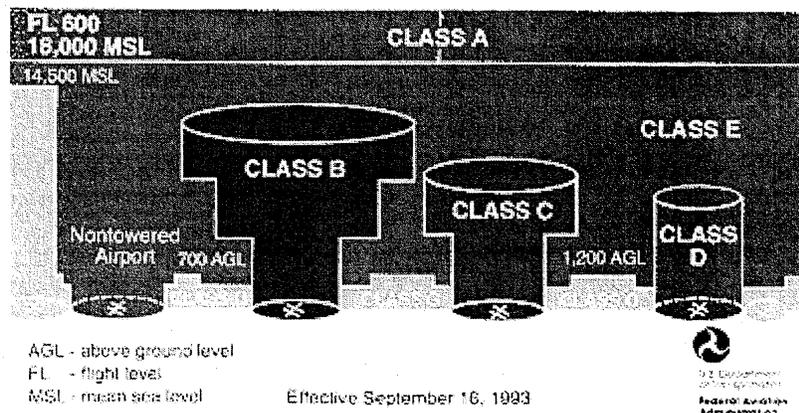
VFR flight is formed around the concept of “see and avoid”, which means that each pilot is responsible for seeing and avoiding other aircraft in the vicinity. See and avoid is critical to preventing collisions. When pilots train for their private pilot certificate, they are taught how to use the different navigation instruments available. However, the private pilot certificate is a VFR-only ticket – it does not qualify a pilot to fly IFR. In order to earn this privilege, additional training and substantially more pilot-in-command time is needed to obtain the instrument rating.

1.1 What type of airspace does Renton have?

In short, all of the airspace in the vicinity of Renton is controlled. As stated above, “controlled airspace” means that IFR services are available to qualified pilots who choose to use them. Pilots may also operate under VFR in controlled airspace, as long as weather conditions will permit them to see and avoid other aircraft.

Overall, the international airspace system is divided into five different types of controlled airspace: Classes A, B, C, D, and E. In Renton, three types are of primary importance—Class B, Class D, and Class E. Following are explanations of each of these types of airspace along with information on how aircraft operate in each type of airspace. Class D is examined first, followed by Class E then Class D. Figure B-1 illustrates the different types of airspace and their relationship to each other.

Figure B-1:
U.S. Airspace Classes at a Glance



1.1.1 Class D

At Renton Municipal Airport, and in the surrounding area, the airspace is Class D when the control tower is in operation, and Class E when the tower is closed. Controllers in the tower are responsible for sequencing arriving and departing airborne traffic in Class D airspace, but traffic separation is the responsibility of both pilots and air traffic controllers. All traffic operating within the Class D airspace must communicate with the tower, regardless of weather conditions.

Within Class D airspace, the minimum weather condition for VFR flight is 3 statute miles of visibility. In addition, aircraft operating in VFR flight in Class D airspace must remain a minimum distance from clouds, including 500 below clouds, 1000 above clouds, and 2000 feet horizontally from clouds. These minimums are necessary for VFR flight because pilots must be able to see other aircraft in order to operate safely.

When the weather conditions are below these minimums, there is no VFR flight allowed in Class D airspace, and air traffic controllers are responsible for traffic separation.

In order to aid in the separation of fast and slow traffic, there is also a speed limit of 200 knots below 2,500 feet and within 4 nautical miles of the primary Class D airport (i.e., Renton Municipal). In addition, aerobatics are prohibited in Class D airspace, and ultralights are prohibited above 2,000 feet.

1.1.2 Class E

When the control tower at Renton is closed the Class D airspace becomes Class E airspace. The control tower is operational from 7 am until 9 pm. Class E airspace has the same visibility and cloud clearance requirements as Class D: 3 statute miles of visibility, 500 feet below clouds, 1,000 feet above clouds, and 2,000 feet horizontally from clouds.

When the weather conditions are below minimums, there is no VFR flight in Class E airspace. So, regardless of whether the tower is open or not, if the weather is below minimums there is no VFR flight.

When the weather is above minimums and the tower is closed (that is, after 9:00 pm and before 7:00 am), pilots are responsible for communicating their intentions to other aircraft operating in the vicinity. In addition to this communication, standard right-of-way rules and operating procedures work to keep aircraft safely separated from each other.

1.1.3 Class B

Class B airspace provides for positive control of both VFR and IFR traffic. All traffic flying in Class B airspace must communicate with air traffic control, the controllers provide separation to all aircraft. Class B airspace exists at 30 of the busiest airports in the country, and serves to separate heavy, fast commercial traffic from other air traffic.

The Renton Class D/Class E airspace lies underneath the Sea-Tac Class B airspace. The Class B airspace is centered on Sea-Tac International, and extends out 30 miles in every direction from Sea-Tac. The Renton Class D airspace extends from the ground to 2,500 feet above the ground, and the Class D airspace extends from 3,000 feet to 10,000 feet.

To operate within 30 miles of Sea-Tac, an aircraft must be equipped with a piece of equipment called a "Mode C transponder". The Mode C transponder is a radio that sends a signal to air traffic control radar, which includes the altitude of the aircraft. The only exception is for aircraft without electrical systems.

1.2 VFR Corridor

One other component of the airspace system is important in the vicinity of Renton: a VFR corridor 4 or 5 miles east of Renton. This corridor allows VFR traffic to remain clear of Sea-Tac, Renton, and Boeing Field airspace with traveling on a north-south axis. This route must be flown below 3,000 feet, in order to remain clear of the Sea-Tac airspace. Also, when flown above 2,500 feet and out of the Renton Class D airspace, an aircraft may use this corridor without communicating with the Renton tower.

This VFR flyway is an important highway in the sky for aircraft moving through the area from north to south, and vice versa. There is also another VFR flyway approximately five miles east of this one, with a ceiling of 5,000 feet. Given the prevalence of cloud cover in this region, though, the route closer to Renton is used more often.

1.3 Apparent near mid-air collisions

Mid-air collisions are extremely rare, especially in controlled airspace. This does not mean that they do not occur. What is disconcerting to a casual observer on the ground, however, is the appearance of near a mid-air collision. In Renton, the combination of airspace types mean that different types of traffic are moving in different directions through the local airspace, which may appear random from the ground.

However, as shown above, the different types of airspace host different types of traffic, and provide separation between the types. For example:

- Below 2,500 hundred feet, aircraft are in the Renton Class D airspace. These aircraft are in the airport traffic pattern. All aircraft in the pattern are going in the same direction, either clockwise or counter-clockwise around the pattern. Arriving and departing aircraft fit into this pattern where space permits. The traffic pattern altitude is flown 1,000 feet above ground level.
- Between 2,500 and 3,000 feet, aircraft are traveling north and south. There is 1,500 feet of vertical separation between this traffic and traffic in the pattern at Renton. From the ground, 1,500 feet may lead to the appearance of a near mid-air: 1,500 feet is the equivalent of five or six city blocks. However, the standard traffic procedures keep this traffic separate.
- Above 3,000 feet, all traffic is controlled by Sea-Tac. Again, the relatively small vertical separation may lead to the appearance a aircraft nearly colliding. No aircraft is allowed to enter the Sea-Tac airspace without permission, though, and all aircraft in that airspace are under the positive control of the Sea-Tac Tower.

2. CORRECTIVE MEASURE AVAILABLE TO THE FAA

Committee members requested information on the types of measures that are available to the FAA to deal with pilots who break rules. The following section, summarized from information from the Aircraft Owner's and Pilots Association (AOPA), summarizes the remedies available to the FAA.

There are five types of actions that the FAA typically uses against general aviation pilots to enforce the Federal Aviation Act and the Federal Aviation Regulations. They are:

- Administrative action,
- Reexamination
- Certificate action
- Civil penalty
- Criminal action

2.1 Administrative Action

The FAA uses administrative actions to dispose of violations that are too minor to warrant legal enforcement action. The FAA considers a violation minor if it was not deliberate, was not significantly unsafe, and did not evidence a lack of competency or qualification. The problem with this criterion is that there is no clarifying guidance for the term "significantly unsafe."

An administrative action takes the form of either a Warning Notice or a Letter of Correction. The Warning Notice is a letter addressed to the alleged violator that recites the facts and circumstances of an incident that the FAA says is a violation of the FARs. The letter states that the matter has been corrected and/or it does not warrant legal enforcement action. It goes on to request future compliance with the regulations.

The Letter of Correction is the same as the Warning Notice except that it recites that there is an agreement with the pilot that corrective action acceptable to the FAA has been taken or will be taken.

The most negative aspect of an administrative action is that, although it does not constitute a "finding of a violation," it does constitute an official record against the airman. The record is supposed to be erased two years after the action is taken.

2.2 Reexamination

The Federal Aviation Act authorizes the FAA to reexamine an airman at any time if the FAA has reasonable grounds to request such a reexamination. Reasonable grounds are any circumstances that indicate that an airman may not be qualified to hold his or her certificate. The two most frequent circumstances leading to a request for reexamination are accidents and FAR violations.

The procedure is fairly simple. An FAA inspector will notify the pilot by certified mail that a reexamination is necessary, giving the basis for the reexamination and usually pointing out the rating or the procedures or maneuvers upon which the pilot will be reexamined. The letter will request that the pilot call to arrange a convenient time and place for the reexamination. If the pilot fails or refuses to take the reexamination, an FAA lawyer will issue an order suspending the pilot's certificate until he passes a reexamination. If the pilot takes and passes the reexamination, that normally is the end of the matter. If he fails (usually after several opportunities), the FAA will take steps to revoke the certificate or rating.

The FAA generally has been fair in requesting and administering reexaminations. Pilots usually prepare for these reexaminations with ground and flight instruction. Very few fail. Those who pass often comment that the reexamination turned out to be good, free, dual instruction and that they came away as better pilots.

2.3 Certificate and Civil Penalty Actions

The certificate action is the most commonly used enforcement tool against the general aviation pilot. The FAA usually seeks to suspend or revoke a pilot's certificate for operational violations of the flight rules or whenever a violation indicates a lack of technical proficiency or qualification that the FAA considers too serious to remedy through reexamination or an administrative action.

A civil penalty is essentially a fine. The FAA has the authority to administratively assess civil penalties for aviation violations. The penalty may be as much as \$1,000 for each violation cited. The FAA prefers to use certificate action against pilots, but a civil penalty is an option available to the FAA.

Whether the FAA chooses to go after a pilot's certificate or opts to assess a civil penalty, the Federal Aviation Act gives the pilot very important procedural rights. It requires the FAA to advise the pilot of the charges or other reasons for the action before taking the action and, except in an emergency action against a certificate, provide the pilot with an opportunity to answer or explain why the action should not be taken. The notice comes in a Notice of Proposed Certificate Action or Notice of Proposed Civil Penalty. If the pilot wants to contest the action, the pilot has the option of requesting an informal conference with the FAA attorney handling the case, among other options. Although the pilot may not come away completely satisfied, most cases settle at the informal conference.

If the case is not settled or dropped, the FAA issues an Order suspending or revoking the pilot's certificate or imposing a civil penalty. The pilot then has a right to appeal to the NTSB. In the case of an Order against the pilot's certificate, the certificate remains effective until the NTSB finally disposes of the appeal. That is, unless the FAA determines that an emergency exists and that safety requires the immediate effectiveness of the certificate action, in which case the FAA issues an Emergency Order of Revocation or of Suspension, and the pilot must give the certificate to the FAA pending the outcome of the appeal.

2.4 Criminal Action

Criminal actions play a small, but increasing, part in FAA enforcement. Historically, they applied only to such acts as aircraft piracy, forgery of certificates, carrying weapons aboard aircraft, and the like but, in recent years, have been expanded to include false marking of aircraft, illegal aircraft registration, illegal fuel tank installation, and airport security violations. While the FAA becomes involved in these cases, the prosecution of criminal cases rests with the U. S. Department of Justice, and the federal rules relating to criminal proceedings apply.