

How do I?

An occasional series

This week: PC's and Radio

In another article we discussed smart phone apps. (“There is an App for that”). Today let’s look at what is on the PC. I am lucky enough to have a Windows computer I can leave in the shack. I turn it on every time I am on the air. What’s on it?

N3FJP logging software. <http://www.n3fjp.com/> Scott N3FJP offers over 100 different PC programs. The heart of their offerings is AC Contact Log, known to most as simply the “N3FJP logging software”. It is easy to set up and use. With it you can easily store contacts, create mail labels for QSO cards, keep track of QSO’s for various awards like WAS-Worked all States and DXCC-worked 100 DX entities, etc. It also provides fields for County names for County Hunters, 10-10 numbers for 10-10 club members, etc.

It also provides for very easy access to upload to LoTW-Logbook of The World and to send and track E-QSL’s. It is not free but it simply works!

Fldigi, the Fast Light Digital modem application, is a free and open-source program which allows an ordinary computer's sound card to be used as a simple two-way data modem. I go to SourceForge.net to download but Google will lead you to other sites as well. Fldigi is used by various amateur radio communities. It is one of the primary platforms for PSK31 and also does CW very well. The EMCOMM community is using it with NBEMS system to send and receive messages. While the original PSK31 was on 20 meters at 14.070, PSK31 can be found on 10-160 meters and is used on 2 meters as well. With the Fldigi package comes Flmsg (used for NBEMS communications), Flwrap, Flrig (rig control from a PC) and some other programs. I have used it for several years and love it.

WSJT is a computer program used for weak-signal radio communication between amateur radio operators. The program was initially written by Joe Taylor, K1JT, but is now open source and is developed by a small team. This is the heart of currently popular HF digital modes such as FT8, JT9, JT65. It probably deserves an entire article on it and possibly an article for each mode and WSJT.

AGWPE packet radio software. AGWPE is a free packet engine. I don’t have much experience with it but if you set up a sound card modem such as a Signa-Link or Rigblaster, AGPWE is your entry to packet radio. Before the internet, packet was used

to transfer data over the air. It was used for “Bulletin Boards” where messages were stored on a repeater (most often 2m, but there were 6m,10m, and 70cm ones as well). The user “dialed in” using a hardware device known as a terminal node controller, or TNC. Bulletin boards have largely faded away, but are still around. Some still use a TNC but a simple computer sound card and software such as AGW Packet Engine will do the job, possibly easier, and uses the same sound card you use for PSK31 or FT8. Google will lead you to many others, and they may be better, but this is one the have set up. AGWPE is free and has made a comeback as APRS messaging developed.

RT Systems radio programmers <https://www.rtsystems.com>

As radios have become more like computers and have more memory options and storage space, RT Systems has made programming easy. The software and cable is generally about \$50 but worth every cent. CHIRP is free and some manufacturers are now starting to provide “free” software but RT Systems simply works. I buy it for every VHF/UHF rig I acquire. I have a standard package of frequencies I install and RT systems eliminates manually entering 100-200 frequencies by hand. Cut and paste is your friend. And since all you need is a PC and the cable, if you are in the field and suddenly find you need several new repeater frequencies, it may be a lot quicker to program them than to enter by hand.

LoTW the ARRL Logbook of The World requires a small program called TQSL to store the encryption key on your PC. For decades, hams used QSL cards to verify contacts. QSL cards are still in use and I have received some very nice ones. I suppose fifty cent postage is really no more expensive than ten cent postage was, but if you are working on your WAS (Worked All States) award, the costs can add up. I have heard many hams on the air be asked for a QSL card and they flatly refuse, saying they cannot afford to QSL. LoTW and EQSL are two free ways around the cost barrier. Some purists may disagree, but I see no difference between a EQSL card I receive and print myself and a mailed card. LoTW is simply a logbook where you upload your contacts and it compares them to those uploaded by others and it matches it is “confirmed”. You can use the confirmed LoTW contacts for various ARRL and some other operating awards. The EQSL folks have their own E-QSL awards and EQSL cannot be used for ARRL awards. (Sort of the whole VHS vs Betamax video tape fight replayed, but some would say that oversimplifies things).

We could go on, and I have not touched on some popular programs like HRD-Ham Radio Deluxe. I don't use it, but it is popular. But our editor only gives us two pages and we are out of room.

Catch ya on the air!

