

Maximizing Your ARRL Field Day Score



ARRL Field Day, which will be held June 25-26 this year, is one of the biggest on-air amateur radio events of the year. On that weekend, thousands of hams throughout the US and Canada will take to the airwaves from homes, tents, picnic shelters, public service agencies, and more.

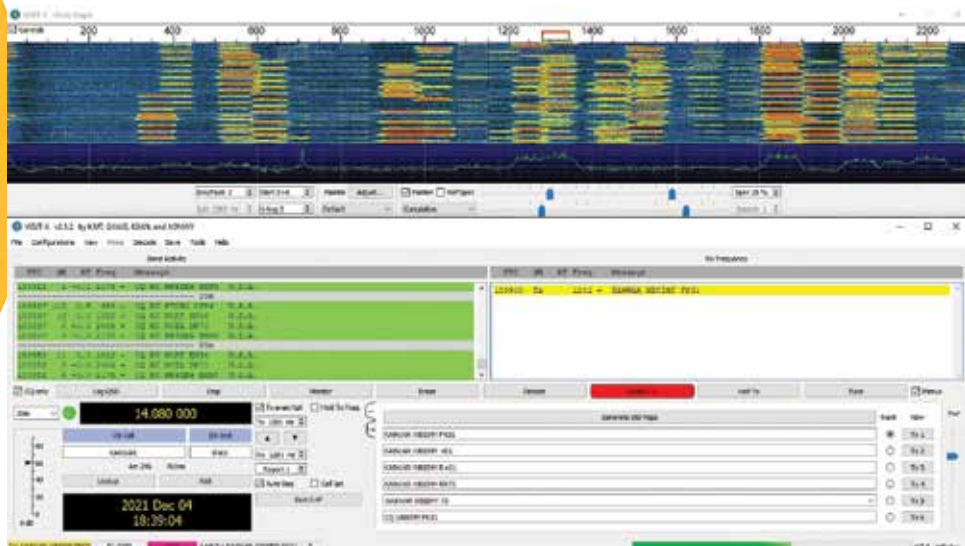
It has been said often, but it's worth repeating: ARRL Field Day is *not* a contest. There are no trophies or certificates awarded. Even so, everyone wants to rack up as many contacts and bonus points as possible. Many participants are engaged in friendly competition with clubs and other groups. Individual operators often are in competition with themselves, putting their stations through their paces to see how well they do.

Everyone who submits a Field Day log gets their call signs printed in the December issue of ARRL's *QST* magazine. For many, that's an extra incentive! Here are some pointers for maximizing your Field Day experience.

Operating Tips to Maximize your "Score"

- **Know the rules.** Visit arrl.org/field-day#rules ahead of time. There is a ton of helpful information here, including detailed Field Day rules. This page should be your first stop weeks before the big event.
- **Jump around the bands.** Try to operate your station on as many frequency bands as possible. By jumping between bands, you'll increase your chances of making more contacts. Avoid using the so-called *WARC bands*: 30, 17, and 12 meters. These bands customarily are off limits to this type of operating. The same is true for 60 meters.
- **Check the propagation forecast.** Before Field Day starts, check propagation conditions on a site such as solar.w5mmw.net to determine which frequency bands are likely to be productive. Remember, however, that these are only predictions. If a band is rated "poor" that weekend, check it anyway. You never know what you may find.
- **Try CW.** If you're comfortable with it, CW is terrific for making contacts quickly at low power levels. If you encounter someone sending at lightning speed, call them at whatever speed works for you. If the operator is considerate, they will slow down to make the contact.
- **Learn FT8 and FT4.** Digital modes such as FT8 and FT4 will be extremely active during Field Day, so much so that your software display may look like sheer bedlam. Don't let that intimidate you. Well in advance of Field Day, install a copy of *WSJT-X* from physics.princeton.edu/pulsar/k1jt/wsjt.html, along with a copy of the user manual, and learn how to use

You can count on our sun being active during Field Day 2022, so pay attention to the online propagation forecasts.



FT8 and FT4 are likely to be the two most popular digital operating modes on the HF bands during Field Day. Here is what FT4 looks like on a busy frequency.

FT8 Frequencies

All frequencies are Upper Sideband (USB)

Band (METERS)	Frequency (MHZ)
80	3.573
40	7.074
20	14.074
15	21.074
10	28.074
6	50.313

FT4 Frequencies

All frequencies are Upper Sideband (USB)

Band (METERS)	Frequency (MHZ)
80	3.575
40	7.0475
20	14.080
15	21.140
10	28.180
6	50.318

the software. *Pro Tip:* Most operators will be using FT8, so try FT4 instead. It works nearly as well, but it is much faster. You're also less likely to be plagued with interference on the FT4 frequencies.

If you choose to operate FT8 or FT4 outdoors where you won't have an internet connection, you'll still need to make sure your computer's clock is properly synchronized. An easy and inexpensive way to do this is to purchase a Global Positioning System (GPS)

receiver that plugs into one of your computer's USB ports. You'll find these selling for \$25 or less on Amazon and at other retailers. Then, use free software such as *Bktimesync* (maniaradio.it/en/bktimesync.html) by Mauro Capelli, IZ2BKT, to tap into the GPS time information and keep your computer in sync.

Just download and install *Bktimesync*. When you start it, uncheck the "Enable NTP" box and put a check in the "Enable GPS" box. You will also need to select the COM port that is communicating with your GPS receiver. In Windows, look under "Ports" in Device Manager to find the port number.

▪ **Turn down the gain.** If you choose to operate voice or CW on the HF bands, try turning down your transceiver's RF gain. If your radio offers a build-in attenuator feature, try it as well. Too much gain will overwhelm your radio and make it more difficult to hear stations. Turn the gain way down and you'll quickly hear the benefit.

▪ **Don't neglect VHF, including VHF FM.** During June, the 6-meter band frequently opens for long-haul contacts. When the band is hot, you'll find SSB operators between about 50.125 and 50.250 MHz. The FT8 digital operators congregate on 50.313 MHz. Just a simple wire dipole antenna is all you need.

On 2 meters, try to put up a small antenna such as a ground plane and elevate it as high as possible. Listen for activity on direct-contact (simplex) frequencies such as 146.52 MHz and don't hesitate to call "CQ Field Day" every so often. Avoid

repeaters, though; Field Day activities are frowned upon there, and contacts made through repeaters cannot be counted toward your score.

▪ **Go for the bonus points!** There are several activities that will substantially add to your final score:

- ✓ **Use 100% emergency power.** This means powering your Field Day station entirely from batteries, generators, wind, solar, etc.
- ✓ **Publicize your operation on local media.** This means newspapers, TV, and social media. Make sure you can provide proof in the form of a newspaper clipping or an internet screen capture.
- ✓ **Operate in a public place, such as a park, shopping center, or school campus.** You'll get even more bonus points if you set up a display table with printed information about amateur radio.

▪ **Team up!** Although we've been talking about operating Field Day by yourself, or perhaps with a small group of friends, you might also choose to assist a nearby club at their Field Day site. See the online ARRL Field Day Locator at arrl.org/field-day-locator to find one.



If you want to operate Field Day with a nearby group, you can find one by using the ARRL Field Day Locator at arrl.org/field-day-locator. See "Find Your Way to Field Day Fun with the ARRL Field Day Station Locator" in this issue for more information about this tool.