Wiley's Seaplane Base (20G3): Noise Abatement & Safety Considerations

All airports exist to some degree at the mercy of the neighbors. It just takes one angry or annoyed neighbor to start a feud that can last for years and cost many tens of thousands of dollars. Wiley's Seaplane Base has been through one of those battles many years ago, and we all want to avoid it ever happening again. To the extent that pilots can use the following noise abatement and safety procedures, it is believed the risk of having annoyed or angry neighbors will be greatly reduced.

Noise Reduction Procedures:

- Reduced RPM's: Use reduced RPM for take-off whenever possible (aircraft with constant speed props). A reduction in RPM's by 10% to 15% will reduce the noise and annoyance factor enormously. On my 172, which has a 220 hp Franklin engine, a take-off at 2400 or 2500 RPM's in lieu of 2800 RPM's gets rid of the very annoying sharp "whine" that is common to 180's, 185's, and other high performance aircraft it almost starts to sound like a Taylorcraft!
- Reduced Manifold Pressure: A reduction in manifold pressure (MP) helps only a little bit; it is really the RPM's (propeller tip speed) which is producing the noise.
- <u>Maximize Slant Distance</u>: Noise level is inversely proportional to distance. When taking off and landing it is pretty hard to get quick vertical distance, so take off with a plan to maintain the greatest possible horizontal distance from residences.
- Avoid Flying Low over Residences: Noise annoyance is largely an issue of perception and fear. Approximately 5% of the population has an innate fear of aircraft. You may not be making much noise while landing, but for that small segment of the population you will terrify them if you are flying less than 600' or 700' over their house. I personally know some of these people who live under our seaplane flight paths, and I work to keep them calmed down educate them that they are not really in any imminent danger. So use common sense and plan your take-offs and landings to avoid any low flight over the top of residences.

No Wind/Low Wind Procedures:

The more that all aircraft using Wiley Seaplane Base utilize similar flight tracks and procedures, the more neighbors will view operations as "predictable", "expected", and "normal". The following normal No Wind/Low Wind procedures are recommended:

- Take off to north, starting either side of the railroad bridge, far enough south so that you can depart through/over the "slot" beside Elk Rock Island (flying near the Elk Rock Cliff results in greater reflected noise).
- Take off with reduced RPM's if possible, or reduce RPM's and MP after take-off as early as possible (remember you have about 19.5 miles of Willamette River runway/waterway beneath you to use in an emergency during a slow climb-out).
- Climb over the river and avoid turning until reaching at least 800' MSL. (Note: the hills directly on the west side of the river reach at a peak elevation of 500 MSL feet) Maintain at least 500' clearance per FAR's.
- On landing, use a pattern altitude of 800' MSL and maintain 500' vertical separation from all houses and over the hospital/retirement home (on east side of river) if possible.
- During light and variable wind conditions land to south through/over "slot" (at Elk Rock Island).
- Self-announce take-offs and landings on 123.075.
- Do your low altitude training and confined space turn training at some other place than around Wiley's Seaplane Base. There is no need to put our neighbors through a lot of training and practice in addition to what's required for the seaplane base to operate.

Part of Aron Faegre's work as an engineer and land use planner is in the establishment, modification, and masterplanning of airports all over the state of Oregon. An airport's relationship with the local neighbors and community is the most important first step for keeping airports alive and healthy. Aron does <u>not</u> want to have to spend time working at protecting Wiley's Seaplane Base. We have had very few complaints in recent years (we are not complaint free), so everyone please do your best to be low impact, and fit in. Having said all of this, since you are pilot in command, it is understood that when there are many boats in the water, there is debris in the water, or there are other overriding circumstances, full power noise may be required and safety will come first. But those times aside, let's have a contest and see who can fly the quietest and friendliest! And if anyone has recommendations for improving this little handout, please feel free to call Aron Faegre at (503) 222-2546.

Wiley's Seaplane Base Lat: N45-25.9 Long: W122-38.9 CTAF: 123.075



