1. Testing and troubleshooting separates into Remote and Local response.
   a. Remote is transmitting, in this case using the Internet and keypad.
   b. Local is the audio including mic and speaker.
   c. Meticulously, do every step, every time. Cannot skip step, ever. This works. Other sequences are unknown.
   d. An airplane pilot uses a checklist on EVERY flight, regardless of experience. Embarrassing and fatal to miss.

2. Node #1 firmware configured. Only one (1) individual node powered on, not both.
   a. Router programmed, port for this node, protect DHCP
   b. Node programmed in rpt.conf and simpleusb.conf. Set according to recommendations and leave alone.
   c. Iax.conf to bind this node
   d. Restart Asterisk to activate changes.
   e. AllStarLink.org node registered?

3. PuTTY in. Select Menu to show black Asterisk CLI

4. Remote connected
   a. WiFi (Ethernet) installed?
   b. WiFi communicating?

5. Local connected – no radio (If radio skip to 7)
   a. Audio plugged in
   b. Speaker power on
   c. Volume up to 3/8
   d. Mic connected?
   e. Mic lights on?

6. Local ops - no radio
   a. Mic key depress, no sound, yellow led on
   b. Keys show on CLI
   c. Connect to another node, *358xxx (may be phone)
   d. CLI display all keys properly
   e. Speaker tells connected, red led comes on
   f. Talk to other node. PTL skip to 9

7. Local connected – Baofeng
   a. Baofeng cable connected
   b. Baofeng on. Frequency set.
   c. Baofeng volume 3/8 CW
   d. Baofeng squelch test
   e. Handi on. Frequency set.
   f. Handi volume 3/8 CW
   g. Handi squelch test

8. Local ops – Baofeng
   a. Handi key pressed, no sound, yellow led on
   b. Baofeng receives. Keys show on CLI. If keys do not show, adjust volume of Baofeng.
   c. Connect to another node, *358xxx (may be phone)
   d. CLI display all keys properly
   e. Handi tells connected, red led comes on
   f. Talk to other node. PTL

9. Node #2, turn it on and turn off Node #1
   a. Repeat steps 2 – 8.

10. Proceed only if each node operates fully and dependably with the other off. Fix that before proceeding.

11. Dual (2) nodes are tedious, but simple. Just set right sequence in one and reverse in other.
    a. iax.conf set for both nodes in node 1. First server is in & outbound
    b. iax.conf set for both nodes in node 2. Reverse order.
    c. rpt.conf set for both nodes in node 1. First server is local loopback
    d. rpt.conf set for both nodes in node 2. Reverse order

12. System check. Turn-on both nodes. Do both register? Do both still work. If not, what changed? Fix it.

13. Life is good. Enjoy!