## 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 unlicensed interested parties and licensed amateurs, mutual support of other amateurs. that engaging events promote amateur radio to the general public and other amateur radio operators, and continuing fellowship by regularly scheduled organized meetings and events.



## SEPTEMBER MINUTES

The September meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled September 1st. President Rusty, KD5GEN, opened the meeting at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. Twentytwo members and quests were present. Each person present introduced himself. Minutes of the previous meeting were approved as published. The Treasurer's report was read.

#### Door Prizes:

President Rusty had lots of door prizes to give out this evening, and started the meeting by drawing for three. They were won by KD5HWO, KF5BID's son, and K5QE's xyl, Jimmie Lou.

#### Old Business:

#### Lufkin Hamfest:

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

#### New Business:

Piney Woods Purgatory bike race coming up Saturday October 2<sup>nd</sup>. The Lufkin ARC and NARC will be providing communications support as usual. If you would like to assist, please contact BB, KD5JER. APRS capability is especially helpful.

#### Door Prizes:

President Rusty awarded three more door prizes to KE5EXX, AE5BN, and KF5BID's other son.

The ARRL September VHF contest will be held on September 11 and 12.

#### Door Prizes:

President Rusty awarded more door prizes to AE5P, KD5HOZ, KD5JER, KC5MIB, KA5OOZ, KE5TCU, LC4LUY and a guest. It really pays to come to the meetings.

Meeting adjourned at 7:24 p.m.

### Program:

Army - AE5P presented a program on how to use the MFJ-259 Antenna Analyzer.

# Oscillations From The Chair

Hello again. The year seems to be moving by so We have endured fast. another very hot summer. Hopefully the extreme temperatures will not come back. I have to consider when I think it is so hot here what the in Irag and troops Afghanistan are enduring. I have heard stories from people who have been there, hiked in the 120 degree plus temperatures but it is hard to fully comprehend that until you have endured it Hopefully, we will be able to bring those folks back soon and safely.

The last three weeks have been filled with preparation and work aimed at getting some new antennas up on the tower. In addition to the new antennas, that required adding antenna some switching accessories along with a new grounding panel. Doing that required a major overhaul of the ham shack. As I write this column, I have three minor tasks to complete and that can await the new day. I suppose amateur radio operators are similar in that once we get everything just perfect, give us six months and we see changes we want to make.

I am very proud of my up which current set allows me to utilize two bands which I did not have the capability of working and that is 2-meter and sideband 70-centimeter In addition, I now have the ability to work 6 meters on a beam or a long wire. Friends in high places were able to acquire a bucket truck and this sure did make the project much easier. The old coax was replaced with heliax. Riding in a bucket truck was something on 'bucket list' and now that is marked off. A bucket truck is much different than an aerial ladder on a If your fire apparatus. feet or hands are not placed properly on aerial ladder, you just might lose one of them if the ladder is extended or retracted.



Top antenna is a Cushcraft 2 meter, vertical or horizontally polarized and a M2 6 meter beam on bottom

None of this would have been possible without the assistance of other hams and ham supporters in our area. I got a lot of advice fantastic hands-on and assistance. I again learned that it takes planning, planning and more planning to accomplish one's goals. The amateur radio community is great about helping others whether it is another ham or community in crisis.

I want to thank each of you for your assistance not only on this project but for being an amateur operator and giving of your time to assist others.

On another note, I received an email from the Silent Key administrator at ARRL and she informed me that the SK notice on K.J. Hughes will be posted in the November issue of QST magazine.

Т contacted Lamar Outdoor Advertising to see if they would consider allowing us free "space" on of one. or more the electronic ad boards around town to promote ham radio. They did reply that free space or time on the electronic boards was not available but that if we paid \$250.00 for the material. they would occasionally hang it on sign boards that were being used for a period of time. When AE5P and I were in Crime Stoppers, the local organization did pay for the material, did get some "air" time but the sign locations were not always high visibility and seemed to be a real problem just getting to point of getting something up in the air. If the members would like to

pursue this, we can discuss it at the next meeting.

I would like for everyone to start thinking about nominations for the next year. Our next meeting is October 6 at which time we will name a nominating committee. We will need to vote at the November The Lufkin meeting. HamFest is approaching and we will go over some items that we will be in charge of at the gathering.

Hope to see you all at the October meeting.

KD5GEN- Rusty email: <u>rusty.sanders@att.net</u>

#### VP's CORNER

Hey Gang, I really miss talking to all of my Nacogdoches friends on a daily basis. I have met a few more people here on the air in Pittsburg. They don't currently have a club that is meeting now. They did at one time. I have tried to encourage some of them to consider getting it

going again. I have even gotten the assistant fire chief to offer a meeting room there at the fire station to hold our meetings. He is also a ham that I knew in high school. Anyway, I haven't gotten this to happen as of yet.

Ι have pretty good here with coverage repeaters. The Pittsburg repeater is not working very well right now but one of the hams I met said that he will be working on it soon. I can reach the Dangerfield repeater well and have heard people all the way from Texarkana on it. I can reach the Longview repeaters also from here. I have talked to several people from that area. The Mt. Vernon repeater (at Purley) is near my farm and I hear people on it as far away as Paris Texas. I am sure there are repeaters around Quitman and Sulphur Springs but haven't gotten them programed into my radio as of yet.

As far as repeaters go, I am in a good location to

reach a real large area of East Texas. Ι have enjoyed meeting a lot of new people on the air but just haven't met many face to face yet. I have invited to been breakfast with a group of hams in Mt. Pleasant but just haven't been free to meet with them yet. I did check into the Dangerfield net on Sunday night. They were very nice and glad to have a new station check into the net.

The band job I am filling in for in Pittsburg is going very well. The kids are working hard and playing very well. I am getting to do all the fun things that go with teaching and someone else does all the things that aren't fun. I really can't complain about the part time job.

Last weekend I passed through Nacogdoches on my way to Beaumont to see my grandkids and was able to catch Bob and James on the air. It was good to talk to them. I was hoping for a few more contacts but I guess the time of day I passed through was

not the best to catch very many of you. I hope everyone is doing well and I look forward to seeing everyone at the October meeting.

73 de John N5AIU

email: n5aiu@yahoo.com

#### VE TESTING

Our next VE testing is scheduled for Wednesday, October 20th 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: <u>ae5p@arrl.net</u>

#### 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. 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

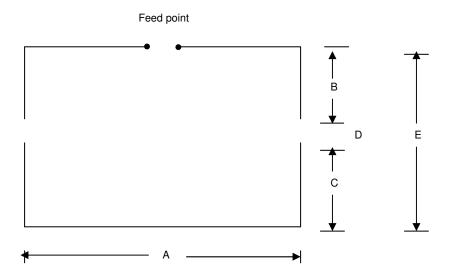
The next meeting will be on Wednesday October 6th at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. The church is at the corner of Starr and Mound Streets in Nacogdoches. Please bring any show and tell items you might have.

# BASIC ANTENNAS PART 23

by

#### Thomas Atchison W5TV

A gain antenna that is easy to build is called the Moxon antenna. This antenna was invented by Les Moxon, G6XN. The Moxon antenna can be thought of as a two element yagi with the ends bent at right angles. We will begin by describing the construction of a horizontal Moxon antenna at a frequency of 14.1 MHz. This is done using a software package called the Moxon Rectangle Generator. The URL for this package is <a href="http://moxonantennaproject.com/design.htm">http://moxonantennaproject.com/design.htm</a>. Looking down on the antenna the result is as follows:



Here the dimensions are:

A=305.31 in. B=46.69 in. C=56.64 in. D=7.53 in. and E=110.86 in.

The gap, D, is usually an insulator. The upper wire is the driven element and the lower wire is a reflector. The directivity is from the reflector toward the driven element.

If we model this antenna on EZNEC using #14 wire, we have the model in Fig. 1.

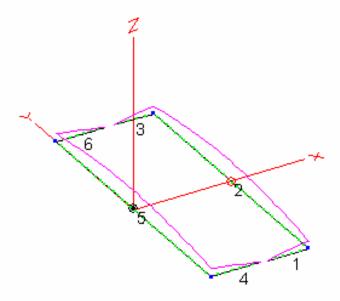


Fig. 1

The green lines represent the Moxon antenna with feed point at 2. The pink lines represent the current distribution on the antenna.

The radiation pattern of this antenna in free space is along the x-axis and is shown in Fig. 2.



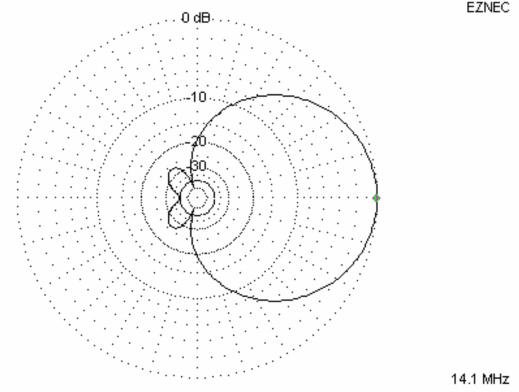


Fig. 2

The impedance at the feed point is 50 ohms. This particular design has excellent front-to-back ratio and it has an SWR below 2:1 over the entire 20 meter band. The antenna can be constructed using spreaders made of bamboo, fiberglass, or PVC.

There is an excellent article in the April 2004 issue of QST that describes a 6 meter Moxon Antenna (See pp. 65-69). The dimensions of the 6 meter Moxon are such that it can be mounted on a vehicle for mobile operation.