## Ham 90B - ASV Back - Maker Day

Dr. Marc & Rosemary © 230211

Let's have a great, fun Maker Day.

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- A. Makers will need to prepare a couple of items.
  - If you do not plan to Maker today, come anyway to see what is done and for the camaraderie.
- B. www.evergreencg.org is the place to be.

Read HamVoip section Ham 91A-F articles on Maker.

You can do this! Elmers will help, but not do it for you.

- 1. Everyone needs to Register on <a href="www.Allstarlink.org">www.Allstarlink.org</a> for a Node Number, today. Even non-Makers need this to talk to repeater.
- 2. If you plan to <u>make a node</u>, you need:
  - a. Additional registration setup on www.Allstarlink.org
  - b. Makers expand to 2 node numbers.
  - c. Make your NODE passwords without special characters, we found out hard way.
  - d. You will need two server names, two call sign display names (like NM0D and NM0D-L), two passwords.
  - e. You will need to link the servers and the node numbers.
  - f. Elmers will help in this area if needed.
- 3. If you plan to do app setup, you need:
  - a. Node registration number
  - b. microSD card, 8GB or so, class 10 or better.
  - c. Pi and power supply, no other hardware required.
  - d. Ethernet cable
  - e. A laptop with PuTTY software or a tablet with Termius app.
  - f. If you have, bring a card reader for your laptop.
  - g. Your home Wi-Fi and password, so it can be added.
- 4. If you plan to <u>fabricate a cable</u> you need:
  - a. Parts from parts list, either a simplex or a local RF-less.
  - b. Small screwdriver that came with DB9 connector.
  - c. Short 2" piece of tape. Heat shrink for simplex is nice but nor required.
- 5. If you plan to <u>install in case</u>, you will need:
  - a. Buy case from Brett. His email is in the CC.
  - b. Playful Pink, OSU Orange, OU Crimson, TU Blue, titanium White, onyx Black, & natural OD are available.
  - c. Know which Pi you have (2-3-4) so you can get correct size. Model 4 with fan costs \$5 more.
  - d. Send him an email to get the color and size you need.
- 6. If you plan to setup SmartPhone, you need:
  - a. iOS app Repeater Phone and a couple of minutes.
  - b. Android app DVSwitch and patience.
- 7. Elmers will supply:
  - a. WiFI extension to give LAN Ethernet access.
  - b. There may be challenges with WiFI interconnection and head bumping. Be patient.
  - c. Soldering iron for tinning and to make jumper on RL-20 board.
  - d. Wire-cutter.
  - e. Stripper for small wire.
  - f. Back-up computer with card reader.

## **RELAX**

Elmers have your back.

A. I am a research scientist. That is what I do.

We have been experimenting to develop a user-friendly Maker experience.

Rosemary and I have built 6 different setups that are working, now.

We built another 6 while testing different microphones that would not work.

We built three more trying different adapter interface cards and another with a display screen.

Other Elmers have built another 6 or so.

B. We did all sorts of testing and tweaking to develop instructions that are easier for Makers.



Rosemary and I have installed AllStarLink app 6 times.

We installed HamVoip app 5 times earlier this week on our nodes.

HamVoip app is orders of magnitude easier, more up to date, and a better user experience.

We can do a complete HamVoip app setup in about 30 minutes now. Your mileage will vary.

She can make the recommended adapter cables in about an hour. You will be close.

C. Other Elmers have installed the Apps a like number of times.

There will still be surprises and issues.

But the Elmers have been there so they can advise you.

D. Bring your own snacks and drinks (risky around construction and computers).

Depending on participation, the morning may run a little longer. And that is a good thing.

RELAX and have FUN.

