

Nacogdoches Amateur Radio Club

2011 CLUB OFFICERS

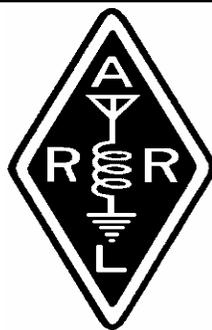
Pres: Rusty Sanders - KD5GEN

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.



NOVEMBER MINUTES

The November meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled on November 3rd. **President Rusty, KD5GEN**, opened the meeting at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. Fifteen members and fifteen guests were present. Each person present introduced himself.

A special program on formal written traffic handling was presented by Jo Ann, KA5AZXK. A very nice booklet on the subject was presented by

Jo Ann to everyone present.

The meeting was resumed at 8:30. Minutes of the previous meeting were approved as published. The Treasurer's report was not available.

Old Business:

Lufkin Hamfest:

Jerry K5JLW and others gave reports on a very successful hamfest. The food concession run by NARC saw a net profit of \$59.52. VE testing resulted in one new Technician and an upgrade from General to Amateur Extra for a second person.

New Business:

CQWW SSB contest: Discussion on this contest by club members who participated.

Nominating Committee

Report: The nominating committee consisting of **Bill WK5F, Janet KE5USH** and **Army AE5P** recommended the following slate of officers for 2011: President Rusty KD5GEN, Vice President Clarence KC5UBP, and Secretary/Treasurer Army AE5P. Slate was elected by acclamation.

Christmas Party/Meeting:

To be held on our regular meeting night, December 1st, starting at 6:00 p.m. in the Parish Hall. Pot luck dinner. Drinks and paper goods to be furnished by the club. White elephant auction to be held as usual.

Shuttle Columbia Special Event Station:

Motion made to hold event on February 5th. Location to be determined. Motion passed.

Meeting adjourned at 9:00.

Oscillations From The Chair

Hello to each of you reading this article. As you are aware, this is the holiday season. Turkey Day is behind us with Christmas approaching fast. For the first time ever, I have actually finished my Christmas shopping. I hope that each of you have made out your Christmas want list and have sent it to Santa in ARRL-land of just what you need for your ideal ham station.

I suppose each of you have seen the election results putting Dr. David Woodweaver, K5RAV and John Stratton, N5AUS back into the West Gulf Division director and vice director positions. Congratulations to both of these gentlemen who will represent our division at ARRL. If you have suggestions or questions of what the ARRL could do or why something is done, please make email contact with either of these folks and they will actually reply

to you. I have done this and received a timely reply. If you have a real concern about something, don't just whine; fire off a letter to them with why you think something needs correcting and THEN propose a solution. Anyone can find fault, but propose a real, workable solution.

The December 2010 QST has some very good articles of interest. In the Correspondence article on page 24, I noticed an article which I had thought about doing before. When one has to make the routine trip to the doctor or dentist, there are a number of magazines or many subject areas. I have thought about saving up the QST's and dropping them off in my doctor's office. This would give another subject matter that is near and dear to our hearts but also may pique the interest of someone to get into amateur radio.

On that same page, there is a letter from a ham regarding 75 meters. It discusses the treatment

that many 'newbies' receive from some of the 'homesteaders' on that band. I too have heard some really rude comments made to young hams who have tried to enter a discussion carried on by the 'homesteaders'. I hope that I never get to that type of behavior. We may not appreciate the interruption but we need to foster the desire the 'newbie' has for the hobby.

As I flipped the pages of the magazine, I spotted an ad for a crimping tool. Recently, AE5P was over at the house and we were attempting to crimp some connectors on an antenna line. The crimper just simply did not have long enough handles for us to complete the crimp. I shot off into the garage and found my set of Irwin Quick-Grip wood clamps. By using one of the clamps on the end of the crimper, we were able to supply the leverage needed to make the crimper work with ease. The hand strength we had was just not enough without the

addition leverage supplied by the wood clamp.

On page 33 of the QST, there is an *d e e p* article on HF ionospheric propagation. I plan to read this again and have thought about making the antennas described to just see for myself the difference made with the two antennas. This subject might be good for a training session at a future meeting.

Further in the magazine is an article on selecting your first handheld. I will have to admit that one can get taken away by all the bells and whistles that come on a new radio. One really needs to sit down and study what they really need before they buy the radio. One has to remember the *K I S S* principle and then they might save some money.

If you are getting some interference on your radio system, take a look at the article on page 48 from Sam, WA6QGH regarding interference from his Linksys wireless router. I

had a similar problem from my old router but the problem was on 6-meters.

All of your life experiences come into play when you are designing your ham station or installing a mobile radio. Since I once worked as a part-time electrician, many of the items we used in commercial wiring practices are very useful in some amateur applications. The article on page 54 regarding the split bolts is one of those electrician items that work good in amateur radio.

Hope to see all of you at the Christmas party on Wednesday, December 1, at 6 PM. Remember, we are starting an hour earlier!

KD5GEN- Rusty

email:

rusty.sanders@att.net

VP's CORNER

Hello Everyone. This is my first column and my first thoughts were what have I got myself into. Let's see if I can get started. I was first licensed as a novice through the local club in 1979 with the call sign KA5HTO.

The requirements back then required that you upgrade within 10 years or lose your license. I couldn't seem to get past 10 words per minute on CW and decided to concentrate on computers instead. I got my current call sign in the mid 1990s as a Tech Plus. Until recently I have owned and operated Nacogdoches Electronic Service.

A word about the NARC in the early 1980s. The club was much smaller then and met at SFA in the Science Building 2nd floor across from the Physics Department. Dr. John Decker, then head of the Physics Department, and Bert were two of the most visible faces. Typical meeting size was around seven people. Low power

CW such as 1 watt amps were popular. My CW receiver was a Heathkit HW-16 that I modified to also receive voice.

73 de Clarence KC5UBP

email:

clarence404@gmail.com

VE TESTING

Our next VE testing is scheduled for Wednesday, December 15th 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 December 1st at 6:00 p.m. in the Parish Hall of Christ Episcopal Church. The church is at the corner of Starr and Mound Streets in Nacogdoches. This is our annual Christmas Party/Meeting. Dinner will be potluck. The club will provide cold drinks and paper goods.

Following dinner will be our annual White Elephant auction. Please bring a gift to be auctioned off. They can

be wrapped or unwrapped, and can be for a ham or for a lady (Yes, I know. We have some lady hams in the club). All proceeds will go to the club. The auction can be lots of fun, but only if you participate.

Spouses and children are most welcome to join us for this event, so please bring the rest of the family and come prepared to have fun.

Feedback

We really need some feedback from you, the club members, on what you would like to get out of your club. What activities do you want to see? What programs would you like to see?

We have the Columbia Special Event Station coming up the first Saturday in February. This will be the eighth annual special event station we have done to commemorate the loss of the Shuttle Columbia. Will you come out and participate?

We did not have a Field Day this past year due to not enough people available and willing to put it together. This was the first Field Day in many years that NARC has not participated. Will we have Field Day in 2011? What would you like to see for Field Day that would make it possible for you to participate?

In past years, we have had a number of members participate as mobiles in the Texas QSO Party. Equipment is available for loan to allow you to do this. Would you like to?

A number of members have participated as rovers in VHF/UHF contests. Again, equipment is available for loan to allow you to do this, from simple one radio 3 band operations to multiple radio 8 band operations. Would you like to do this?

One of our members has one of the finest VHF/UHF multi-multi contest stations in the country, and is always looking for operators to help during contests.

Another of our members is building a world class HF contest station. Would you like to learn more about this and participate in a contest?

The club in the past has provided communications support for many community events such as fun runs and walkathons. Would you participate in such an event?

Is there some other subject that you would enjoy seeing a program on, or is there some other subject you would like to present a program on? Please let any of the club officers know, and we'll do our best to make it happen.

We really need your feedback to make NARC the best Amateur Radio club in the area. Let us hear from you, please.

BASIC ANTENNAS

PART 25

by

Thomas Atchison W5TV

As we said in Part 24, two or more vertical antennas spaced apart can be operated as a single antenna system to obtain additional gain and a directional pattern. An antenna that is directly fed with RF power is called an active antenna. If we have two or more active antenna elements that are arranged so the electromagnetic fields add in some direction(s) and cancel in other direction(s), then we have a phased antenna system. Broadcast stations (AM) use this type of antenna system so they can send a strong signal to the greatest number of listeners in a particular area.

For amateur purposes suppose we consider two ground mounted quarter wave vertical antennas that are spaced a quarter wave length apart. We will feed one directly and the other we will feed with a phase shift of 90 degrees. Let's construct our phased vertical system for 40 meters. We will design our system for the center of the 40 meter band at 7.15 MHz. To accomplish this we will use vertical elements that are 32.75 feet long and spaced 34.42 feet apart. Putting this information into the EZNEC simulator we have the antenna system at Fig. 1

EZNEC

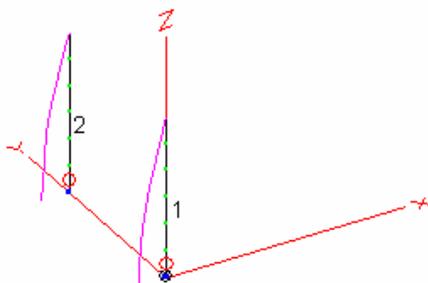


Fig. 1

Here the two vertical elements are labeled 1 and 2. The pink lines show the current distribution on these elements.

The elevation radiation pattern from EZNEC is shown in Fig. 2

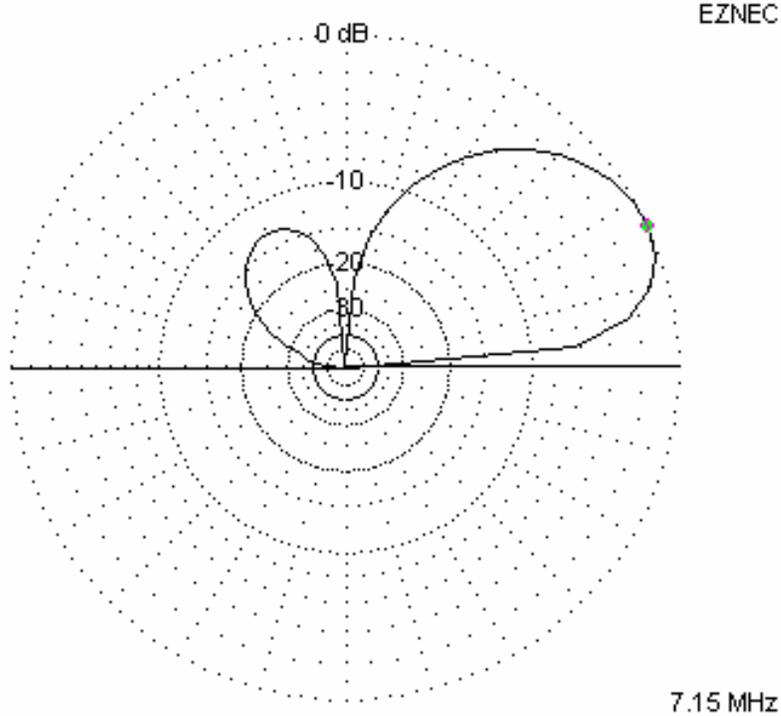


Fig. 2

The maximum radiation of the lobe on the right is at 25 degrees. Element 1 is located at the center of the circle and Element 2 is located to the right of Element 1.

The azimuth radiation pattern at 25 degrees is shown in Fig. 3

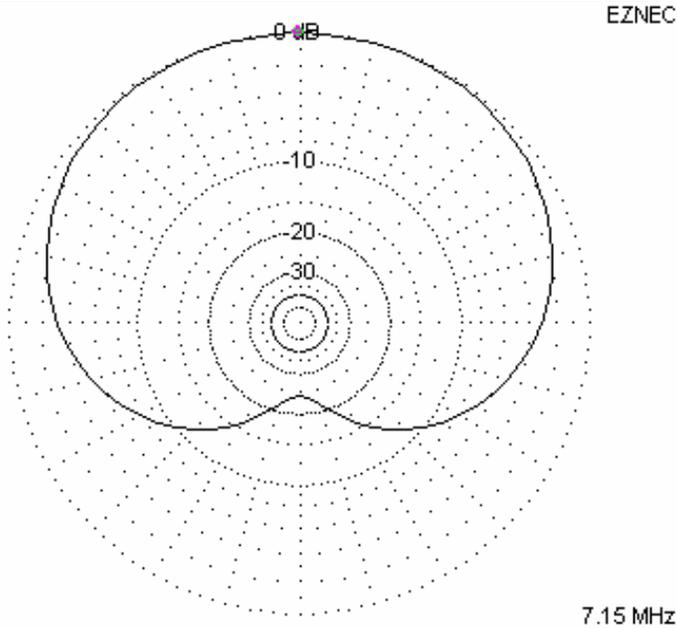


Fig. 3.

Element 1 is at the center of this plot and is fed directly with an RF voltage. Element 2 is located above Element 1 and is fed with an RF voltage that lags the RF voltage fed to Element 1 by 90 degrees. This means that the voltage to Element 2 has a phase shift of - 90 degrees relative to the voltage on Element 1.

We will expand on these ideas in future articles.