

The Moreno Valley Repeater

March-April 2024



Testing with MVARA & GLAARG

MVARA testing continues to grow! Thanks to the help of all the VE's we have helped over a hundred people get their Technician or upgrade their current license. If you are looking to upgrade make sure to book a spot before they fill up. Keep in mind if you are looking to upgrade to Extra the question pool will be changing July 1st, 2024. More information on testing can be found on our website mvara.club

MVARA is Staying Busy!

Over the last few years, MVARA has worked hard to make sure our club is one that is committed to productivity and activity. From meetings to nets, breakfasts, and our ever-expanding equipment collection, MVARA ensures that members, new and experienced, have opportunities to connect with other Hams and share in their favorite hobby.

Whether you're a casual Ham who likes to meet up for Fox Hunts and POTAs, or a more techy Ham who likes to show off new rigs and chat about radios over a net, MVARA has plenty to offer. Outside of our monthly meetings, please continue to encourage one another to get involved! Our most up-to-date calendar can be found on our website, and many helpful conversations and reminders can be found on our Facebook page! We can't wait to see you out at our next community event: April 27th's Fox Hunt!



MVARA Antenna Workshop

The MVARA antenna workshop was a big success! The event was led by Chase Laurence KW6CAL and Ed Nijst AJ6ET at the Frank Zizzo Radio Room. During the workshop hams learned to build a Yagi antenna from the ground up.

As a club we hope to make more of these events happen. They provide a great opportunity to get hands on radio experience and learn valuable skills. Make sure to keep an eye on the club calendar!

On April 27th MVARA will be hosting a Fox Hunt starting at 9am. This will give workshop participants a chance to test out their new antennas. The Fox will be hidden somewhere within Moreno Valley city limits, easily accessible by car or on foot. The Fox will be on frequency 146.565. Make sure you are gassed up and ready to go. It will beacon promptly at 9am and every 3 minutes thereafter.

For help and hints make sure to program the MVARA club repeater at 146.655 - pl 103.5. Participants are encouraged to work together and help each other out. When you find the fox please let your fellow hunters know you are on location, and exiting the hunt. Any and all are welcome to participate!

If you missed out, see below for a home DIY tutorial

UPCOMING EVENTS

April 4th - Club Meeting
Frank Zizzo Radio Room, 6pm social 6:30pm meeting

April 18th - GLAARG Testing Session
Frank Zizzo Radio Room, 6pm

April 27th - Fox Hunt 149.655 - pl103.5
Moreno Valley, 9am-11am

May 2nd - Club Meeting
Frank Zizzo Radio Room, 6pm social 6:30pm meeting

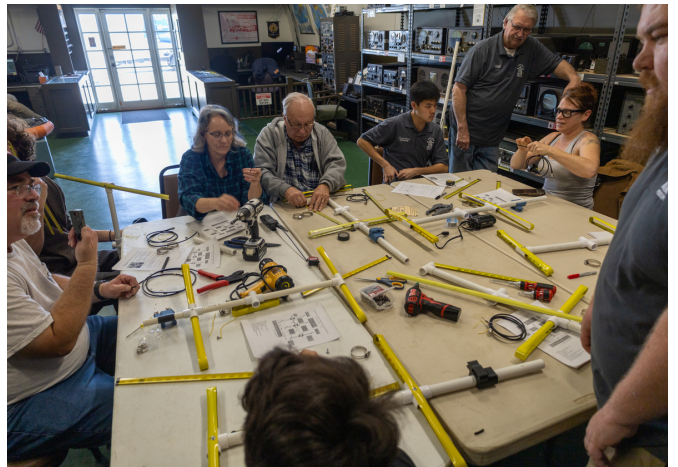
May 16th - GLAARG Testing Session
Frank Zizzo Radio Room, 6pm

May 18th - MVARA POTA Event
Lake Perris SRA, 9am

Make sure to check the club calendar for up to date information on events at mvara.club

Tuesdays: Weekly MVARA Roundtable, 7:30 PM,
449.300-103.5 (TSQL)

Have something you want to share in our next newsletter?
Contact us at
AB6MVnet@gmail.com



New Ham Journal

By Terrence Banks (KO6CGU)

My name is Terrence Banks. My callsign is KO6CGU. I am a general licensed Ham. I have been licensed since late December 2023. Through a series of articles in our club's newsletter, I wanted to share my experiences as a new Ham with other licensed Hams. Hopefully, others can avoid a few of my rookie mistakes. As I share my journey, I welcome input from other experienced Hams. Together we can elevate the amateur ham community.

I became interested in Ham Radio operations after watching a YouTube video in early 2023 about the Ghost Net. The Ghost Net is a multi-layered communication plan to allow radio operators to communicate with each other efficiently using a variety of data modes. I was fascinated by the Ghost Net. I wanted to know more. I had often contemplated my options if there were a natural disaster. How could I communicate and stay aware of news happening around me? What would I do if SHTF? I am sure you can figure out the acronym. I have to keep this article PG, but you know what I mean. I wanted to learn more.

So, I did like any other noob(that is an official Ham amateur-technical term); I bought a Baofeng UV-5R from Amazon. It was cheap. It was fun to listen to, but I would need a license to talk on this thing. I knew that not having a license meant that I was not allowed to hit the push-to-talk (PTT). That was when I decided to study for my technician license. I wanted to do more than just listen.

They call me KO6CGU.

A week later after taking the technician exam, my name appeared on the FCC ULS list. Now I wanted to get a good radio. Something mobile and to reach further distances.

So, I bought a Yaesu FTM-500DR. It looked so cool and sleek. But, I didn't think about the fact that it doesn't cover the HF band. The HF band was the primary reason I wanted to get into this hobby. I chalked it up to a typical rookie mistake. It did more than a Baofeng!

Because I speak Thai, I wanted to learn about amateur ham radio operations in Thailand and maintain proficiency in the Thai language. Either way, I will buy a nice radio once I get my General License.

Until next time. This is KO6CGU...monitoring.
73!



Member Highlight

Hello! I am Victor, KN6NIK, a licensed general ham. I also have a GMRS license with call sign WRVH300. First a little about me and my family. I've been married to my wife, Helen, since 2017. Together we have two daughters (my girls, Kayla 25, and Melody 19) and two sons (Helen's boys, Tony 40, and Erik 36). We live over in the South Corona area, and we also have a trailer out on the Parker strip in Arizona. We go there about every two weeks to play with other pictured hobbies that we share. We own a classic 1968 Hondo flat bottom speed boat and play with an Arctic Cat side by side, and an old Yamaha wave raider.

At home I am very much into street motorcycles. I have a 2006 Yamaha FJR1300, and my daily commuting bike is a Honda NC700x. That Honda is the reason I have a ham license; I had an accident on the I-15 freeway and was down for four months with a broken ankle. After watching television for three days I said, "I can't do this! I'm going to study for my ham ticket". That was over three years ago now.

I absolutely love radio ! My interest in radio started when I was a nine-year-old kid in Brooklyn, New York. I used to go to my grandmother's house and listen to my uncle's shortwave radio while looking out her window at the Empire State Building in the distance. I was into CB radio at that time and for about the next twenty years. I eventually lost interest in CB, laying it down for about the next ten years.

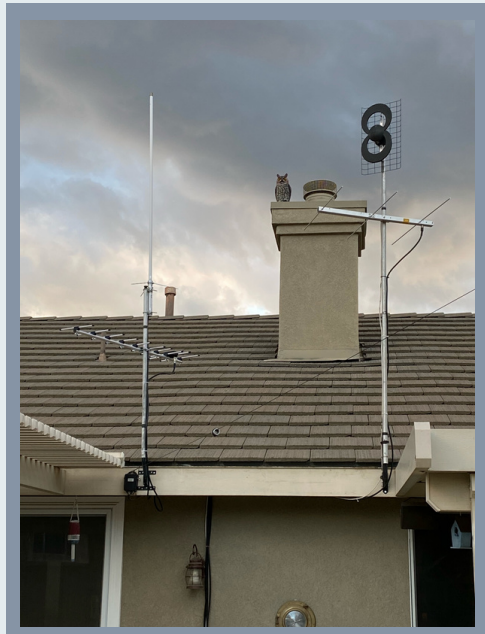
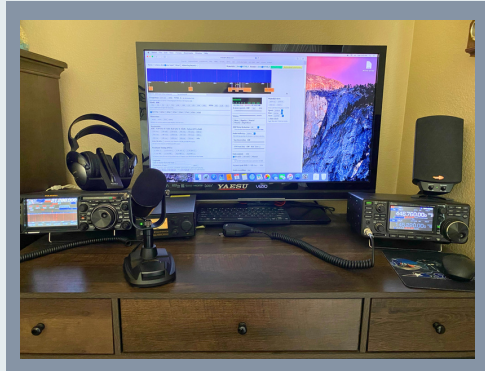
I've always been mechanically oriented. I can pretty much fix anything. In school I earned degrees in electrical engineering and HVAC. Since 2011 I work as a facilities-maintenance engineer at Kaiser Permanente in the facilities department. I had a hair-raising experience before I was even qualified in emergency communications, back around June of 2014. ALL of the comms at the plant went down in the hospital, and the PBX operator did not follow their emergency protocols. It was an intense situation! I was the only person there who knew what to do! I did get all the equipment up and running by around 4 AM, but I missed Father's Day with my family that year, as I spent most of that night taking care of the situation. I became officially part of their Emergency Communications team in June 2021, immediately after getting my general ham license. We meet for testing and drills monthly. I find this service to be very worthwhile, because I know that when all else fails with other communications, radio comms will be there.

My ham shack currently consists of a Yaesu FTDX-10 for HF, and an I-Com IC 9700 for VHF and UHF. I also have an I-Com ID-5100 in my jeep, and a Yaesu FTM-300 in my truck. My antenna farm, lol, consists of an End Fed HF wire, a diamond x50 vertical; a ten-element beam for 70 cm and a three- element beam for 2m, both of which are horizontally polarized. I regularly talk to a friend 185 miles away in Lake Havasu City, Arizona on the 2m beam. I love the whole spectrum, but I seem to be doing a bit more VHF and UHF weak signal work these days. My best contact was South Africa on the last Field Day!

I am very happy to be in this club! You're a good group of people and nobody out there has a radio room like ours. Hope to catch you all on the air!

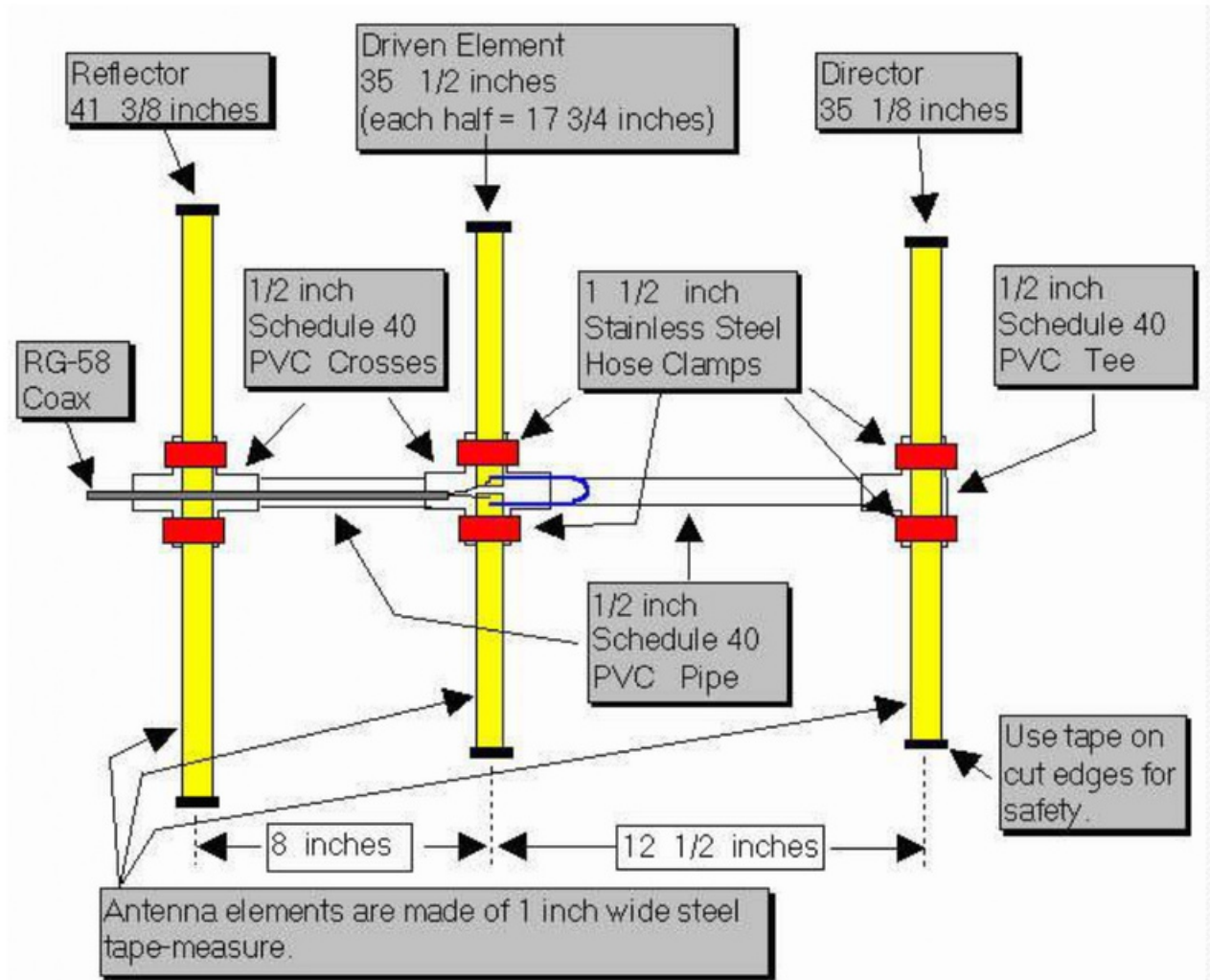
Victor, KN6NIK

edited by Assunta, KJ6FQP



MVARA 2M Tape Measure Antenna Build

By Chase Laurence KW6CAL 3.9.2024



Credit: Joe Leggio WB2HOL

Materials:

- PVC 3/4" Schedule 40 (At least 2 1/4')
- 3/4" Pipe Cross x2
- 3/4" T-Connector x1
- Tape Measure 1" (at least 9 1/2')
- RG-58 Coax
- Connector to Radio (BNC, SMA, PL-259, etc)
- Wire (Any Gauge, about 4")
- Hose Clamps (2-6) or Self Tapping Screws
- Solder, Flux, and Soldering Iron

Instructions:

1. Cut PVC and tape measure elements to size.

Cuts to Make:

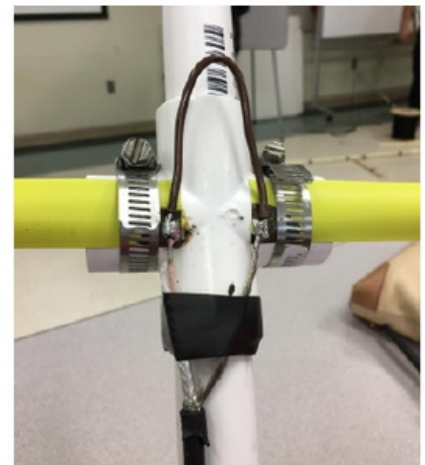
3/4" PVC

- 7" x1
- 11.5" x1
- 6" or more for handle
-

Tape Measure

- 41 3/8" x1 (Reflector)
- 17 3/4" x2 (Driven Element)
- 35 1/8" (Director)
- Note: When cutting the tape measure be sure to either round the ends or dip them in liquid electrical tape. They will be extremely sharp!

2. Assemble PVC structure, ensuring that each piece is in the correct order based on the above diagram.
3. Using hose clamps or self-tapping screws secure the tape measure elements to the PVC Tees making sure they are centered. The two driven element pieces should be hose clamped to the middle tee, to allow for tuning. The reflector element (41 3/8 ") is closest, and the director element (35 1/8") is furthest from you. These can be secure with screws or hose clamps. If you are using screws, measure twice!
4. Sand a small spot to remove the paint at the bottom edge of each of your driven elements.
5. Strip about 2" off then end of your coax cable, separate center insulator and braided shielding. Carefully strip About 1" off center insulator to expose the copper.
6. Tin each element with solder. You will then solder each leg of the coax to its respective element. Next, take your Small piece of wire and use it to bridge the two elements as shown in the picture to the right.
7. Double check the distance between elements and ensure that everything is in the correct order.



8. Give yourself a pat on the back, you just built a yagi antenna! **Join your local club** on a fox hunt, talk to the ISS, activate your local SOTA summit on 2m, and so much more!

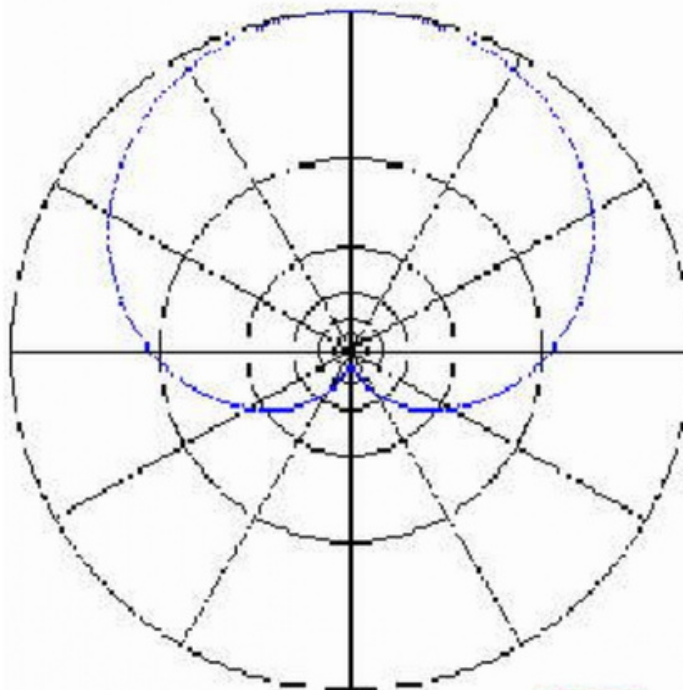
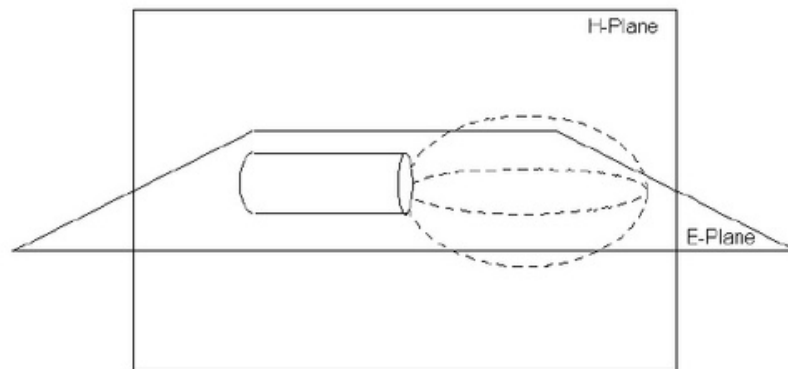
Antenna Specs

(Credit https://theleggios.net/wb2hol/projects/rdf/tape_bm.htm)

SWR should be less than 2:1 across the entire 2M band. Loosen the hose clamps to adjust the driven elements closer or farther apart to fine tune your antenna.

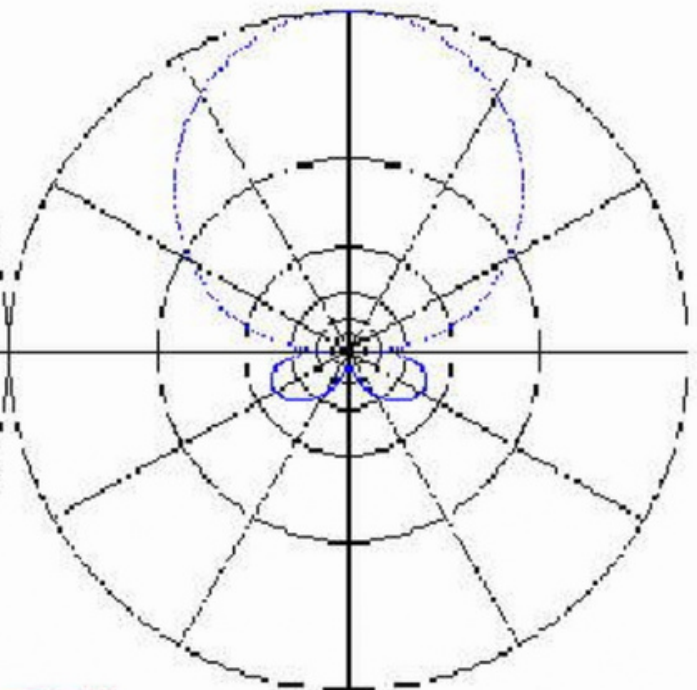
Performance Predicted by YAGI-CAD

GAIN	7.3 dBd
Front-to-Back Ratio	>50 db
3 db Beamwidth	E = 67.5 degrees
3 db Beamwidth	H = 110 degrees



H - PATTERN

10 DB per Division



E - PATTERN



Feel free to get creative with this antenna build! The whole idea behind the tape measure and PVC is to make this accessible to anyone with a local hardware store (or a cluttered garage). I've seen yagi antennas made from scrap copper pulled from some romex, and a 1x2 piece of lumber. The principle is the same. One of my favorite uses for this antenna is participating in transmitter hunting or fox hunts. Due to the high directional gain of this antenna it can be used to triangulate a signal or even talk to the space station. I highly recommend getting out and joining your local radio club and participating in events. Hopefully you learned a thing or two while building this antenna, and you continue to learn and grow as a radio operator.

73,
Chase Laurence
KW6CAL