Letter to West Central Florida ARES® Members

Outstanding in Our Field (Day)

June 2025

Dear ARES® Members,

The last Saturday of June, June 28th this year, we radio amateurs traditionally take our equipment out in the field to demonstrate remote or austere operations. This is the Amateur Radio Field Day. Many hams pack up the go-kit and antennas, fill the cooler with snacks and hydration, find a good spot to set up the camp table, and spend 24 hours trying to make contacts across the bands and around the world. This is our premier event to fellowship with fellow hams, swap our operating legends, and promote our hobby. Don't forget the sunscreen and the wide brimmed hat. Be sure to take some good pictures that your club can share.

As ARES members, Field Day affords us an excellent opportunity to test our equipment on battery or generator power. We should also follow some solid safety practices to avoid injuries and equipment damage. We recommend that one ham at the field site be appointed as safety officer. The Safety Officer (SOFR) should not be directly involved in setting up or operating the equipment. As SOFER you should discuss the plan, identify hazards, and be ready to intercede if safety questions arise.

As we approach our field location, first we look at those hazards to the people. Most of us in ham radio are not as nimble as we once were. Survey the setup area to identify and avoid tripping hazards, potentially dangerous plants and animals, and sun exposure. Bring plenty of chairs. Have plenty of water in the cooler. Make sure there is plenty of shade available – pop up canopies can be a big plus. Wear close-toed shoes and consider long pants and sleeves to minimize sun exposure. Don't forget the sunscreen (did I say that twice?).

Once the operating site is set up and safe. We need to look at electrical and RF safety. Shocks, burns, and singed fingers are not the memories we want to bring home. We recommend that every field location has a proper ground system including a ground rod or connection to a buried metal pipe. You can be creative if the ground system makes a good earth connection. One site I recall used one side of a car jumper cable clamped to a chain link fence post. If you are using a generator, follow the manufacturer's instructions on grounding the unit. In most cases there needs to be a connection between the electrical safety ground and your station ground bus.

Thinking about the generator, make sure it is located a safe distance downwind from the operators to avoid carbon monoxide (CO) poisoning. Breathing the generator fumes over a long field day can result in a buildup even though it's a distance away. Your safety officer should have ready references to identify the effects of CO. One key factor to note is if two people have the same symptoms (like headache, nausea, or drowsiness) then there is a good chance it's carbon monoxide. Also, remember don't fill the generator while it is running or still hot. It's good practice to switch over to battery while you let the generator cool and then fill it.

Let's talk about antenna safety. If you are setting up masts and using guy lines, there is a high possibility of tripping. Mark your guy lines. You can use Caution Tape or brightly colored line. Personally, I like to use pool noodles, slit so they can slide over the line. Then I tape them shut at the ends. If you plan to operate at night, you might want to put glow sticks on the guy lines as well. Also, carefully mark your ground stakes and guy anchors.

Many years, Florida is the "Lightning Capital". Keep in mind, "If you hear it – fear it, if you see it - flee it." Lightning can strike 10 to 15 miles away from a thunderstorm. If you hear thunder, you are in range to be struck. The safest thing to do is to go inside if you hear thunder. Move inside a building or a vehicle. Wait at least 15 minutes after the thunder is gone. Also, disconnect your transceivers and take them inside with you. While disconnecting doesn't prevent a direct lightning strike from damaging the equipment, disconnecting does eliminate the surge effects of nearby lightning strikes. It goes without saying to avoid holding on to any antenna or ground conductor when lightning is in the area. Your SOFR should keep an eye on the weather. A radar app on your cell phone is perfect for watching storms. Don't forget that thunderstorms can have dangerous wind gusts which can turn over canopies and take down antenna masts. This is another reason to go inside until the storm passes through.

Once the antenna is physically secure, I like to coil 5 or 6 loops of coaxial cable at the base of the mast or use an inline common mode choke. This helps prevent RF coupling back to the operating position. If you are using more than a few watts, the RF coupled back to the operating position can cause burns and signal distortion. A fuzzy transmit signal is a good indicator that you have common mode RF coming in. It's a good idea to pay attention to RF exposure, especially if you are using higher power. The ARRL RF Exposure Calculator can really help (http://arrl.org/rf-exposure-calculator).

If you plan to operate at night, be sure to have good flashlights and lamps at the operating position. You might consider using red lights which will let you see but not interfere with your night vision. It's a good idea to keep the brightness on your laptop near the low end

because computer screens can affect night vision as well. Personally, I like my headband lamp which has both white and red settings.

If you are operating from a clubhouse or other facility, don't overload your electrical service. Pay attention to the total current drawn per circuit. Use surge protection, but don't daisy chain power surge strips. Make sure your equipment has good ventilation to avoid overheating.

Field Day is a great time to check out your equipment, have fun on the air, and showcase our hobby to others. Stay safe and have fun.

Sincerely,
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ARRL® West Central Florida Section

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