## IMPROVING YOUR SIMPLEX EXPERIENCE 10-5-23

Many Simplex net participants start out being very frustrated by how poorly they can communicate with others without the benefit of a repeater. Many begin participating using a 5-watt handheld radio indoors and expect good results. Learning how to effectively communicate without a repeater and providing an opportunity to try new things (radio, antenna, location) is what the Simplex net is all about.

Here are some steps that many have taken to improve their experience:

- 1. If you have a handheld, go outside away from buildings. If possible, operate from a high unobstructed location.
- 2. Purchase a mag mount antenna the kind you would use on top of your car and put it on something with a lot of metal such as a metal railing, BBQ Grill, or best of all your car. If you are in your car, find a location that is as high as possible and unobstructed. If you are in your manor, run some coax from the antenna to your radio so you can operate from inside your home.
- 3. Purchase a more powerful radio:
- a. A caution, If you are using a handheld for Simplex and have purchased one with 8-watts or more use a speaker mic to get the antenna away from your face. Your eyes are particularly sensitive to RF radiation.
- b. Normally 25-watts is the minimum power required to communicate more than 5 miles on Simplex but the antenna is even more important. For a low-cost solution, consider one of the 25-watt radios that plug into a cigarette lighter adapter in your car. With a power adapter you can use them at home or as a mobile radio. There are several choices under \$150. A 50-watt radio is ideal, but it needs a more powerful power supply (often 30 amps. To use it as mobile radio in your car, you can hard wire it directly to your battery (don't wire it to anything else). Many of us have opted to purchase a 20+ amp LiFePO4 battery and use this to power the 50-watt radio when we are away from commercial power. They are relatively small and much lighter than a lead acid battery and they should last for many years
- 4. Purchase a vertical base-station antenna and mount it up as high as possible preferably so that it is completely above your roof. Most of us live in HOA antenna restricted communities and this is a luxury we don't have. We have gotten around this by mounting the vertical antenna on a PVC pole that we put up for the Simplex net and then take it right down to avoid HOA hassles. Some have found ways to mount it lower below roof line for daily use and then extending it up for the Simplex net.

Please send us your ideas and experiences with improving your performance on Simplex! <a href="mailto:info@lwraces.org">info@lwraces.org</a>

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