

# Nacogdoches Amateur Radio Club

## 2010 CLUB OFFICERS

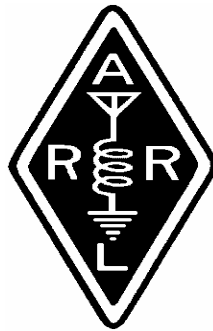
Pres: Rusty Sanders - KD5GEN

VP: John Jordan - N5AIU

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.



## OCTOBER MINUTES

The October meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled on October 6th. **President Rusty, KD5GEN**, opened the meeting at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. Seventeen members and four guests were present. Each person present introduced himself. Minutes of the previous meeting were approved as published. The Treasurer's report was not available.

## Old Business:

### Lufkin Hamfest:

**Jerry K5JLW** gave an update. The Lufkin Hamfest is set for Saturday, October 16<sup>th</sup>, at the Lufkin First Church of the Nazarene, located at 1604 S. Medford Dr (also known as the East Loop 287), between FM841 and Hwy 69. NARC will be responsible for the food concession, and for VE testing on site.

## New Business:

### Texas QSO Party:

Several members reported on their participation in the Texas QSO Party.

### CQWW SSB contest:

Coming up the last weekend of the month.

**Piney Woods Purgatory bike race:** All went well.

**Nominating Committee:** President Rusty appointed Bill WK5F, Janet KE5USH and Army AE5P to the nominating committee. They are to report back at the November meeting.

Stuart W5GSW reported on a special training program held at the Jacksonville club recently on traffic handling. Steve KB8QWN suggested that a joint meeting between Nacogdoches and Lufkin be held to host this same training. Motion made to do this at our next meeting with NARC to host the trainers for dinner that evening. Passed.

Meeting adjourned at 7:25 p.m.

### Program:

**NTX Section Manager Jay Urish W5GM** presented a program on what's going on in the section. Big news is the appointment of **Walt Mayfield KE5SOO** as our new Section Emergency Coordinator (SEC). Look for lots of information and

activity from Walt in the coming weeks. Jay also donated several ARRL publications for a raffle. Jay answered questions from the floor and was well received by the club.

## Oscillations From The Chair

Hello November, Good bye dry October. The year is winding down and somewhere along the way, Mother Nature has not graced us with the rains we need. I was thinking about the weather and how dry and warm it has been. From this, I remember back to the winter months of this year and how many amateurs up in the northern states were talking about their antenna systems. Apparently, they are not as lucky as us in the warmer areas. They discuss antennas, towers and wires affected by the snow and ice and how they must await spring weather before they can work on their antennas. We are fortunate that we have only a short window of cold weather that will not allow

us to install or repair antennas.

The Lufkin Hamfest is over for another year. I certainly appreciate all the hard work that went into the event by the numerous people that contributed time and effort. Kaye and Bill, N5YA, were the key movers and shakers at making the concessions section a hit at the hamfest. There were a number of vendors and a lot of hams showed up from around the area. I was finally able to meet a number of people that I had never seen, but heard a number of times.

There is a special event station coming up on November 5 - 7 that is of interest to some hams. It is the Edmund Fitzgerald Special Event Station. The Edmund Fitzgerald was a Great Lakes ore carrier that went down in a storm on November 10, 1975. What I particularly remember was that a man at Chireno, who is now deceased, was scheduled to be the head cook on the boat for that trip. He

happened to come down with the flu and was not able to make the fateful sailing. That is about the only time that I know when the flu was a life saver!

I am back studying for my Extra Class license,,,,again! I am developing a long list of questions for AE5P on whys and hows. As I go through the study questions and answers, I tend to let my mind wander as to how all of this technology came about. It has all evolved over many years by curious people asking why and experimenting with if I do this, what will happen, or how I can make this work. People from all walks of life, brainstorming, experimenting, and tinkering have been the evolution of amateur radio as we know it today. I certainly am not a math major but when one looks at formulas used in electronics, someone somewhere put in a lot of time to develop theories and then prove or disprove those theories. Those theories that were proven, became formulas which we

take as laws within our hobby.

I suppose that as we each evolve into the amateur radio operator that we are, we accept these proven laws in the building of our antenna systems and ham shacks. The hobby is not finite but continually changing. As you work within the hobby, be mindful of those who have gone before us. If you are asked by someone about the hobby, try to assist them in their quest for knowledge. Be their Elmer. You may have to be like me and ask for help on answering some questions but do not put out their flame for knowledge.

I would like to see all club members at the meeting on November 3. Our Nomination Committee will be naming the candidates for office and we will be holding an election. I would like to see a full house of members to help decide who leads the NARC into 2011.

KD5GEN- Rusty  
email:

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

### VP's CORNER

Hello everyone. I never thought that I would write anything about a storm here in Pittsburg. However, last Sunday on Oct. 17, 2010 we actually had a tornado in the Pittsburg area. One of my sister's grandsons took a very nice picture of it. It did not hit downtown so we did not have any damage in town from it. It was out in the rural areas. We did however have a great deal of large hail. I found many pieces larger than a golf ball. I was in Longview at Regional Hospital carrying one of my aunts to see her sister when the storm came through. On return, I found that I had one windshield damaged on my old Toyota and my sister had her back windshield totally knocked out of her car. She also had about 30 or more holes in the top of her barn that were over 2 inches in diameter. We will have a lot of patching to do to keep the stalls dry and to keep the

feed from getting wet. I still haven't had time to go and look at my hay barn. We had another storm that came through again in the evening hours. Most of it went to our south between us and Tyler. There was supposed to be some rotation in it that went toward the Cartage area. There were a couple of storm chasers from the Dallas area that were following this storm. One was a husband and wife team and they were streaming video live from their car with a camera that was mounted on the car. They were using mostly the repeater in the Dangerfield area when they were chasing the storm in our area. I couldn't find where I wrote down their calls and web site. I will try to put that out later on hamlist so you can look them up in the future.

On another note, I would like to say that it has been fun being vice president of the Nacogdoches Ham Club. I really did not do the job very well after I moved away. That was

something I just really could not help. Anyway, I want to thank everyone for allowing me to serve while I could. I have always known that the Nacogdoches club is very special. However, that really becomes evident when you move away and try to find another group to join. There just isn't a group like Nacogdoches. I will try to stay a member but will not be able to be there like I was in the past. I wish all of you well.

73 de John N5AIU

email: [n5aiu@yahoo.com](mailto:n5aiu@yahoo.com)

### VE TESTING

Our next VE testing is scheduled for Wednesday, November 17th 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)

### 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 November 3rd 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. Please bring any show and tell items you might have.

We have a very special program planned for this meeting. Jo Ann and John Keith, KA5AZK and W5BWC from Longview will be presenting a most interesting program on traffic handling, complete with great handouts. We plan to meet before the meeting for dinner at Clear Springs Restaurant. If you would like to join us you are most welcome to do so. We will be in the private dining room, on your right as you come in

the door. Dinner will start at 5:00 so we will have time to visit and still get to the meeting before 7:00. If you would like to join us for dinner, please send a note to Army AE5P and let him know.

## BASIC ANTENNAS

### PART 24

by

Thomas Atchison W5TV

Two or more vertical antennas spaced apart can be operated as a single antenna system to obtain additional gain and a directional pattern. Feeding an RF current into such an antenna system becomes an important consideration. In order to understand how we might send RF to the system we need to recall something about *phase*. The term phase has the same meaning when it is used to describe currents flowing in antenna elements as it does in other electrical circuits. In Basic Antennas, Part 16, we talked about collinear arrays with multiple half wavelength elements added using phasing loops. We need to talk in more detail about this idea. In particular, we say that two currents are in phase if they reach their maximum values at the same time moving in the same direction. The currents are 180 degrees out of phase if they reach their maximum values at the same time but are moving in opposite directions. There are other phase relationships that we will deal with in later articles.

For an element in an antenna system, the direction of current flow depends on the way in which power is applied to the element. More specifically, the phasing of a driven element depends on the direction of the element, the phase of the applied voltage, and the point at which the voltage is applied.

Consider a simple antenna called the half-square antenna. We have a half-wave dipole with a quarter wavelength vertical wire at each end. The horizontal dipole is at a height of 50 feet. If we model such an antenna for 40 meters (7.15 MHz) then EZNEC produces the antenna view in Fig. 2.

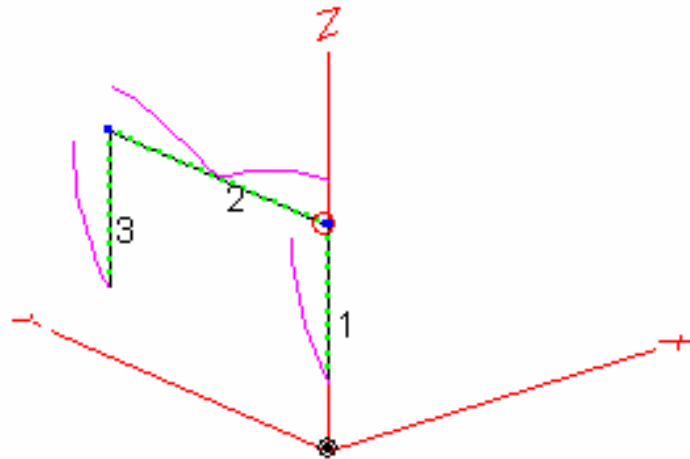


Fig. 2

The green lines represent the antenna and the pink lines show current distribution. The feed point is at the point where the vertical element labeled 1 joins the horizontal element labeled 2. Notice that the feedpoint is at a current loop. The current maximums on the vertical elements are at the top corners. Using 70 feet for the horizontal piece and 35 feet for the vertical pieces EZNEC produces an SWR of about 1.1 to 1 at 7.15 MHz. The theoretical gain over a single vertical is 3.8 dB. An important advantage of this antenna system is that it does not require an extensive ground system. Radiation takes place from both the vertical and horizontal wires; however, the horizontal wire is serving as a phasing line for the two vertical elements. That is, the vertical elements are in phase.

The elevation radiation pattern broadside to this antenna is shown in Fig. 3, with maximum radiation at about 15 degrees.

EZNEC

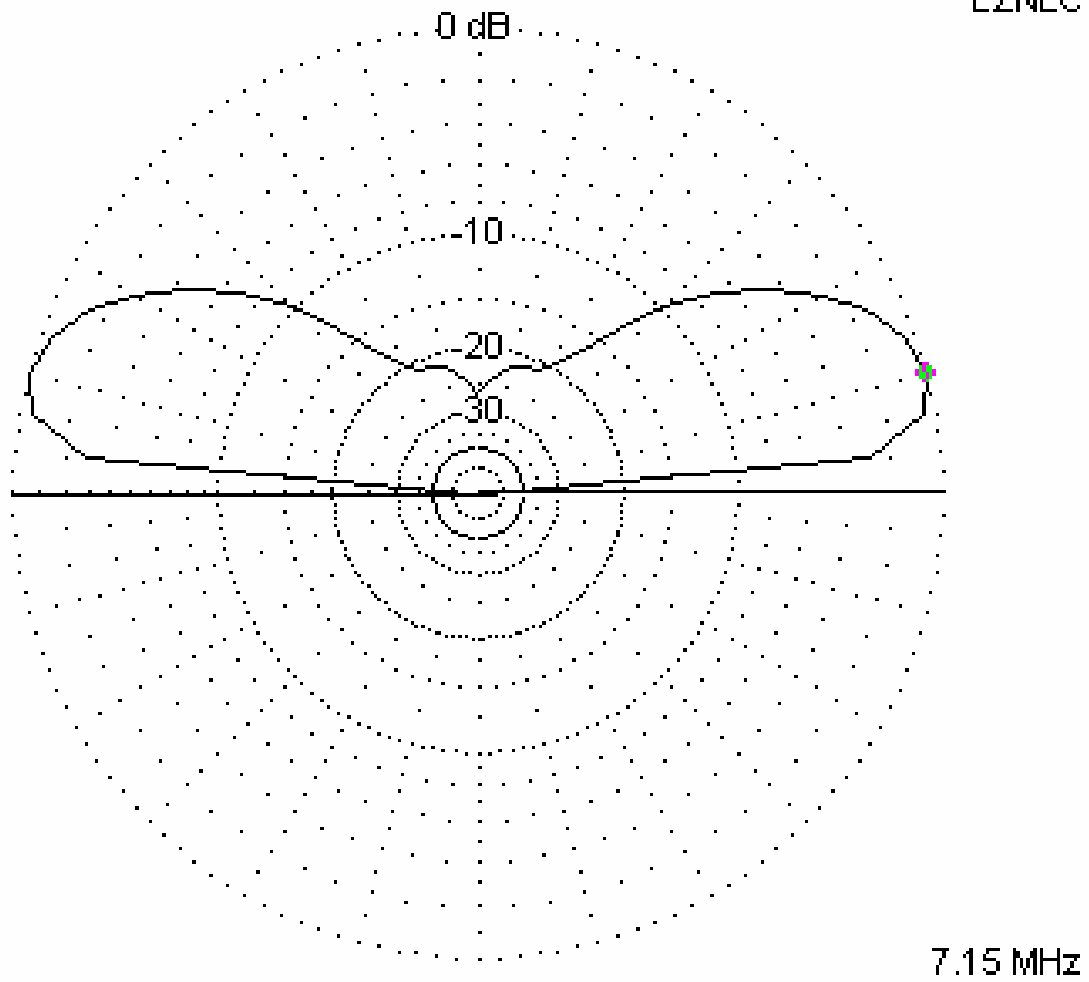


Fig. 3

The azimuth radiation pattern at 15 degrees is shown in Fig. 4.



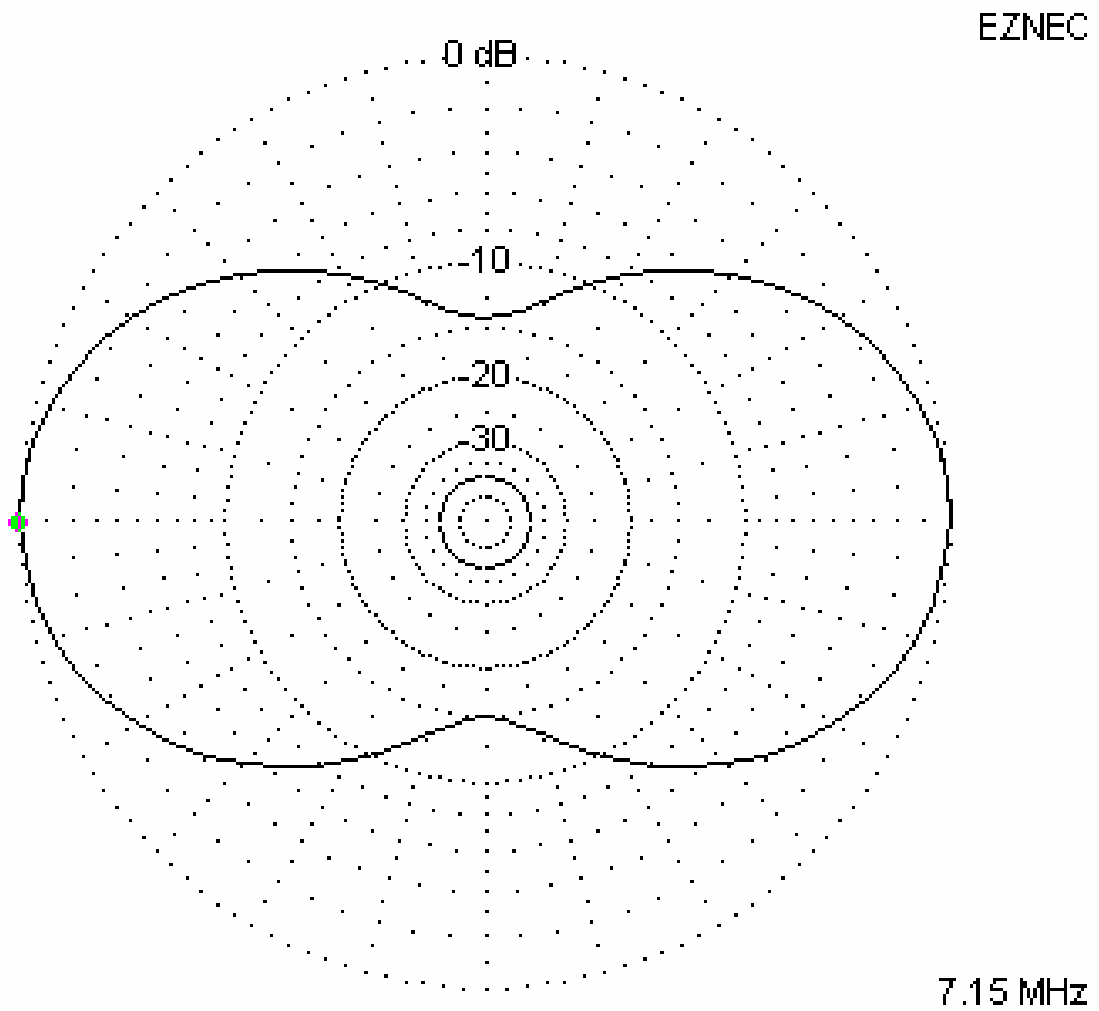


Fig. 4

This is an excellent antenna for DX work on the HF bands.