

MEPN USER INFORMATION

OVERVIEW – The Missouri Emergency Packet Network (MEPN) is part of the Missouri Emergency Radio Service (MERS) supported by Amateur radio operators across the state of Missouri. This section provides a general overview of the MEPN as it exists in November 2009. Please read it to understand the system and its limitations prior to making a connection.

- A. **GENERAL** – The MEPN consists of number of Packet nodes around Missouri to facilitate Amateur radio backup communications to state agencies during emergencies when normal channels are not available or are overloaded. Amateurs are encouraged to use the system on a routine basis for testing, training and general Amateur operations. Comments can be directed to MEPNissues@mersweb.org.
- B. **NETWORK** – The network consists of 1200 baud User Nodes on 2-meters and 9600 baud nodes on 6-meters for the backbone. At this time, the network requires manual routing by the user from node to node.

User nodes on 145.070 MHz are:

Centralia	MMJY
Jefferson City	MJEF
St. Louis	MSTL

Backbone nodes on 50.680 MHz are:

Callaway	MCAL6 (routes to MSTL6, MJEF6 & MMJY6)
Centralia	MMJY6 (routes to MJEF6 & MCAL6)
Jefferson City	MJEF6 (routes to MCAL6 & MMJY6)
St. Louis	MSTL6 (routes to MCAL6)

- C. **SOFTWARE** – There are many software programs, usually called terminal communications programs, available for controlling the TNC between the radio and the computer. The most widely available program is the HyperTerminal software that is distributed with every copy of Windows through XP. HyperTerminal can be added to Vista and Windows7. Search “HyperTerminal Vista” for applicable information. Other terminal communications programs used are ProComm Plus and Tera-Term.

Software written for packet communications, such as “EmComm Ops” from Creative Software Services or AGW Packet Engine from SV2AGW.com can also be used. The AWG Packet Engine uses your computer’s soundcard for encoding and decoding and does not require an external TNC.

SETUP – Connect and configure your TNC to your radio and computer per the TNC owner’s manual. Proper audio levels and deviation are the most critical settings for reliable Packet operation. Set your radio to “simplex” on the 2-meter User Node input frequency. No sub-audible tone required.

OPERATION – This section explains how to enter, use and exit the MEPN. The network software supports two different, but very useful methods of keyboard to keyboard communications. The first is similar to connecting directly to a local station and the second is the option of simultaneously connecting to multiple stations in a single area. Both types of connections are described below.

For convention below, the commands are entered into the network. If they are commands to be entered at the TNC Command Prompt, it will be noted. If you are connected to the network and need to get to the TNC Command Prompt, Ctrl+C usually works for most TNC's.

A. **SYSTEM NAVIGATION** – Users can enter the system at any User Node and traverse the backbone to another User Node in order to connect to a specific station, or group of stations, at that location. Throughout this navigation discussion, the connection from the far eastern part of the state to Jeff City will be used as an example.

- Network Entry – To enter a local User Node, at the TNC Command Prompt, type **c [space] node name [Enter]**

Example: **c mstl [Enter]**. The system will respond with “Connected to...”.

- Move Up to Backbone – To move up to the backbone, type **c [space] backbone node name [Enter]**.

Example: **c mstl6 [Enter]**. The system will respond with “Connected to...”.

- Manually Route the Backbone – Head toward Jeff City by instructing the backbone to connect to the nearest node in that direction (Callaway).

Example: **c mcal6 [Enter]**. The system will respond with “Connected to...”.

Continue to head west by instructing the backbone to connect to Jefferson City.

Example: **c mjef6 [Enter]**. The system will respond with “Connected to...”.

- Move down from the Backbone – Move from the backbone down to the User Node at the desired destination.

Example: **c mjef [Enter]**. The system will respond with “Connected to...”.

- Connect to Local Station – Connect and communicate with the desired local station in the distant area using standard Packet commands.

- Disconnecting – When finished with the communication at the distant location, you disconnect by typing “**D**” at the TNC Command Prompt. This will back you out of the system completely.

- Disconnecting from a PBBS – Most PBBS use the “**B**” Command to exit the mailbox. If you type “**B**” to exit the PBBS, you will be returned to the distant node.

- Disconnecting Node by Node – If you are connected to a node, to back out node by node, type “**B**” while still in the Converse Mode. The system will respond with “Goodbye” and a few seconds later will respond with, “Welcome back”. Repeat the above action for each node until you are back at the User Node where you entered the MEPN. When in the TNC Command Prompt mode, type “**D**” to completely exit the MEPN. The standard Packet response of “Disconnected” will be issued.

B. OPTIONAL CONNECTION – Instead of connecting to a single station at a selected User Node, you have the option of connecting to all stations connected to that node. This may be useful during times when several shelters or agency stations are on the air at the same time in a single location. The procedure is the same if the User Node is local or distant to the user.

Note: A number of Packet nets are using this connection method to take check-ins and disseminate information to users in diverse areas of the state.

- Connect – Connect to the local User Node or to a distant User Node as described above.
- Command – While in the Converse Mode, type “**talk**” [Enter]. The system will announce your presence to all of the other stations.
- Communicate – Anything and everything you type will be visible to all of the other stations connected to that User Node. Conversely, everything typed by another station will be visible to you.
- Exit – To exit the “talk mode”, type “/ex” [Enter] on a new line. The system will announce your exit.