

# Nacogdoches Amateur Radio Club

## 2013 CLUB OFFICERS

Pres: Mike Brown - KF5KEY

VP: John Cechin - W5FWR

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.



## FEBRUARY MINUTES

The February meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled on February 6th. **President Mike KF5KEY**, opened the meeting at 7:00 p.m. in the Bailey Library of Christ Episcopal Church. Eighteen members and one guest were present. Each person present introduced themselves. Minutes of the previous meeting were approved as published. The Treasurer's report was read.

**Marshall K5QE** gave a report on 10<sup>th</sup> anniversary Shuttle Columbia Special Event Station held at the

Columbia Museum in Hemphill February 1<sup>st</sup> and 2<sup>nd</sup>. A total of 662 contacts were made on 20 meters, and 18 contacts made on 40 meters. Replying to QSL requests is underway.

**Marshall K5QE** reported on the January VHF contest. The K5QE multi-multi station finished with about 442,000 points, about half of what was achieved last year. Rovers this year included N6NB, W6TAI, W5TV/WD5RAH, WK5F, and KE5GAQ / KE5EXX. The rovers reported more than their normal share of problems this year.

The Brazos Valley ARC is sponsoring the Greater Houston Hamfest on March 23 in Rosenberg. Several club members have

expressed an interest in attending.

The Northwest ARS, who sponsor the Texas QSO Party, is putting together the first annual Texas State Parks on the Air (TSPOTA) April 6-7. Details can be found at <http://www.tspota.com/>

Meeting adjourned at 7:30 p.m.

#### Program:

Army AE5P presented a program on Oscilloscopes.

## FROM THE PRESIDENT

Greetings to all. It doesn't seem possible that another month has gone by, and it's time to write yet another newsletter column. As I look outside and see the new buds breaking out and the few flowers starting to bloom, I have very mixed emotions. I like winter. My wife hates winter. An exhaustive study has revealed that most of us with just a bit

more padding than others have a tendency to really appreciate the colder seasons, while those of you less fortuitously endowed seem to like the hot times. As I have a great liking of fall and winter, I feel that this speaks volumes regarding my own particular girth versus that of my spouse. Probably one of the greatest boons to those of us with mixed marriages (rotund vs svelte) has been the advent of the dual temperature controls in our cars. She can sit on her side and roast marshmallows while I build snowmen on mine. But I digress....

One of the reasons that I hate to witness the demise of winter is the enjoyment that I get out of ham radio in the wintertime. When it is cold and blustery outside, especially with little sunshine and a bit of rain, I do truly enjoy sitting in front of the radio gear with only the minimum light necessary to illuminate the various dials,

buttons and switches, snug in the warmth of our hobby while the elements rage. Great fun and very satisfying to call up the tropics or the Caribbean islands or cross the equator and talk to VK land while snug from the cold. The very first column that I ever wrote for the newsletter told of my having a shortwave listening station ensconced inside of a very small clothes closet, listening to a vintage Hallicrafters S-20R receiver, huddling in the dark heated by the glow of the old tube radio. I still get a great deal of pleasure from operating in a dark room with just enough light to use the equipment...a bit of nostalgia I guess.

Nonetheless, we have a great hobby. Especially as we advance in years and have put away all the skydiving, motorcycle racing, big game hunting, ski jumping, etc, etc, we find that no matter the age, our hobby patiently awaits us and welcomes us back time after time, regardless of our

somewhat diminished physical state as compared to our earlier years. There are few hobbies which will allow you as much access in all stages of life. One of the things I find so enjoyable in ham radio is having a QSO with some fellow ham and having formed a mental picture of the lady or gent, and then have them tell you that he/she is very advanced in years while all the time, the picture that I had formed from the rate of speech, the vibrancy of the voice, the mental quickness all pointed to a much younger person. Then when you look up the ham's call sign on QRZ, you find someone even older than you! (miracle of miracles!!) While not trying to hide behind the facade of radio's contact distance, I have a great deal of fun talking to hams of all ages, especially those not quite as temporally challenged as I, and when they find out that I am an old fart, are astonished that I can talk on the radio, put two sentences together and

not actually drool or fall asleep. I then direct them to the avatar that I have put on my site on QRZ and tell them that it is an actual photograph ...and by the way, if you haven't seen that, you might take a peek on QRZ. I found this while browsing one day and just had to add it to my page. Great fun!!

Well, I've managed to waste another perfectly good half hour penning nonsensical drivel for you to read. I must apologize for wasting your time, but I am anything but a columnist, and it really is hard to come up with fresh ideas for the newsletter. I'll try to do better next time..maybe...

73 and remember my motto...."Nulle Illegitimae Carborundum"

73 to all....

KF5KEY - Mike

Email:

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

## MY 2 CENTS FOX WILLY ROGER

March is upon us and the Lion and Lamb will go at it once more.

Well the response to last month's article was overwhelming to say the least.

I have listed some of the comments I received, these are listed as to popular and or like subjects, a few of the results are listed below:

- 1)
  - 2)
  - 3)
  - 4)
  - 5)
- And my favorite
- 6)

Come on people, what do you think, let me know!

How can we continue to have a great club if there is no feedback? In this case "SILENCE DOES NOT DENOTE APPROVAL"

These past months I asked some members to give programs. I listed the programs in last month's

newsletter. I now ask the full club members to come forward and be more than a face in the crowd. In the past it fell to a few members to step up and share what they know with the rest of us. No one member knows it all, so ELMER up and do. If you don't want to ELMER, then what about a Q & A program? Don't keep that knowledge. Pick a subject and we can do it after the meeting and show & tell? What do you think? Let me know.

The club needs you.

The club SES has come and gone and I'm told that once more a high number of contacts were reported for 20m, and a few for 40m, although conditions were at their worst. Well done and thanks.

In a past newsletter I had said something about shacks and..... I will start off with mine. To you newer hams, this station was started in 2000 so it didn't happen overnight.

Also a station is always changing adding to or removing from, or that's the way it is with me. A word of advice, if you have more than one radio/antenna, make sketches, notes, label wires and coax leading to and from the shack and most important, don't forget where you put the information, I am speaking from the hard side of that road, I don't remember how many info packets I have made up and are still in my place, somewhere. In the first pic's show the current antenna system.

The HF was a swap out, the UHF/VHF was purchased new, and the hard line was swapped for some UHF transverters and so on.

The top antenna is the 70cm at 85ft, next is the 2m X unit, both vert and horz all on one boom, then comes 6m and also the 1.25cm, last but not least my HF Mosley, missing the director and below that is my 40/80/160m wire at 65ft.

The tower is second hand as well as the rotor, all put

in place by members of the club, thanks to all.

The other pic's are of the shack and yes I am still in the closet.

Enjoy

What do you think, let me know?

73,

John Cechin W5FWR

[Carrots4ever2u@suddenlink.net](mailto:Carrots4ever2u@suddenlink.net)



W5FWR antenna tower.



W5FWR antennas.



W5FWR closet shack.

## VE TESTING

Our next VE testing is scheduled for Wednesday, March 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: [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 March 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 come join us and bring a friend.

## NARC WEEKLY LUNCH

Please come join us for lunch each Wednesday beginning at 11:30 a.m. at Clear Springs Restaurant on Old Tyler Road.

## BASIC ANTENNAS

### PART 50

by

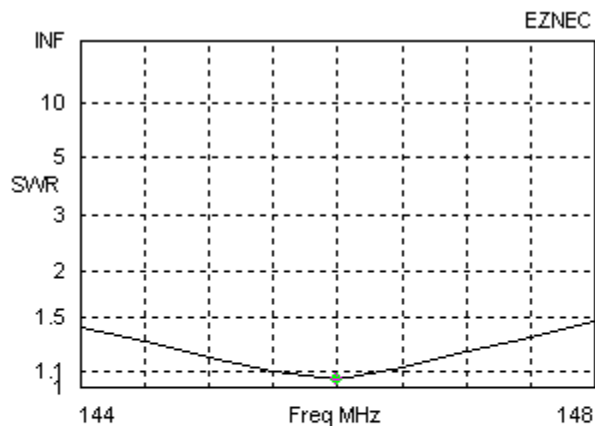
Thomas Atchison W5TV

We now consider constructing a 2 meter J-Pole using copper tubing. With an EZNEC simulation I used the following dimensions:

Vertical element = 60 inches,  
 Matching stub = 23.5 inches,  
 Spacing between radiator and stub = 2.75 inch,  
 Load point = 4.5 inches from the bottom shunt, and  
 Height of base above ground = 10 feet.

The 50  $\Omega$  feedline has the center conductor connected to the main vertical element and the ground connected to the matching stub at the load point.

The SWR in the EZNEC simulation is as follows:

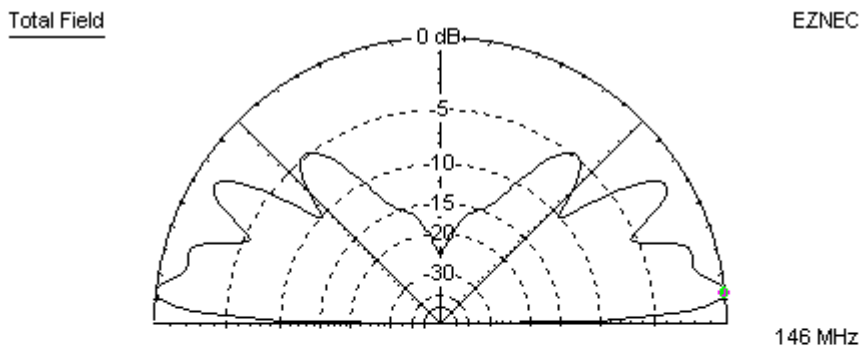


Freq	146 MHz	Source #	1
SWR	<b>1.046</b>	Z0	50 ohms
Z	47.98 at -0.99 deg.		
	= 47.97 - j 0.8295 ohms		
Refl Coeff	0.0224 at -157.3 deg.		
	= -0.02066 - j 0.008642		
Ret Loss	33.0 dB		

The SWR at 146 is less than 1.1 to 1!



The elevation radiation pattern at 146 MHz is as follows:



Elevation Plot		Cursor Elev	6.0 deg.
Azimuth Angle	0.0 deg.	Gain	4.5 dBi
Outer Ring	4.5 dBi		0.0 dBmax
Slice Max Gain	4.5 dBi @ Elev Angle = 6.0 deg.		
Beamwidth	16.7 deg.; -3dB @ 2.8, 19.5 deg.		
Sidelobe Gain	4.5 dBi @ Elev Angle = 174.0 deg.		
Front/Sidelobe	0.0 dB		

Construction using copper can be accomplished using  $\frac{1}{2}$  inch copper tubing with a  $\frac{1}{2}$  inch Tee and a  $\frac{1}{2}$  inch 90 degree L coupling. The long vertical element is cut to 60 inches and the shorter vertical stub is cut to 23.5 inches. The 60-inch vertical element is soldered in to one end of the Tee and a horizontal piece of tubing of appropriate length is soldered to the stem end of the Tee. A 90 degree L coupling is soldered to the horizontal tubing and the 23.5 inch vertical stub is soldered to the L coupling. You should to put caps on the two vertical elements to prevent water from getting in the antenna. Use  $\frac{1}{2}$  inch hose clamps on each of the vertical elements so the feed point can be changed for minimum SWR. The simulation used a feed point that was 4.5 inches above the bottom of the antenna; however, you will want to test several different feed points to find the one that provides minimum SWR. Once this point has been determined you can install a coax connector at that point. Remember the center of the coax must be attached to the 60-inch vertical element and the shield must be attached to the 23.5-inch vertical element. Lowe's has the copper parts needed to construct this antenna. I have constructed an antenna like this and it has served me well for several years. The open end of the Tee can be used for mounting the J-Pole on a pipe or similar structure. I used RG-58 coax feedline with 5 turns coiled just below the Tee for matching purposes.

Here is a picture of the feed point of the J-Pole:

