

Nacogdoches Amateur Radio Club

2014 CLUB OFFICERS

Pres: John Cechin - W5FWR

VP: John Chapman - KC5MIB

Sec/Treas: Army Curtis - AE5P

Visit our web site at

<http://w5nac.com/>

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.



MAY MINUTES

The May meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled on May 7th. **President John W5FWR**, opened the meeting at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. Seventeen members and six guests were present. Each person present introduced them self. Minutes of the previous meeting were approved as published. The Treasurer's report was read.

Old Business:

Neches River Rendezvous is scheduled for Saturday,

June 7th. **Steve KB8QWN** gave a report and asked for additional volunteers to assist with communications for the event.

Report given on the I-10 Tailgate Sale in Longview on April 12 by **Army AE5P**, **Bill WK5F** and **Tom W5TV**. Each returned with goodies they felt they could not live without.

Reminder given that Field Day the last full week-end in June will be held at the shack of AE5P.

New Business:

The annual Armed Forces Day crossband communications test is scheduled for May 10. Details at www.arrl.org.

Tim KE5PQJ gave a report on the TX Statewide Interop Channel Plan

including a handout of the complete plan.

Tim KE5PQJ noted that he has created Facebook and Twitter accounts for NARC.

Meeting closed at 7:30 p.m.

Program:

Robert KD5FEE was scheduled to present a program on the upcoming state-wide simulated emergency test (SET). Due to a misunderstanding of information received from the SFA Police Dept., Robert cancelled his presentation.

MY 2 CENTS FOX WILLY ROGER

JUNE:

I received a reminder from our S/T that it was NL time, so here goes:

THANK YOU MR.PLATT.

It was early AM when I and my trusty side kick Tonto "AE5P" ventured north to T town to witness a wonderful event. Yes I am talking about Mr. Platt and his group of young

people involved in a project other than walking around talking on a cell phone to someone they had just left. On this great day Mr. Platt with his ground crew launched #5 with more students gathered around to support the latest effort of the balloon project, thanks again Mr. Platt.

While I'm on the subject, you slackers missed another chance to be part of something great; I hate to see what Field day is going to be like, will the slackers participate or what? We shall see, we shall see.

ANOTHER GREAT PROGRAM? MIB did it again, our own KD5FEE sang a few numbers from Madam Butterfly, thanks Robert, HI HI.

PHASE II, III, IV, V:

In the last newsletter I had reported that **GB** had made her bid to be a house cat good, but as luck would have it, this lasted for only a day and when evening came **GB** ran outside to rejoin her

brother, **BC**. And that's the way it stood for about a week. **GB** vanished for about three days. I searched the back yards around and found nothing, then from nowhere **GB** came running out from someplace and into the house, only to be greeted with hisses and swats. I don't know much about cats and according to several VETS they are at a loss for an explanation, but when **GB** returned she was smiling and singing the song from meow mix, can you help? Well now back to the living arrangements, so far **GB** has the kitchen and the garage, these two rooms she feels somewhat safe in, and **TB** and **CU** still have the entire house to rule.

I still find myself talking to shadows now and then, but not as much, I guess I will have to carry a flashlight now. **CU** captured a roach the other night and played it to its end; I am still looking for pieces to clean up, but with no luck. What about your cat (s), what's the story about them?

Ok now, I have been telling you about my family in the past few NL's, it is time for the test, the answers will be in next month's NL. Answer the following questions for **TB**, **CU**, **GB**, and **BC**:

- A) FULL NAME
- B) DATE OF BIRTH
- C) COLOR OF FUR
- D) BREED
- E) GENDER

Now sharpen thoughts pencils and write your answers down on a 3x5 card or send me your QSL card with the answers. AE5P will have the prize for first place, but the answers must be received B4 the next NL.

Cats have had me for a good many years and it's still a wonder how different cats are. In this latest group of four, three of which are from the same litter, are so very opposite. **BC** will only let me pet him at meal time. **GB** wants attention all the waking time and **CU** sits and watches and picks her times. **TB** does anything she wants, anytime.

Surprise, surprise, our cool weather has gone away, I think. I was hoping that the warmer days would bring forth an abundance of food from my meager garden. But sad to say the rain has taken its toll and a few plants are rising above and going forth and doing great things, all three or four plants that remain. It will be a surprise to me if I get anything from my garden. The blackberry production has been a handful at best, not even enough to put on some ice cream. Speaking of ice cream, sneaky how I did that, **JULY** is almost here and with it is the **ice cream social**, let us know hoq many and what kind of **IC** or goodies they will be bringing,

Well it seems like at least one person came and viewed my cactus plant in all its glory, I understand a picnic basket was even involved, I can't tell you who it was but out of a sick bed to my front yard, is this a great country or not. The plant is still going strong but I'm sure time is short, so come see and

bring a lawn mower and cut the front yard, no extra charge for that.

Be sure and hug a cactus today, they need love too.

Just a reminder, **FIELD DAY**, **ICE CREAM SOCIAL**, **HAM COM**, **TXQSO**, **VHF CONTESTS**, and much more is just around the corner, as you may or may not know that field day is going to be at AE5P's QTH, bring a coat and warm clothes, so come out and enjoy.

That's all the leaves on the word tree for June.

Remember: keep your powder dry and your head below the horizon.

Happy Trails

73 Enjoy

What do you think, let me know?

73,

John Cechin W5FWR

Carrots4ever2u@suddenlink.net

VEEPS CORNER

Army asked me the other day if there were any leaves on my word tree and I allowed as there were, but I haven't harvested them yet. So here are the fruits of my labors.

A new repeater in Alto. I remember there was some simplex work going a few years ago, good to see we have some more coverage especially for our special events like the Piney Woods Purgatory and any weather events.

Speaking of weather events we've had tons of rain. Knock on wood, I don't want to jinx it, but no other of the spring specials we can get. And as of this writing (1 June) hurricane season is now upon us. I haven't heard how many they are expecting, but you never can tell. Sooooo, how are your emergency kits, your bug out bags, your plans if we do get visited?

FWR and a few others have posted up some great

DX and contacts with W1AW. Have you contacted W1AW yet and gotten a QSL card or e-card from them?

It's also antenna project time, finishing up repairs from winter damage and putting up new. What are you putting on the air? What other projects are you working on? Can you bring it the next meeting?

Field day is this month, we will be congregating at the AE5P shack, his new (AGAIN) Flex radio should be installed and boring holes in the ionosphere. I think he gets the beta and good ole boy discount with those lads in Austin.

Looking forward to seeing everyone on Wednesday.

73 de
John
KC5MIB
jlchapman2@juno.com

VE TESTING

Our next VE testing is scheduled for Wednesday, June 18th 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 June 4th** 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.

UPCOMING EVENTS OF NOTE

Mark your calendars for the following events coming up in the next few months:

**NECHES RIVER
RENDEZVOUS** - June 7

HAMCOM - June 13-14 in Plano.
<http://hamcom.org/>

**ARRL JUNE VHF
CONTEST** - June 14-16
<http://www.arrl.org/june-vhf>

ARRL KIDS DAY - June 21
<http://www.arrl.org/kids-day>

ARRL FIELD DAY - June 28-29 at AE5P.
<http://www.arrl.org/field-day>

**NARC MONTHLY
MEETING AND ICE
CREAM SOCIAL** - July 2

**IARU WORLD HF
CHAMPIONSHIP** - July 12-13
<http://www.arrl.org/iaru-hf-championship>

**CQ WORLD WIDE VHF
CONTEST** - July 19-20
<http://www.cqww-vhf.com/>

**CENTRAL STATES VHF
SOCIETY ANNUAL
CONFERENCE**- July 24-26 in Austin.

<http://csvhfs.org/>

ARRL UHF CONTEST - Aug 2-3
<http://www.arrl.org/august-t-uhf>

**NORTH AMERICAN QSO
PARTY (NAQP) (SSB)** - August 16-17
<http://ncjweb.com/naqp/>

**33rd Annual 2014
ARRL/TAPR DCC (Digital
Communications
Conference)** - Sept 5-7 in Austin.
<http://www.tapr.org/dcc>

**ARRL SEPTEMBER VHF
CONTEST** - Sept 13-15
<http://www.arrl.org/september-vhf>

TEXAS QSO PARTY - Sept 27 - 28
<http://www.txqp.org/>

Introduction to EZNEC Demo

By

Thomas A. Atchison W5TV

As mentioned in the previous article, the demo version of EZNEC has all of the tools that the regular EZNEC has except for the number of segments that can be implemented. The demo version restricts the user to at most 20 segments therefore you are restricted in the complexity of the antenna that you can simulate. Still, there are several interesting antennas that you can simulate using the demo version and using the demo version will allow you to decide if you want to go further with antenna simulation.

In this article I want to walk you through the simulation of a simple dipole for 20 meters. First, open the demo version of EZNEC by clicking on the EZNEC icon on your desktop. The main window that opens has a title bar at the top that may have some words in it. Click on the title bar to get a Title window. Type in the words '20 Meter Dipole' and click the Ok button. This should fill in the title bar appropriately.

Go down to the line entitled 'Frequency' and click on the '>' symbol. This will open a window entitled 'Frequency'. Enter 14.2 in the Frequency(MHz) box and click Ok. The frequency of 14.2 MHz should appear on your main window to the right of the word 'Frequency'. Also, the line directly beneath should give the Wavelength for 14.2 MHz. If the wavelength is not in feet, then we need to make some changes. Go down to the line labeled 'Units' and click on the '>' symbol. This opens the 'Units' window. Select the button marked 'Feet' and click Ok. The wavelength line should now read 69.2656 ft.

Go to the 'Wires' line and click on the '>' symbol. This will open the 'Wires' window. If you have only **ONE** wire in this table then move to the next paragraph. If you have **MORE** than one wire listed then click on the upper left drop down menu that is labeled 'Wire'. This will provide a menu with several items including the command 'delete'. Click this item. This will open a window entitled 'Delete wire(s)'. The line entitled 'First wire to delete' should have 1 and the line entitled 'Last wire to delete' should have the number of the last wire used in previous work that was done. You don't need to change any of this, just click Ok. You should get a message that says 'Not all wires can be deleted. One will remain'. Click Ok and you should have a wires window with a single line indicating wire number 1 with some following data.

You will note that there are columns labeled 'End 1' and 'End 2'. Since we will be working in 3-dimensions, underneath each of these are columns labeled X (ft), Y (ft), and Z (ft). Recall our wavelength was 69.6328 and a half wave dipole should be one-half a wavelength long so we divide to get 34.6328 feet. Under End 1 enter 0 in the cell below the X (ft), 0 in the cell below Y (ft), and 20 in the cell below Z (ft). This makes End 1 with x,y at 0,0 and 20 feet high. Under End 2, enter 34.6 in the cell below X (ft), 0 in the cell below Y (ft), and 20 in the cell below Z (ft). This make End 2 with x,y at 34.6,0 and 20 feet high. Now, under the Diameter column enter #14 (for #14 wire) and under the Segs column enter 11. This divides the wire into 11 segments. An odd number is preferred so that we can place the signal source on the middle segment (segment 6 in this case). Click return and the Wires window is complete. You may close this window if you like. The main window should show the Wires line with 1 wire, 11 segments.

On the left side of the main window, click on the View Ant button. This should open a window with a picture of your antenna and some basic information below.

We must now put a 'Source' on our antenna. Click on the '>' symbol of the 'Sources' line of the main window to open the Sources window. Enter 1 in the cell below Wire # and 50 in the cell under the % From E1. The Actual Pos. column should be automatically filled with 50 and 6 under % From E1 and Seg, respectively. Leave everything else alone and close the Sources window.

On the main window click the '>' on the line labeled 'Ground Type'. This will open the Ground Type window. Select Real and High Accuracy, then click Ok.

Now click the FF Plot button at the lower left corner of the main window and you should get a 2D Plot: 20 Meter Dipole window. It will show an elevation plot of radiation from the antenna with some information below the elevation plot. If you left the View Antenna window open it should have a pink curve that indicates the current distribution on the antenna.

Click on the SWR button on the main window to get the SWR Sweep Parameters window. Enter 14 in the Start Frequency cell, 14.5 in the Stop Frequency cell and 0.1 in the Frequency Step cell. Click the Run button to get a window labeled SWR Plot: 20 Meter Dipole. This is a graph of the SWR of your antenna from 14 MHz to 14.5 MHz in steps of 0.1 MHz. Notice that the 50 ohms button is selected. If you select the Alt (75 ohms) button you will get a graph assuming the source is 75 ohms. This graph will provide a lower graph indicating that the SWR is better. That is what you would

expect from a half-wave dipole antenna. Also, note that the graph is sloped upward from left to right suggesting that a lower SWR may be at a lower frequency. This would suggest that the length of the antenna is too long.

To examine this possibility, we will return to the Wires menu and change the cell under End 2, X (ft) to 33.6. This takes 1 foot off our original antenna. Close the Wires window and click the SWR button on the main window to get the SWR Sweep Parameters window again. Click Run and you will see a better SWR plot. If the Alt (75 ohms) button is active the SWR at 14 MHz should be 1.23. Click the dashed vertical line at 14.1 and the SWR should read 1.15. You can check other frequencies as you wish. If you want to see what a feed line of 50 ohms would do click the 50 ohms button and get the appropriate graph. Notice that the SWR is still a minimum at about 14.1 MHz but it is higher than for a 75 ohm feed line.

This should be enough to get you started with the EZNEC demo. Now create your own simulations and see what happens.