This is a periodic message primarily directed at new NWAPRS users. Please print this out and keep it handy, or share it with a another newcomer. It offers recommended settings for APRS. Please note that these are recommendations only, and not orders. If you don't want to follow a particular setting, no problem. But please be aware that as our group grows larger and larger we need to all help keep our systems optimized for best performance and minimal mutual interference.

Much information can be found on the nwaprs web pages at www.nwaprs.org.

Home QTH running APRSdos, WinAPRS, MacAPRS, or APRSsa:
1. Preconfigure your TNC using a terminal program first, before attempting to use it with APRS. You must know your TNC baud rate before starting APRS. It can be set on any value, but I'd recommend 4800 or 9600. You must also enter basic information such as MYCALL, MYPBBS, etc. You should also change HEA OFF, MCOM OFF, and MCON OFF, if they are set to ON. The TNC must be in INT TERMINAL mode to work properly with APRS. FYI, new Kantronics TNCs are set to INT NEWUSER, which will allow you to only change certain settings.
2. When you start APRS the software will automatically configure other settings to what they need to be, but you need to make some of those settings first in software, and perhaps re-iniatialize the TNC.
3. Setting up your outgoing path is relatively easily. We want all NWAPRS stations to see your home station on the air. After you are up and running, try setting your outgoing path to WIDE6-6 (for Seattle, Vancouver BC, Yakima, and Spokane) or WIDE4-4 (for Olympia, Vancouver WA, and Portland). This setting SHOULD get you coverage through all 16+ nwaprs WIDE digipeaters, and optimize your station settings. If you CANNOT get into the nearest WIDE digipeater, then change your outgoing path to RELAY,WIDE6-6 or RELAY,WIDE4-4. If this works, then you should further investigate and try to find out whose RELAY station you are transmitting thru, then substitute the actual call for the RELAY setting.
4. Please add something to the comments string, including your first name and general area where you live. I use "Dave, Pe Ell, WA" for my home station setting. This helps all of know who you are.

Mobile Trackers:
1. Check the recommended settings on the nwaprs.org web pages.
2. Mobile trackers should not transmit more than once per minute to an immediate region. If your TNC allows you to have multiple settings, like the Kantronics TNCs, then send your once per minute updates to something like RELAY,WIDE. I don't think anybody will have problems with setting a second path of RELAY,WIDE4-4 or RELAY,WIDE6-6 every 2, 3, or 5 minutes. If you use one path with an HF GATE, such as RELAY,WIDE,GATE,GATE,WIDE, please set it at every 10 minutes or greater. This path gets you out onto HF, providing there is an HF gateway station within earshot of your nearby WIDE.

3. Here's what I'd recommend for a KPC-3+ 8.3 setting:
LTP 1 GPSLV V RELAY,WIDE and BLT 1 E 00:01:00 CLEAR
LTP 2 GPSLV V RELAY,WIDE6-6 and BLT 2 E 00:05:00 CLEAR
LTP 3 GPSLV V RELAY,WIDE,GATE,GATE,WIDE and BLT 3 E 00:10:30 CLEAR
Note the GPSLV will make my symbol on APRS appear as a van. See the web page for symbols and SENDTO settings.
4. Your tracker BTEXT should be GPSLV (substitute your own desired symbol setting) V RELAY,WIDE4-4 (or WIDE6-6) and B E 10 (minutes).
5. Set the GPSHEAD 1 setting to either $GPRMC or $GPGGA.
6. Here are some common SENDTO symbol types:
GPSBH small aircraft
GPSLV jeep
GPSLK truck
GPSP0 numerical circle (use 0-9)
GPSMT motorcycle
GPSMV car
GPSNV# numbered car
GPSPC canoe
GPSPR recreational vehicle
GPSPU bus
GPSPX helicopter
GPSPY yacht
GPSHV large aircraft
GPSLA ambulance
GPSLB bike
GPSLG glider
GPSLP rover (puppy)
GPSLU 18-wheeler
GPSLV van
7. The nice thing about using the SENDTO to determine your symbol is that you can easily change this via remote access without changing the station callsign. I have two portable trackers. One is K7GPS-11, the other is K7GPS-12. By accessing the SENDTO field on either tracker I can change the icon as it appears on your APRS screen. If I have a tracker in a vehicle set at GPSLK (a truck symbol), but then it is moved to a helicopter, all I have to do is connect remotely and change the SENDTO from GPSLK to GPSPX.

APRS Mobile Stations:
1. This is the situation where you have a laptop in your vehicle running APRS. You can use the Kantronics KPC-3+ 8.3, and a PacComm Pico Packet dual serial port, to easily integrate mobile APRS with a GPS. The GPS output goes to pins 3 and 6, data and ground respectively, on the KPC-3+ 8.3 DB-9 radio port connector. The GPS output goes to the center and ground ring pins of a 1/8" stereo connector for the Pico 2SP model.
2. If you have an older KPC-3 you can still use it while mobile, by building or buying an HSP

cable. This is a pig-tailed connector that when attached cycles between the selected TNC and GPS for position updates and is computer software controlled. Once the newer PacComm Pico Packet 2SP and KPC-3+ 8.3 became available, I stopped using my HSP cables.
3. Remainder of the settings are software controlled, and different (of course) depending on which version of APRS you are running.

APRS Weather Stations, and APRS Remoted Weather Stations:
1. The Peet Brothers and Davis Weather System weather stations both work well with all versions of APRS.
2. On a home QTH APRS station, typically the weather station feeds into serial port 2 of the computer. If you are running a home station on a laptop and the only serial port is occupied by the TNC, then consider purchasing a serial port PCMCIA card to use the second serial port for the weather station.
3. For a remoted weather station, like one combined with a WIDE digi, you input the weather station data into the DB-25 (pins 2 and 7) on a KPC-3. There is also a different setting for GPSHEAD 1 since no GPS is connected, but one that allows the weather string to flow into the TNC.

WIDE Digipeaters:
1. Recommended settings are listed on the nwaprs.org home pages.
2. Please do not arbitrarily make your home station a WIDE digipeater unless you have pre-coordinated this with your regional coordinator. In some rare cases we do this because the home station is at a key (read this high up) location that is generally unserved by a remoted WIDE area digi. It does this system no good having two WIDEs nearby each other, both digipeating the same traffic.
3. WIDE digis are typically located at high up locations. The capital outlay for a WIDE digi site is usually high because of the rf conditions we must abide by. A typical WIDE site may include a high-dollar antenna capable of sustaining strong winds and ice build-up, hardline cable, filters and cavities, and perhaps a commercial-quality radio, along with the recommended Kantronics KPC-3+ TNC with remote access settings activated.
4. In the BTEXT setting, which is set to TX every 10 minutes, please include a general site name so we can all get a general idea where the WIDE is located. Something like "South Mountain APRS WIDEn-n" would be acceptable.

Now, if you're thoroughly confused, check back to the elmer listing off the nwaprs.org home pages and see if there is an APRS elmer who lives near you. The easiest, and best recommended way to learn about APRS is have someone looking over your shoulder while you push the buttons.

This document should help you get started with APRS. The nwaprs.org web pages have more information about using the Mic-Encoder (mic-e) which attaches between your radio and microphone and sends a short position burst over your favorite repeater, the Agrello

DFjr direction finding unit which interfaces nicely with APRS, and more.

Our membership is well over 100 now in Washington, Idaho, Montana, Oregon, and British Columbia. We have 130+ members on our email list (to subscribe, email nwaprssig-request@nwaprs.org and in the body "subscribe nwaprssig") and all of our members are potential elmers to help newcomers. I encourage all our existing members to help out where you can so the newcomers get up and running smoothly and without aggravation or stress.

That's enough for this message. Thanks for reading. Dave/K7GPS