Ham 96A – ASV Plus – SkyWarn
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1. Skywarn Plus is a super weather app to add to your AllStar node.
   a. Skywarn is the National Weather Service system.
   b. You can configure your node with which county and what type warnings you want to receive.
   c. You can auto link, sound a siren, or just stay updated.

2. The process is straightforward, with just a few lines of set-up.
   a. Familiarity with Raspberry Pi operations and Python programming eliminates apprehensions, but is not necessary.
   b. The code modifications by Mason 10198 are from GitHub at https://github.com/Mason10198/SkywarnPlus
   c. Scroll down for weather messages information capabilities.
   d. Then scroll down for the install instructions. He skips all the Putty, and background instructions.

3. PuTTY into the node.
   a. Enter the hostname / IP address. Change to Port 222. Click SSH. Give a <u>Session-Name</u>. Click Save. Click Open.
   b. A small black, screen shows connected to Pi's Linux CLI. Enter Linux login: root and password: YourName.

4. HamVoip Admin Menu grey screen opens.
   a. Select Menu 1- Perform Update. Updates are a good idea for compatibility before additions.
   b. Select Menu 9- Start Bash Shell to access the Raspberry Pi operating system. A black screen shows you made it.

5. From GitHub, use Arch (HamVoip) dependencies. Ignore warning HamVoip Python is outdated.
   a. Copy each line from GitHub. Paste in Bash Shell. <enter>. Accept the defaults. Then <Y> to accept.

```
pacman -S ffmpeg
wget https://bootstrap.pypa.io/pip/3.5/get-pip.py
python get-pip.py
pip install pyyaml requests python-dateutil pydub
pip install ruamel.yaml==0.15.100
```

6. On the Pi, change folder, then install the latest SkywarnPlus release.
   a. Copy each line from GitHub. Paste in Bash Shell. <enter>. Accept the defaults. Then <Y> to accept.

```
cd /usr/local/bin
wget https://github.com/Mason10198/SkywarnPlus/releases/latest/download/SkywarnPlus.zip
unzip SkywarnPlus.zip
rm SkywarnPlus.zip
```

7. Go to the folder. Then set executable permissions.

```
cd SkywarnPlus
chmod +x *.py
```

8. Go to https://alerts.weather.gov/. Next to the state, select county list. Get County Code. AVOID zone code.
   a. Back to the Pi, set the 'yaml' data file with your local configurations. Tulsa is OKC143.

```
nano config.yaml
```

   b. Scroll down to Asterisk stanza under nodes. Back up to delete message 'Your_Node'. Leave dash and 1 space. '- '
   c. Enter the Node's Number, ie 584000.
   d. Scroll downtown to County code. Back up to delete message 'Your_County'. Leave dash and 1 space. '- '.
   e. Enter the county code, ie OKC143. <Control X>, <Y>es, <enter> to save.

9. Set timer on Pi with Crontab. Open file in Bash Shell. Then add a line at the end.

```
crontab -e
* * * * * /usr/local/bin/SkywarnPlus/SkywarnPlus.py
```

   a. If you want weather on the hour with the ID, go to line with saytime.pl, add 'sp zipcode sp' before $.
   b. <Control X>, <Y>es, <enter> to save.
   c. Type 'exit' from Bash Shell back to Admin Menu. Select 15-Reboot.

10. When first starting and after reboot, SkywarnPlus will not announce. It is awaiting a change. To test go to [Dev].

```
nano config.yaml
INJECT: True
INJECTALERTS:
  - Tornado Warning
```

   May have to call from Linux CLI.

11. Changes for testing, tail messages, courtesy tones, Sky Describe, Alert Script, are in the readme file on GitHub.

12. Life is good. Enjoy!