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Remote Contesting

The big contest is coming up, but you have to be out of town. How can you get on and operate, simply, cheaply, and well enough for a dozen hours of fun? Is there a simple solution? These are the simplest methods for remote contesting that I can recommend.

Borrow Someone Else's Station

A first possibility is to borrow access to someone else's station for the contest. It can be an experiment in remote operating, the experience of a different location, and you don't have to make any changes at your station. You might know a friend already set up for remote access, especially FlexRadio users. Multi-Multi contest stations are always looking for more contest operators, and several are now set up for remote access as part of their team.

Another possibility might be at Remote-Hams.com, which lists hundreds of remote stations around the world. To be allowed to operate the transmitter (rather than just listen) you will have to register, upload a copy of your license, contact the specific station owner, and maybe join their local club. Stations vary widely in capability and reliability, and you shouldn't "hog" a station for a contest weekend without first checking with the owner. Save some time to learn to use the RemoteHams software called *RCForb Client*.

A little more expensive is RemoteHam-Radio.com, but it offers a free trial period, stations at various cost levels, and the support and reliability to make sure your operation happens (see Figure 1).

Some other entrants in the rent-a-remote category are **BeLoud.us**, K7RL (**k7rl. com/station-rental/)**, and W3TX (**super-bertha.com/remote-control-rentals**).

Remotely Operating Your Own Station

But, maybe you have a home station you use throughout the year. You're familiar with its operation, and you really want to try remotely operating your *own* station. Now, the fun begins.

First, you need to evaluate how fully automated your current station is. Can a contest be completely operated from the shack PC, or will you need to jump up to plug a cable, turn a switch, or change a setting? Those "manual" operations will not be possible when remote, so they should be replaced by an automatic, or PC-controlled, solution, or you have to accept the limits they impose. Maybe some bands or antennas will not be available or only a single mode can be set up and used (not a problem with most "single-mode" contests).

I don't count "reaching out to adjust the radio" as a problem. Radio operation can be taken over by software on the shack PC, generally called "rig control software." There are many possibilities, starting with your favorite logging software which can make common adjustments such as frequency, mode, or RIT, but lacks complex controls for such things as filters, bandwidth, or noise blanker. Adding specific rig control software will reach all the radio functions. Some popular software known to work well for remote control include *DX-LabSuite Commander* (**dxlabsuite.com**); *Win4K3Suite* (and the Icom and Yaesu versions) (**va2fsq.com**); *TRX-Manager* (**trx-manager.com**) or *N4PY* software (**n4py.com**).

These programs, free or available at a modest cost, will allow an on-screen radio to control the physical radio, providing access to the knobs and menu settings.

To run your contest logging program simultaneously with this rig-control software, you will need to "share" the radio serial port. Support of logging programs (sharing) is built into the programs mentioned above. See, for example how *Win4K3* shares with other programs at **va2fsq.com/category/3rdpartyintegration/**.

DXLabs Commander handles this sharing as described at **www.dxlabsuite.com/dxlabwiki/RemoteControl**. Using other software may require adding a virtual COM port or other sharing mechanism such as *Com0Com* or *VSPE*. This can be a "difficult" area, so enter with care.

The idea is to be able to carry a laptop, log into the shack PC, and operate as if sitting in the shack. Access from the laptop to the shack PC is done with "remote desktop" software such as *TeamViewer*, *Chrome Remote Desktop*, *Windows Remote Desktop*, or *Splashtop*. These programs all include two-way audio. Other remote desktop programs without audio, such as *TightVNC* or *RealVNC* are available, and in those cases, you will need to add "voice over IP" programs such as DF3CB's *Rem-*
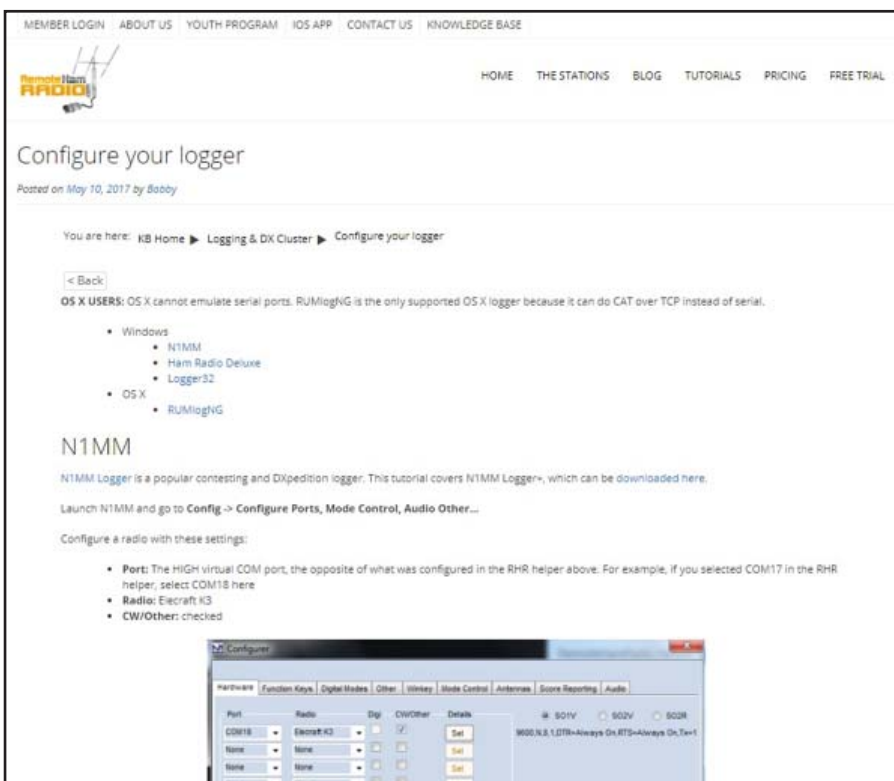
An example of help for setting up your logger to work with RemoteHamRadio.com [Courtesy of RemoteHamRadio.com].

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Aud or *Skype*. A remote desktop connection will let you send CW from the logging program and the keyboard, but not with a key or paddle without additional hardware and complexity. Needless to say, all this automation and software should be installed and tested prior to leaving on your trip!

If all this software has you worried, you may want to consider a more hardware-based solution. A pair of RemoteRig boxes (RRC-1258MkIIs) from RemoteRig.com will allow you to connect across the internet and control your radio from a detachable front panel, second radio, or a "software radio" such as *Ham Radio Deluxe*. Review the information at **RemoteRig.com** "How

it works" or the "RRC-Micro PC-Client" to see if this appeals to you.

The RemoteRig boxes will require changing the cables at your station before leaving, and again when you return, but the boxes are very reliable, once configured and operating. A pair of RemoteRig boxes, or a box for the radio and the PC software, will cost you about $500 US.

Start well ahead of any contest you'd like to operate remotely to install and configure software or hardware and to have time for a dry-run now. Who said operating remote stations is "too easy" and is "dumbing down" ham radio? See you in the contest!