

Digital Training Session 3.

This is the third part in a series of training sessions on the use of digital communications in Harris County.

This part discusses *Station Guidelines* for digital messages. Here are the major points:

All stations:

1. When commissioning your station, use default parameters for the program. However, you should check these for your individual station:
 - Check your frequency. On 1200bps, it should be within 200-300Hz. This can easily be checked with a tunable receiver or calibrated counter
 - Check your deviation using a meter. Adjusting by ear is not good enough for optimum performance
 - Check the transmit time delay for your particular radio (there can be both good and nasty surprises here!)
2. Look for an Elmer to help out with advice, techniques or test equipment. Some names are listed on the HCARES website
3. Keep your software up to date
4. Keep in practice and expand your skills!
5. Use beacons to announce your presence, but set the time interval for not shorter than every 20 minutes
6. On packet, use the auto check-in feature in Airmail and Paclink to test availability of new stations, or to check reliability of your station with another. Use in moderation.
7. In all installations, make sure you use shielded cables, good grounds and ferrites for RF suppression.

Telpac Guidelines:

1. Use direct modem connections (as opposed to AGW connections) for normal standalone Telpacs. This:
 - Should be more reliable
 - Enables the Telpac to have a KA node if you use a Kantronics modem. (AGW does not have the ability to use a KA node)
2. Use AGW based Telpacs if messaging needs to be part of the system. For example, in an EOC or hospital, this will be more reliable rather than shutting down Telpac to use Airmail whenever messages need to be sent or received
3. Use a UPS or battery backup.
 - It is required to protect against power surges or interruptions
 - Consider how emergency power can be provided in case of power failures (how long is TelPac operation needed, how vital is the TelPac to the network)
 - Include your cable modem, DSL etc in the backup
4. Configure all Telpacs to use both digipeater and KA node functions if possible. For an AGW based TelPac, digipeating will require the use of the AGW digi software.

5. Use standard SSIDs. This will make it easier for users to locate and remember the correct SSIDs. The standards in our County are:
 - Callsign – 5 for the digipeater
 - Callsign – 7 for the KA node
 - Callsign – 10 for the TelPac function
 - Callsign – 11 for a second TelPacInclude the station SSIDs in your beacon text. For example, a beacon text could be:
“W0MAC-10 TelPac located 20 miles NW of Houston.
Also W0MAC-5 digi and W0MAC-7 KA node”
6. Keep your TelPac information up to date on the Winlink and HCARES website

Digipeater Guidelines

1. Do not be too aggressive with settings. Lengthen slot time and lower persistence if the digipeater responds too quickly
2. In AGWDigi, include callsign-5, callsign-7, callsign-10 in the config file.

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This ends the third session in a series on the use of digital communications in Harris County. In this session, we have seen important station guidelines for digital messages

In the next session, we will discuss *Airmail or Paclink?*

These digital guidelines will, and should, change regularly as more opportunities arise. If you have any comments or suggested changes, please let your EC know or email them direct to kb2wf@yahoo.com