

Nacogdoches Amateur Radio Club

2011 CLUB OFFICERS

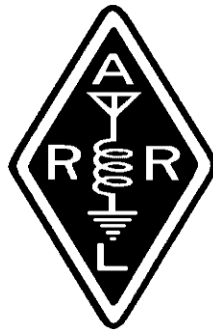
Pres: Rusty Sanders - KD5GEN

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.



JANUARY MINUTES

The January meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled on January 5th. **President Rusty, KD5GEN**, opened the meeting at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. Seventeen members and three guests were present. Each person present introduced himself. Minutes of the previous meeting were approved as published. The Treasurer's report was read.

Shuttle Columbia Special Event Station:

Discussion held on our annual special event station. Location will be the International Church of Nacogdoches on the Southwest Loop. Two complete HF stations are planned. **President Rusty** appointed **Army AE5P** and **John KC5MIB** as co-chairmen. **Marshall K5QE** will bring a radio and amplifier. **Army** will bring a radio and two laptops. **John** will bring a laptop. **Rusty** will bring the green monster. More information will be available at our next meeting.

Special educational programs are planned for January 28th at McMichael School. **Jim KE5ZNJ** will represent the club at the event.

The ARRL January VHF contest is coming up the weekend of January 22-23. Anyone wishing to operate as a rover is invited to contact **Army** for assistance.

Meeting adjourned at 7:45.

Program: Army presented an ARRL Educational video on vertical antennas, using the club's new video projector.

Oscillations From The Chair

Hello to everyone in the Nacogdoches Amateur Radio Club members and others who happen to read the newsletter.

I have been gone for several days and was lucky enough to have missed a lot of the cold weather each of you have been dealing with.

While gone, I was fortunate enough to be

able to visit with the captain of a cruise ship. I had numerous questions regarding trivial details of the ship's operation. In years gone by, all ships utilized a radio operator who used various means to communicate with other ships and shore based locations. In the 60's, I use to monitor ship to shore telephone patches that at times were quite interesting. There was a mobile marine operator out of New Orleans who was very efficient at handling traffic. Ships at sea would call in by RF and he would patch them through a telephone patch to their company or family members. As communications improved and GPS became a standard, the shipping lines removed the radio operator position. The people up in the 'steering house' now have various electronic methods for communicating with simply pushing a button. The ship no longer has to have someone to use a sextant or radio beacons to determine location. The ships are equipped with

various dishes and antennas which cover the necessary needs for location and communication. This particular captain indicated that he wished the company still employed a radio man. Without a radio man, when something quits working, they have to resort to alternate radios if they are still working.

Hopefully each of you has gotten back on Hamlist and Wx alert. KE5EXX has provided us with this service and I certainly appreciate his efforts. Hackers and others who disrupt systems should have a special hot place in Hades.

We have two nets locally which operate on Monday nights and Thursday nights. I encourage each of you to join us on those nights. I can remember many years ago, being asked to be net controller. For a while, I refused to do so from I suppose "stage fright". When I decided to volunteer for such duty, I found that being net control is not

something to be afraid of. If you make a mistake, so what! Fifty years from now, it will not mean anything. If you do not make a mistake, you are not trying. We can always use new net controllers. It would be great to have alternates for each of the nets.

SAVE THE DATE: Be sure and keep your social calendar open for Saturday, February 5. We will be hosting the special event station on the Columbia shuttle disaster. There will be more discussion on this event at our next meeting.

In the January 2011 QST, there was an interesting article on Open Wire Transmission Lines on page 59. This might be a good topic of discussion either as a training session or open discussion after the Monday night net.

Hope to see all of you at the next meeting.

KD5GEN- Rusty

email:

rusty.sanders@att.net

VP's CORNER

After seeing the Computer ham radio that Army showed, I couldn't help but think about how far ham radio has come since my early days.

In the late 70s, of course computers weren't available like today. The big thing back then was building your own equipment. Today that may be much harder given the role of microprocessors.

Still being a software programmer, my interest has been raised to the possibility of writing software to control hardware through a digital to analog converter.

Back in the late 70s I designed and built a class C 100 watt transistor RF amp and still have much of the project. It's a long shot but I'll be looking into the interface challenges.

73 de Clarence KC5UBP

email:

clarence404@gmail.com

VE TESTING

Our next VE testing is scheduled for Wednesday, February 16th 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

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 February 2nd at 7:00 p.m. in the Bailey Library of Christ Episcopal Church. The church is at the corner of Starr and Mound Streets in Nacogdoches. The Church School will be using the Parish Hall for their annual Science Fair. The Bailey Library is the smaller room to the left of the Parish Hall.

BASIC ANTENNAS

PART 28

by

Thomas Atchison W5TV

There has been some discussion in QST and other magazines about using a vertical antenna that has a length of 43 feet. It is said that this antenna can be used as a good 'all band' antenna from 160 meters to 10 meters. Suppose we look at a simulation of such a vertical antenna using EZNEC. The simulation assumes a vertical of length 43 feet with a constant diameter of 1.5 inches. Most such verticals have some taper to them and this could be simulated, however, I felt that using a straight pole would give you an idea of what is happening. The graph in Fig. 1 is the three-dimensional radiation pattern from the antenna. The red graph is an elevation slice with maximum radiation at 25 degrees (green dot).

EZNEC

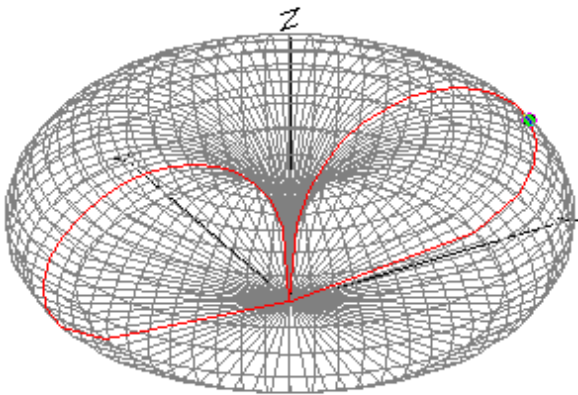


Fig. 1

We now feed the antenna with 50 Ω coax and perform a scan of the frequencies from 1 MHz to 28 MHz to display the SWR. The result is shown in Fig. 2.

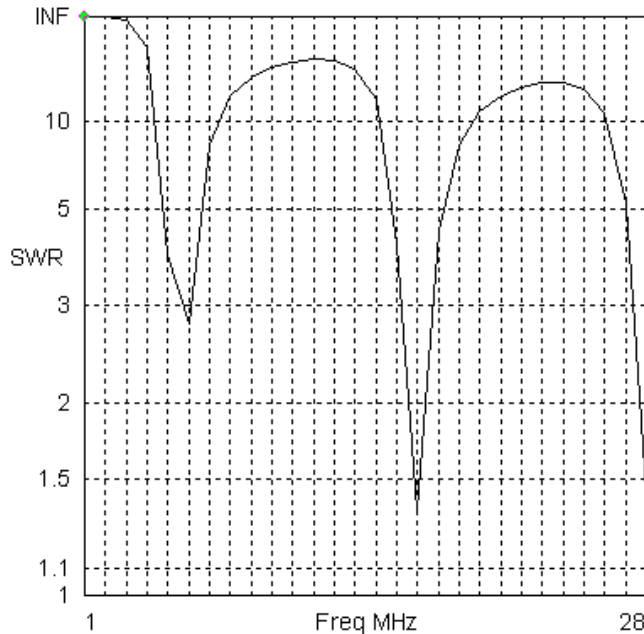


Fig. 2

The SWRs for some key frequencies are contained in the following table:

Freq. MHz	2	4	7	10	14	18	21	24	28
SWR	>100	37.3	8.03	21.7	21.2	4.4	13.6	16.3	1.42

The minimum values of SWR occur at 6 MHz (SWR 2.77), 17 MHz (SWR 1.34) and 28 MHz (SWR 1.42)

This antenna could be used with a good antenna tuner at frequencies from 3.5 MHz to 28 MHz. For 160 meters you would probably need a base loading coil to get a reasonable load. If you decide to build one of these antennas you need to have several radials for the ground plane. I would suggest the radials should be approximately one-quarter wavelength long at the lowest frequency you plan to use.