

Backup – and Moving Forward

There he goes with the cryptic headlines again! Well, I decided to start this column with a topic that at first glance doesn't have much to do with contesting – a backup solution for your precious computer files. Just bear with me – I'll tie it all together.

Some time ago, I got worried about what would happen if I had a power failure during a contest. So, to protect my log data, I got a 128 MB USB "thumb drive", almost free at Staples. My thought was to do frequent (every 5 minutes) backups to the thumb drive. Then I started looking at backup software, and was surprised at how expensive it was. And of course, right after I bought some shareware, I discovered a better solution, and it's free.

2BrightSparks offers a free backup package called SyncBack (www.2BrightSparks.com). I assume their objective is to promote their SyncBack SE professional version, but over 2 years of use I have found the free one does everything I want. It backs up exactly the files I want, on schedule, and only writes to the drive any files that have changed.

More recently, I decided I needed a more general backup solution. As disk drives get bigger, CDs are much too small, and even DVDs aren't enough (I'd need a couple for a full backup). Then I stumbled across Seagate's FreeAgent USB drive – 320 GB of storage, a USB 2.0 connection to your computer (very fast!), looks like something out of Star Wars (see Figure 1), and best of all it sells for under \$100. When I consider that my first hard drive held 10 MB and cost \$250, the FreeAgent is 8,000 times as cost effective. I'd call that progress.



Anyway, it's been a total success. SyncBack doesn't care where the files to be backed up are stored, so I can automatically back up my wife's computer across our primitive wired network. It runs in the middle of the night, and reports any problems with the backups it performs when I get up the next morning.

Just to hook this back to contesting ... 320 GB is far more than I'll ever need for backup. I've discovered, though, that it is very convenient for recording contests with RecAll, and the next thing I plan to do is to record a complete contest using CW Skimmer - a 96 KHz slice of one band requires about 90 GB of storage. I figure it's always better to do this sort of disk-intensive stuff on a drive other than the one where my logging software lives.

Moving right along... as most of us are discovering, the LPT port on new computers is a vanishing breed, which poses a problem for many contesters who use LPT-port-controlled SO2R switching systems. Laptops have dispensed with LPT ports for years, and new desktops are following suit. Available USB-to-LPT converters, designed to drive older printers, don't support software switching of individual lines on the port. Desktop computers still have a PCI bus, so one option is to add an LPT port card, but laptop users are out of luck.

Faithful NCJ readers will recall that Joe Subic, W4TV wrote an article in the May-June 2007 article proposing a way of using a single serial port to provide all necessary control signals for SO2R operation, via simple hardware interfacing between either hardware or USB serial ports and the LPT port, using various serial port control lines to manage the needed switching.

In the meantime, Joe's colleagues at MicroHam (he is their US representative, at www.microham-usa.com) have come up with another approach to the problem, for use with their MK2R/MK2R+ two-radio controller. Using a simple set of serial commands, the MicroHam SO2R Protocol provides all of the standard SO2R commands, plus band data, over a USB port; it also has two-way capabilities, when used with the MK2R+, so that it can share status information with the computer, potentially enabling a whole set of new capabilities. All but one of the standard Windows contest logging programs – N1MM Logger, Writelog, and Win-Test – support the MicroHam SO2R Protocol, and there are some indications that CTWIN won't be far behind.

Given all this activity, it was natural that someone would figure out a way to utilize a subset of the MicroHam protocol commands to control existing LPT-port SO2R controllers. Chris Sieg, WA3LDI, of PIEXX (www.piexx.com) has now stepped up to the challenge. Chris is best known for his microprocessor update for the Kenwood TS-930, which extended the life of that venerable but excellent CW radio by adding computer control and a number of other features. He has come up with a firmware device, called SO2RXLATE, that translates a subset of the MicroHam Protocol commands into LPT port signals that will control all the standard functions of SO2R controllers, such as the TopTen DXDoubler. The unit is available either as a PC board, with or without debugging display, or in a nicely-finished enclosure (Figure 2).



It also translates band data and makes it available on the conventional LPT port lines, and will control a radio, all through a single USB port. ICOM and non-ICOM versions are available. Finally, LPT port CW and PTT are supported, making it a one-stop solution, though of course outboard keyers such as the Winkey can be used as well. Software installation is simple – virtual port drivers that load only when they sense the presence of the SO2RXLATE unit.

What the SO2RXLATE unit gives you is a way to extend the life of an existing SO2R controller, or to use it with a laptop, which was heretofore impossible. It still isn't close to the capabilities of an MK2R+ (nothing currently on the market is), but by encouraging adoption of the MicroHam SO2R Protocol, it will probably lead even more people to upgrade to the MK2R family of multi-mode two-radio controllers. In the meantime, I have a hunch one of these may find its way into many guest ops' and contest DXpeditioners' "go bag." Cost is US\$85 for the base unit. The optional display "daughter-board" is \$26, and the optional metal enclosure is \$20, direct from www.piexx.com. Not bad, particularly when you

consider that it will do away with the need for separate CW and PTT interfaces and requires only the USB cable to the computer.

That's it for this time. As regular readers of CQ-Contest know, I've been deeply involved in the CW Skimmer software project with VE3NEA, and will have lots to say about that, and its implications for contesting, in the months ahead. See you at Dayton?