Last time, I wrote about contest trainers for use under *Windows XP*. Just as I was putting the column to bed, Alex Shovkoplyas, VE3NEA, the author of *DXAtlas*, released his freeware trainer, called Morse Runner (www.dxatlas.com). For those of you familiar with his other efforts, it will come as no surprise that this trainer is exceptionally good. It permits speeds down to 10 WPM, and the CW sounds good at that speed. There are a variety of special effects, including very realistic QRN, QRM, QSB and flutter, as well as a "lids" mode in which the "stations" coming back to you periodically mess up (see Figure 1). I found myself grabbing for my paddle to send fills, the simulation is that good.

The simulator operates in WPX mode (with serial numbers) and emulates CT commands, as well as the ESM (Enter Sends Messages) mode familiar to users of *N1MM Logger* and *TR Log*. There are pileup, single signal and competition modes available. Since December, Alex has introduced 2 new versions; the latest, version 1.4, even adds RIT for "received" signals via the Up and Down Arrow keys. One of the features I like most is the rate meter, which counts down constantly while you "operate", giving an excellent reminder of which pileup problems cost the most in terms of rate.

For those of you who are competitive even when running a simulator, the competition mode offers the option of doing a 60-minute "contest" and then reporting it to VE3NEA's web site, where a list of top scores is maintained and available to users. So far the top scorers are reporting as many as 270 QSOs in the hour's time.

Morse Runner

File Run Send Help

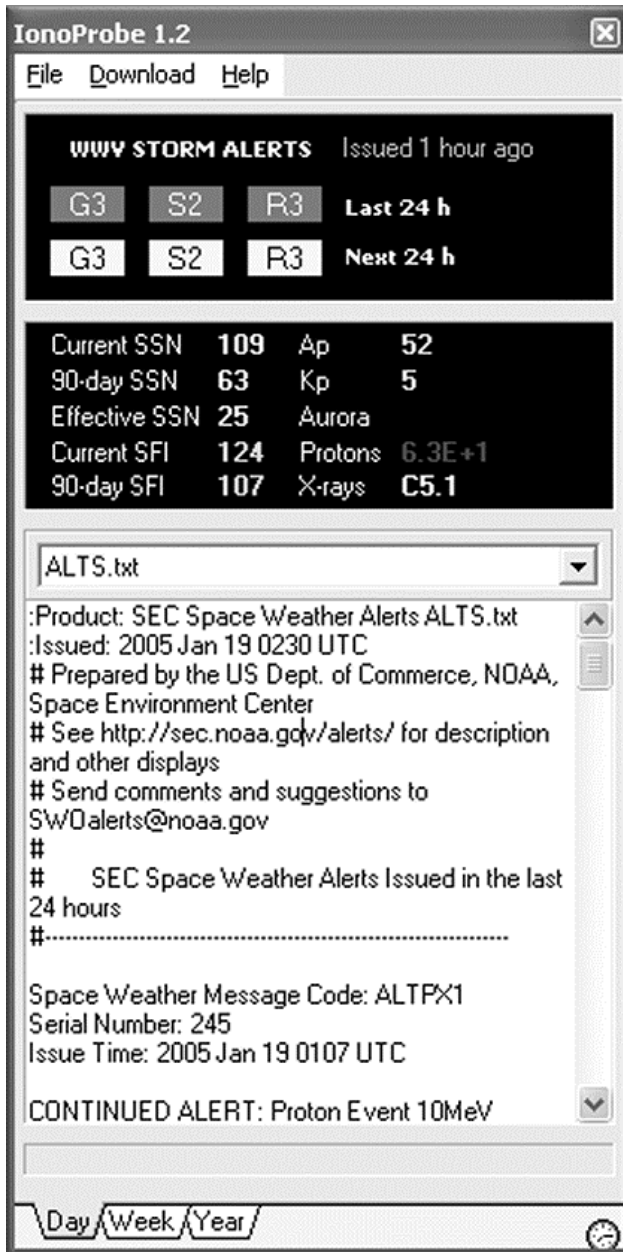| UTC	Call	Recv	Sent	Pref	Chk
00:00:35	LB8RE	599 001	599 001	LB8	
00:01:17	OK2SFP	599 002	599 002	OK2	
00:01:46	ON7LB	599 001	599 003	ON7	RST
00:02:24	HG8N	599 001	599 004	HG8	
00:02:44	IV3IUM	599 007	599 005	IV3	
00:03:08	YS1AE	599 004	599 006	YS1	
00:03:28	SP6GNO	599 005	599 007	SP6	
00:03:51	DB9KM	599 004	599 008	DB9	
00:04:34	DJ7ZK	599 002	599 009	DJ7	
00:05:02	K2BRG	599 007	599 010	K2	
00:05:49	AB5XP	599 001	599 011	AB5	
00:06:09	NR3E	599 009	599 012	NR3	
00:06:38	AA3GM	599 003	599 013	AA3	
00:07:06	G4NXG/M	599 003	599 014	G4	
00:07:39	JL1UTS	599 005	599 015	JL1	NR

Station
Call N4ZR   □ QSK
CW Speed 28 ▲▼ WPM
CW Pitch 500 Hz ▾
RX Bandwidth 200 Hz ▾

Band Conditions
☑ QRN ☑ Flutter   Activity
☑ QRM ☑ LID's   4 ▲▼
☑ QSB

▷ Run ▾ for 60 ▲▼ minutes

Call   RST   Nr.

F1 CQ F2 <#> F3 TU F4 <my>
F5 <his> F6 B4 F7 ? F8 AGN

Pile-Up: 4   120 qso/hr.   00:07:51

	Raw	Verified
Pts	15	13
Mult	15	13
Score	225	169

I won't usually do this, but since I started with VE3NEA, I thought I'd devote the rest of this column to Alex's superb group of programs. Several are freeware, and the more ambitious ones are available as shareware from www.dxatlas.com.

Most of us are probably familiar with *DX Atlas*, Alex's super evolution of the *Geoclock* idea. One of the most fascinating improvements he has developed is integration with other programs of his. In addition to providing world maps, with grey line, relief and prefix information, when used in conjunction with his other programs (discussed below) *DX Atlas* can also display near-real-time ionospheric maps and even plot the paths of QSOs being spotted on DX Summit as the spots are posted.

Perhaps my favorite among Alex's other programs, from the standpoint of pure utility, is *Ionoprobe*, a shareware application that resides in the system tray, accesses Internet reporting of ionospheric and geomagnetic conditions, and displays summaries and full text on demand. It even sounds a "horn" and turns its tray icon red when disturbed conditions are reported. It is a great adjunct to any *Windows* logging program for keeping on top of conditions in real time. As I write this, the *Ionoprobe* icon in the system tray is red, denoting disturbed conditions, and a single click on it gives me all the current parameters, as well as the texts of all the major alerts (see Figure 2). One click of the mouse will show you trends for the last week or year, and placing the cursor on any of the graphs will give specific numbers.

IonoProbe 1.2

File Download Help

WWV STORM ALERTS Issued 1 hour ago

G3 S2 R3 **Last 24 h**

G3 S2 R3 **Next 24 h**

Current SSN **109** Ap **52**
90-day SSN **63** Kp **5**
Effective SSN **25** Aurora
Current SFI **124** Protons 6.3E+1
90-day SFI **107** X-rays **C5.1**

ALTS.txt

:Product: SEC Space Weather Alerts ALTS.txt
:Issued: 2005 Jan 19 0230 UTC
Prepared by the US Dept. of Commerce, NOAA,
Space Environment Center
See http://sec.noaa.gov/alerts/ for description
and other displays
Send comments and suggestions to
SWOalerts@noaa.gov
#
SEC Space Weather Alerts Issued in the last
24 hours
#--

Space Weather Message Code: ALTPX1
Serial Number: 245
Issue Time: 2005 Jan 19 0107 UTC

CONTINUED ALERT: Proton Event 10MeV

\Day/\Week/\Year/

My second favorite is *Ham CAP*, a freeware front end for the powerful but complex *VOACAP* propagation modeling software. Once you have *VOACAP* installed, *Ham CAP* provides a user-friendly and simplified interface for using it to predict conditions on any path or worldwide. One of the harder things to do in *VOACAP* is to incorporate the effect of antennas at both ends of the path; *Ham CAP* makes that easy by giving you lists of antennas that can be used in calculations on each band. The resulting MUF versus time charts mimic the look of the ARRL-published charts.

Propagation modeling is a *very* complicated business, so there is lots of room for debate about the particular parameters anyone uses, but the charts so far seem

to meet the sanity test. It's always worth remembering that the predictions are statistically derived, and cannot reflect the dynamic conditions on a particular day. Alex tells me that several logging software makers are working on integrating *HamCAP* with their programs so that right-clicking on a DX call will display the propagation to that area.

Recently, Alex introduced *Band Master*, a standalone band-map/spot listing program that takes Internet spots downloaded from *DX Summit* and displays them on a bandmap that links to your radio. Initially I thought that this would be basically a "fun" program, since it duplicates much of the functionality we are used to in contest loggers (a clickable bandmap, for example). I'm now wondering, though, whether it couldn't be used to advantage in conjunction with a *Windows* general logger; one issue is that two programs can't normally share the serial port used to communicate with your radio, so you would have to disable radio control in the general logger, and then remember to keep it on the right band. Potentially, *BandMaster* could interact with logging programs through the COM/OLE interface, as *DX Atlas* does, and Alex says that his *Omnirig* radio control engine, which is used by the *Band Master* as well as *MixW* and some other loggers, could allow this sort of operation if it were to be adopted by other logging programs. *Omnirig* is available from Alex's *Developer's Corner* (http://www.dxatlas.com/Dev).

One last notable utility that Alex has produced is the *Master Callsign Database Editor, Medit.* The idea, as the name implies, is to allow individual contesters to edit their Super Check Partial (master.dta) databases, either manually or through adding other source files to them. It will accept other master.dta files, Cabrillo, ADIF, or ordinary text files containing lists of callsigns, and allow the operator to do *QRZ* lookups or otherwise decide whether to delete calls as busted. One unique feature is that the program can capture callsigns from the upcoming contest DXpedition list maintained by Bill, NG3K on his excellent website (http://www.his.com/~wfeidt/index.html). For nothing but this feature alone, this editor will become part of my toolkit.

Medit is undocumented, so it's worthwhile doing a little exploration before trying to use it for real. Fortunately, it is organized so that nothing is changed in the file being edited or augmented until you exit *Medit* or explicitly save it or save it *as* another filename (always the best idea). Also, the default locations for downloading master.dta files and upcoming contest operations are severely outdated, so you need to provide your own in the Settings dialog before using. And finally, as a long-time user of the expanded trmaster.dta files, which also store state, section, check, name, etc., I was sorry that *Medit* is limited to call-only master.dta files. I do understand, though, that modifiying *Medit* to handle those files would not be a trivial undertaking, and it *is* freeware.