

# Nacogdoches Amateur Radio Club

## 2011 CLUB OFFICERS

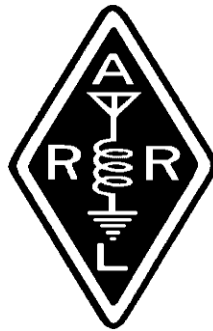
Pres: Rusty Sanders - KD5GEN

VP: Clarence Riddle - KC5UBP

Sec/Treas: Army Curtis - AE5P

## MISSION STATEMENT

The Mission of the Nacogdoches Amateur Radio Club is to support and promote Amateur Radio by public service, offering training to unlicensed interested parties and licensed Amateurs, mutual support of other Amateurs, engaging events that promote Amateur radio to the general public and other Amateur radio operators, and continuing fellowship by regularly scheduled organized meetings and events.



## APRIL MINUTES

The April meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled on April 6th. **President Rusty, KD5GEN**, opened the meeting at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. Twenty-three members and seven guests were present. Each person present introduced himself. Minutes of the previous meeting were approved as published. The Treasurer's report was read.

**Army - AE5P** made a special presentation of a limited edition ARES 75<sup>th</sup> anniversary patch to **Billy**

- **KD5HOZ** for his long commitment as net control of the club's ARES/RACES net on Monday evenings.

Shuttle Columbia SES QSL report: **John - W5FWR** reports that he has now answered more than 200 requests for QSL cards.

Belton Spring event: **Army - AE5P and Rusty - KD5GEN** attended the Belton swap meet, along with several other club members. **Army** had two tables for selling items and reported a brisk sale. **Rusty** claims he was forced into buying a new Kenwood TH-F6 triband HT.

Field Day: **President Rusty** appointed **Army - AE5P** to be the FD chairman this year. Plan at this time is to hold FD in the City/County emergency trailer to be

located at the airport. Help from club members will be necessary to make this event a success. More information will be available at the next meeting.

#### UPCOMING EVENTS:

**VHF South Memorial Day Barbeque**, May 28<sup>th</sup> at N5YA. Please RSVP to Kay at 409-625-0309.

**Neches River Rendezvous**, June 4<sup>th</sup>.

**HamCom / ARRL National Convention** in Plano, June 10-11.

**ARRL VHF+ June Contest**, June 11-12.

Meeting adjourned at 7:40.

**Show and Tell:** Jerry - **K5JLW** showed off the new Wouxun dual band HT that sells for just over \$100.

**Program:** Army - **AE5P** presented a program on operating HF featuring the Flex 1500 SDR radio.

## NEWEST HAMS

This last month found two club members upgrading their licenses. **Ken - K5TRK** upgraded from Tech to General. **Rusty - KD5GEN** upgraded from General to Extra. Congratulations to both.

## OSCILLATIONS FROM THE CHAIR

Hello again. Another month has passed for which I am quite glad.

I put in many hours in study for the Extra class ticket and actually learned something. But more than just the study of the material, there were a number of items, which opened my eyes to how things actually function. There were other informational topics that made me wonder if I could use such an application at my house with my system. The rhombic antenna would be something neat to build along with many other antennas.

I suppose the big topic for the news media this month has been the many raging wildfires and the hot, windy weather. Since I grew up in and retired from the fire service, I tend to pay a little attention to such matters.

I must stray from the normal article and discuss some of this topic. Many times, those of us in East Texas think only California or maybe West Texas can have such devastating types of fires. A quick jump back in time will reveal that we had a fire season a few years ago somewhat similar but smaller in scope.

Our region is very vulnerable to a massive wildfire with the high winds, drought conditions and low humidity. You may feel that your home is safe but is it really?

You may see green trees and grass from your home windows but does that mean you are safe? If a wind-fed fire breaks out, the hot gases (smoke) actually preheat the

unburned fuel in front of the fire. As the flames near those fuels, they will tend to burst into flame quicker with more heat. This is a progressive state to the extent that the fire will develop its own winds. With the huge amount of trees around us, we can have what is called a crown fire. The burning underbrush develops such heat that the fire gets into the treetops and they burst into flame. Yes, green pine trees, oak trees, etc, can burst into flame with intense heat. This crown fire will race along faster than a ground cover fire with the winds in the treetops faster than wind speed at the ground. Oh yes, this can easily happen with the city limits of our fair city. You do not have to live in a rural area to be in danger!

You will normally have windows and wood on your home. The roof is normally a non-combustible material. The intense heat of the crown fire can ignite exposed wood trim. The heat can cause the windows to crack or

shatter, exposing materials inside the home to burning embers and the hot gases.

You must live with the wood trim and the windows but you can prepare for such an event. Water sprinklers can be placed to keep a cooling spray on the wood trim and the window glass. The Texas Forest Service recommends keeping a green space near the home. Have bushes that tend to have a lot of moisture in them as plants near the house. Be prepared for the electricity to fail and possibly the water pressure to diminish.

If you have to evacuate, make sure and take necessary medicines and vital paperwork and/or family pictures. If you have a fire safe, items inside it may not be protected from a total home burnout. Most safes give something like a 1200 degree protection for 30 minutes. Your home will generate more heat than that and burn longer than 30 minutes.

Think about your situation and what you could do to protect your home. Besides, you would lose all your antennas and radios that you have collected over the years.

We have a speaker for the next meeting who used to work for the Texas Forest Service and is now the County Emergency Management coordinator. He will be discussing the proposed evac center and could give you some ideas on how to protect your home from wildfire.

Hope to see all of you at the next meeting.

KD5GEN- Rusty

email:

[rusty.sanders@att.net](mailto:rusty.sanders@att.net)

### VP's CORNER

I was wondering about the popularity of using CW over the internet. It seems like the perfect way to DX the world with low cost equipment. A web site could act as a server for the two contacts. Just

click on the county you want to DX and send out a CQ.

73 de Clarence KC5UBP

email:

[clarence404@hotmail.com](mailto:clarence404@hotmail.com)

## VE TESTING

Our next VE testing is scheduled for Wednesday, May 18th at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. Applicants should bring a picture ID, the original and a copy of their current Amateur license, the original of any CSCE's and \$15 to cover the cost of the exam(s). Correct change is always very much appreciated. 73 de AE5P

email: [ae5p@arrl.net](mailto:ae5p@arrl.net)

We are also planning a special VE test session on Monday May 2<sup>nd</sup>, 7:00 p.m. in the Parish Hall. This is being done to accommodate a ham from Ireland who is arriving the day before and wishes to upgrade his license to Extra. Others are welcome to join us that evening.

## CLUB NETS

Remember to join us each week for the 2-meter nets sponsored by NARC. Each **MONDAY** is the **NARC ARES/RACES** net, at 8:00 p.m. on the club's 146.84 repeater (PL 141.3). Second, on **THURSDAY** evenings at 8:00 p.m. is the **Deep East Texas Skywarn Emergency Weather Net** on the 147.32 repeater (PL 141.3). Please join us for one or both. We are always looking for folks who would like to become net control operators. If you are interested, please contact any of the existing net controls. We will be pleased to help you in any way we can.

## NEXT MEETING

The next meeting will be on **Wednesday May 4th** at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. The church is at the corner of Starr and Mound Streets in Nacogdoches. Hope to see all of you there.

## PARTING SHOTS

Tom - W5TV and I had planned to attend the SVHFS (Southeastern VHF Society) Annual Conference held in Huntsville, AL the past few days. This event planned to feature many excellent speakers giving presentations on a variety of VHF/UHF/Microwave topics. There were to be vendors, a flea market, and final banquet Saturday evening. If you've been watching the news and weather, the conference didn't happen.

**Bill N5YA** and **Marshall K5QE** travelled to Huntsville on Wednesday, the day of the severe weather. They arrived to find Huntsville and most of northern Alabama without power, and likely to stay that way for at least a week.

The Central States VHF Society will have their conference this year in Dallas the end of July. We hope to attend that also.

See ya'll Wednesday.

73 de AE5P

## BASIC ANTENNAS

### PART 31

by

Thomas Atchison W5TV

There has been a lot of discussion over the years concerning an antenna called an 'Inverted L'. Suppose we begin with a half wavelength inverted L that is center fed. An EZNEC model of this antenna is shown in Fig. 1.

EZNEC

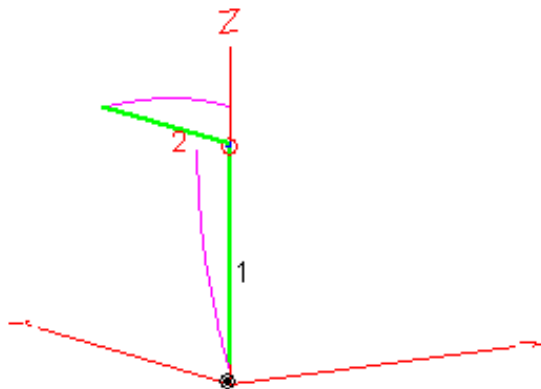


Fig. 1

In this model wire 1 is 64.5 feet long and wire 2 is 64.5 feet long. The total length of 129 feet is approximately a half wavelength at 3.75 MHz. The feed point is represented by a circle at the corner joining wire 1 and wire 2. A scan of the SWR from 3.5 to 4.0 is shown in Fig. 2.

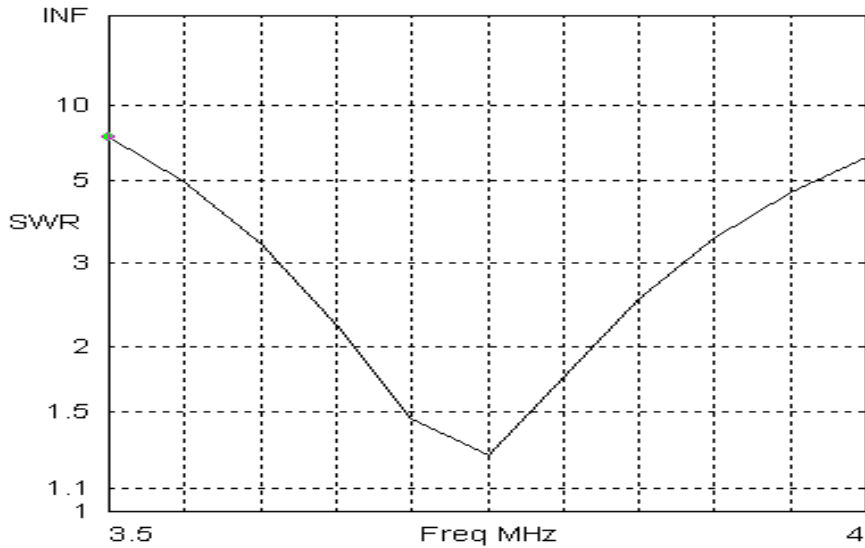


Fig. 2

The SWR at 3.75 for a 50 ohm transmission line is about 1.25:1. The elevation radiation pattern is shown in Fig. 3.

EZNEC

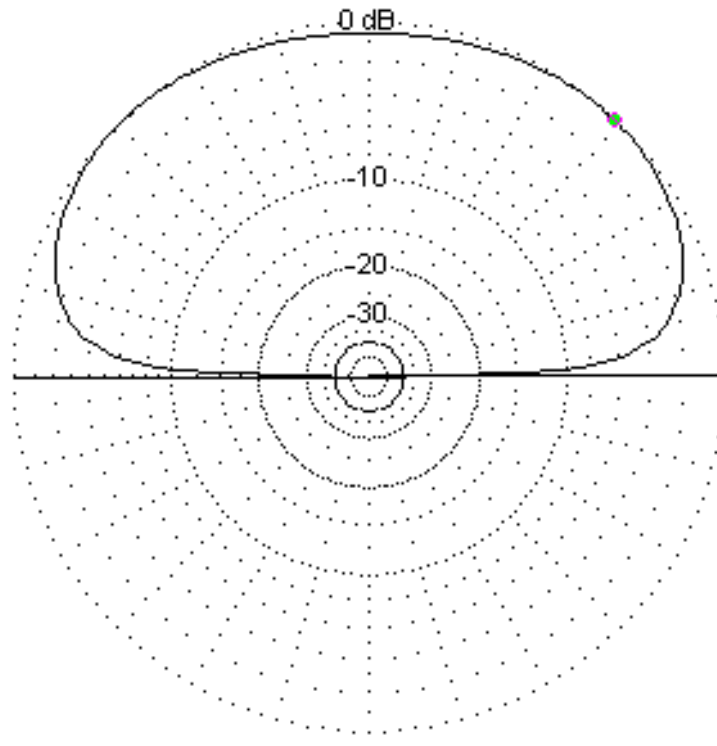


Fig. 3

The maximum radiation is at about 46 degrees. The 3-dimensional radiation pattern is shown in Fig 4 (the elevation radiation pattern is shown in red).

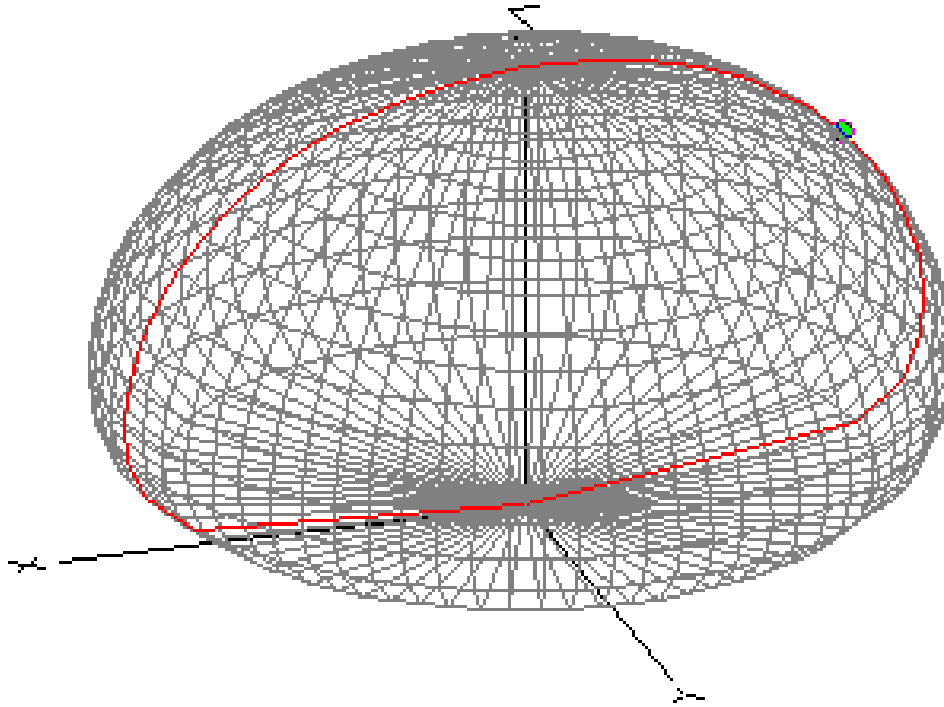


Fig. 4

Now suppose we add another horizontal wire at the feed point so we have a 'T-Shape' antenna. The EZNEC model is shown in Fig. 5.

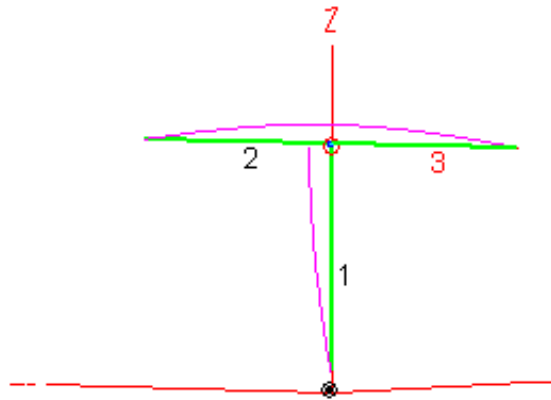


Fig. 5

The total length of the horizontal wire is 129 feet. The pink curves represent the current distribution on the wires. A sweep of the SWR for a 50 ohm load is shown in Fig. 6

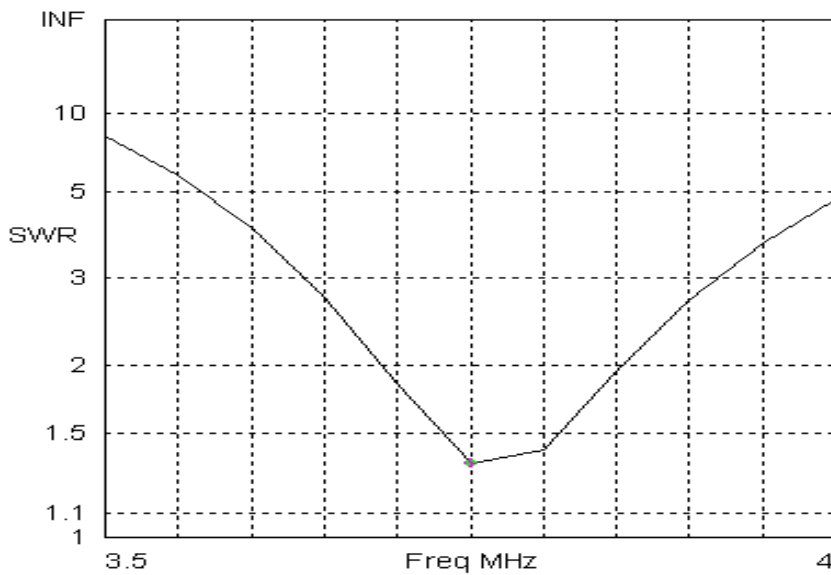
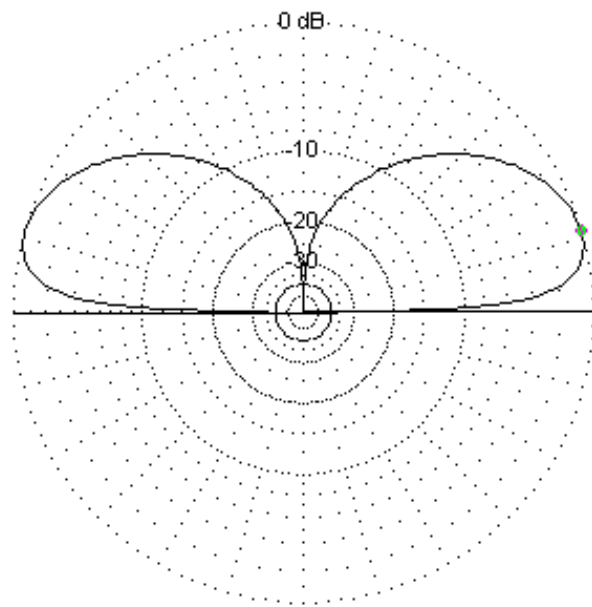


Fig. 6



The elevation radiation pattern is shown in Fig. 7.



EZNEC

3.75 MHz

Fig. 7

The maximum radiation is at about 16 degrees. A 3-dimensional view of the radiation pattern is shown in Fig. 8 (the elevation radiation pattern is shown in red).

EZNEC

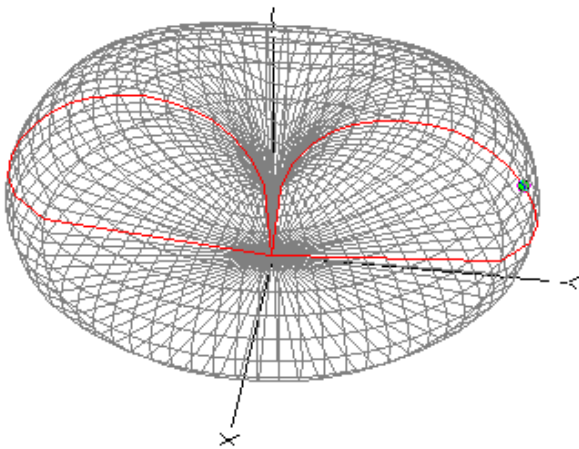


Fig. 8

In conclusion, the 'Inverted L' appears to be better for local propagation. The 'T antenna' has a lower angle of radiation so it should be better for distance work.

### PICTURE FROM THE EXAM

Rusty - KD5GEN was so proud of his upgrade to Extra (rightfully so!), he brought his camera along to capture the moment. Here is the VE crew that administered his exam. Are you ready for your upgrade?



The VE crew: From left, Robert Judy - KD5FEE, Andy Delgado - KE5EXX, Rusty Sanders - KD5GEN/AE, Army Curtis - AE5P, and Lon Glaze - AE5BN. Picture taken by Bill Krause - WK5F.