## Ham 91E – ASV Maker – App Setup

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- 1. Getting an AllStar node on fast start involves ordering parts, building the node and adapter cable, copying to the microSD card with the operating system (OS), then running the configuration.
  - a. Download BalenaEtcher <u>www.balena.io/etcher</u>. The app copies (flashes) from the PC file to the microSD card.
  - b. Download latest HamVoip image. <u>https://hamvoip.org/RPi2/RPi-Z2W-2-3-4\_V1.7-01\_Allstar.img.xz</u>
  - c. Save to your PC drive (desktop is fine). This is a zipped image.
  - d. Place your  $\mu$ SD card in your PC slot. Start Balena Etcher. Open downloaded \*.xz. Flash to  $\mu$ SD.
  - e. Balena has a three-step process: decompress the file, flash to card, and validate. It takes about 7 mins. AllSt\*
  - f. Several protection pop-ups disrupt the screen. There are 7 on mine. Ignore them.
- 2. Insert the card in your Raspberry Pi slot.
  - a. Connect the Sound Card/Radio Adapter board. Plug in an Ethernet cable.
  - b. Plug in radio or mic cable into DB9 pin.
  - c. Get ready to write down your IP address numbers. Plug in power supply.
  - d. It will take half-minute or so for the card to initialize. It will speak your IP address. Write it down.
- 3. If you miss it, find the IP address of the Pi. Open your router for a list of devices.
  - a. If needed, check article 'Ham Network Router'.
  - b. Alternately, use an app on your iPhone or tablet, such as IP Scanner. Some give more or less info.
  - c. Your Pi initial name is 'alarmpi'. Record the IP address. Logout!
- 4. PuTTY is a program used to configure the Pi from your PC. Use Termius on iOS tablet.
  - a. Go to <u>www.putty.org</u>. Click to download.
  - b. Open PuTTY.
  - c. Enter the hostname / IP address. Change to Port 222. Click SSH. Give a Session-Name. Click Save. Click Open.
  - d. A security screen asks if you want to allow? <yes>
  - e. A small black, screen shows connected to the Pi's Linux command line interpreter (CLI).
  - f. Enter Linux hostname login: root and password: root. Login root allows all access. Password will change in a few.
- 5. Asterisk blue menu screen opens. Select update. Select restart. <ok>
  - a. The Pi shuts down. Connection ended. <ok>
- 6. PuTTY Ethernet again. Click Session-Name you saved the first time. Click <load>. Click <open>
  - a. Restart speaks your IP address again.
  - b. Asterisk blue screen again asks to select update? <no>
  - c. Then run first time setup? <yes>
- 7. Create new Linux password: YourName. Write it down. I didn't, twice.
  - a. Is this private node? <no>
  - b. Enter ASL node number: 58xxx1 <u>NOTE: Enter numbers from top row, not number pad.</u>
  - c. Setup node? <yes> [configuration will run after reboot] <ok>
  - d. Change Time Zone: <yes> Scroll. Click <America/Chicago>. <ok>
  - e. Is this correct? <yes>
  - f. Change Linux hostname from alarmpi: <yes> New name: YourHost, e.g. pipink.
  - g. Current IP: 192.x.x.y. State: Dynamic. Change? <no>
  - h. SSH port setup is 222: Change? <no>
  - i. Reboot. <yes>
- 8. Do PuTTY again. Click Session-Name. Click <load>. Click <open>
  - a. Enter login: <u>root</u>. Enter new password: <u>YourName</u>
  - b. Do you wish to continue Asterisk configuration of iax, rpt, extensions? <yes>
  - c. Reenter Node Number. Then type station callsign to display.
  - d. Make node to report status? <yes> Useful while setting up. Can change later for private.
  - e. Change station id from CW (Morse) to voice? <no>
  - f. Bind port in router to IAX: 4569 or change
  - g. Desired duplex mode: Select 1, semi-half duplex.<ok>
  - h. Enter node password assigned in ASL: <u>NodePass</u>. <ok> <u>Special character passwords are not accepted</u>.
  - i. Configure password for IAX. <yes>
  - j. Configure SimpleUSB? <yes>; if select <no>, use Admin Menu, which I prefer.
  - k. Restart Asterisk for changes to take place. <yes>







