

# Nacogdoches Amateur Radio Club

## 2011 CLUB OFFICERS

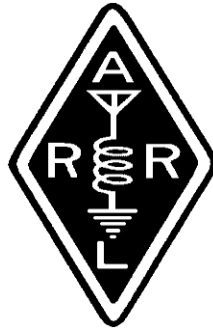
Pres: Rusty Sanders - KD5GEN

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.



## AUGUST MINUTES

The August meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled on August 3rd. **President Rusty, KD5GEN**, opened the meeting at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. Fifteen members and two guests were present. Each person present introduced himself. Minutes of the previous meeting were approved as published. The Treasurer's report was read.

Ronnie Kimbrough, KE5LWV, announced that he has accepted a position as Emergency Manager for

Cherokee County, and will be stepping down as ARRL Emergency Coordinator for Nacogdoches County.

New solar activity has been noted in the last few days, and more is expected as the sun rotates more active spots towards the earth. Members were reminded that while such activity can sometimes mean communications blackouts on the HF bands, it can also result in greatly enhanced conditions on the VHF/UHF bands.

John, KC5MIB, gave a report on possible future threats to our UHF and microwave bands as congress and the FCC attempt to "re-farm" frequencies taken from television interests.

Meeting adjourned at 7:25.

**Program:** Bill - N5YA gave a program on Contesting 101. Bill is in the process of building a world class HF contesting station on his property north of Milam.

## NEWEST HAMS

At our August 17th VE test session, Frank Hardy of Lufkin passed his Tech test and is now KF5MLJ. Congratulations Frank.

## OSCILLATIONS FROM THE CHAIR

Hello again. The sun is hot and the clouds are not giving up their moisture. Folks, our drought situation is serious and dangerous. I have been keeping my eyes peeled on the tropical radar and satellite images in hopes that we can obtain some moisture from the south. As many others have stated, a tropical system may be our only hope for some moisture.

Should we obtain moisture from a tropical system, we

might get some extras that we did not count on having. Because of the lack of rain, many of the trees are in a stressed state and some have been dropping leaves and in some cases, large limbs. A large thunderstorm or a tropical system could leave us with some damp ground but unwanted items such as power lines down, trees down and homes damaged. This all brings me to the topic of this month's column.

Public Service - Emergency Service - Volunteering  
Amateur radio operators have for decades been some of the first to volunteer their services, time, and equipment during emergency situations. I feel we are all proud of that example.

In the event that we receive some tropical system(s) this year, there may be a call that goes out requesting amateur radio operators to lend their talents. This service could be performed locally or in adjacent counties or COG

(council of governments) regions.

I urge each of you to consider what you could do in an effort to alleviate disaster conditions. Upon saying that, consider what you are not able to do also. In past years, particularly after Hurricanes Rita and Ike, I felt the urge to try to assist. In the first instance, I was not set up with a mobile unit. After figuring out how to solve that tripping point, I realized that I had no way to go into an area of devastation and carry on with the possibility of limited food, water, shelter and fuel. If you should decide to go "away from home base" and assist other communities, I admire you for doing so but be sure you have thought through the process and have what it takes to be self-sufficient for probably 72 hours. Getting to the point where you can actually go and work takes a lot of preparation, time and money. Once you feel you are "ten foot tall and bullet proof", go out into

one of the national forests for 3 days and determine what you forgot.

One of the most important points regarding volunteering your service is to not just show up unannounced! You probably will not get past the roadblocks. There are ways to let other communities know your assistance is available during an emergency. You can become a member of the Red Cross, Southern Baptist Men, or SATURN (Salvation Army comm).

The ARRL has a very good article regarding assisting in emergency service on their web site. In this case, the assistance would be from your home and you would not have to be on the road. There are certain requirements but not like if you were working away from your home base. Please see the web article <http://www.arrl.org/news/arrl-soliciting-stations-to-become-emergency-liaison-stations>

I sincerely hope that if you want to contribute, please do so. This article is not intended to sway you away from assisting but to keep you from becoming a victim. Disaster conditions are harsh and you must be prepared to work in those conditions.

Hope to see you at the next meeting.

KD5GEN- Rusty

email:

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

### VP's CORNER

73 de Clarence KC5UBP

email:

[clarence404@hotmail.com](mailto:clarence404@hotmail.com)

### VE TESTING

Our next VE testing is scheduled for Wednesday, September 21st 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 September 7th** 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. A special program is planned. Hope to see all of you there.

## RADIO GIVEAWAY

If you are a current member of the Nacogdoches Amateur Radio Club, and upgrade your ham license to General or Extra during the calendar year 2011, you will receive one or more tickets for a special drawing to be held at the club's annual Christmas party / meeting on December 7th, 2011.

Members upgrading from Tech to General will receive one ticket. Members upgrading from General to Extra will receive two tickets. Members upgrading from

Tech to Extra will receive three tickets.

Each winner of the drawing will receive at minimum an Amateur Radio HF transceiver complete with power supply and microphone. Depending on donations, there may be more equipment added to this.

At this time, there are at least three complete HF radios available for the drawing:

1. Drake TR-5 transceiver
2. Kenwood TS-140 transceiver
3. Kenwood TS-130 transceiver

The drawing will be administered and conducted by the Club Secretary/Treasurer.

Winners of this equipment are asked to donate their equipment back to the club if they no longer have a need for it, so the program can be continued in future years.

If you would like to donate equipment to be used for this program, please contact **AE5P**.

## New Nacogdoches County Emergency Coordinator

Gary Lewis, **WG5L**, District 10 DEC, and Walt Mayfield, **KD5SOO**, SEC NTX, have approved the appointment of Robert Judy, **KD5FEE**, as the new EC for Nacogdoches County. Robert replaces Ronnie Kimbrough, **KE5LWV**, who resigned to accept the position of Emergency Manager for Cherokee County.

Many thanks to Ronnie for his service. We wish him the best in his new position.

Congratulations to Robert in his new role as EC. Robert's willingness to step up and take on this position is very much appreciated.

## Texas QSO Party

The Texas QSO Party is the last full weekend in September. Full details at <http://txqp.net/>

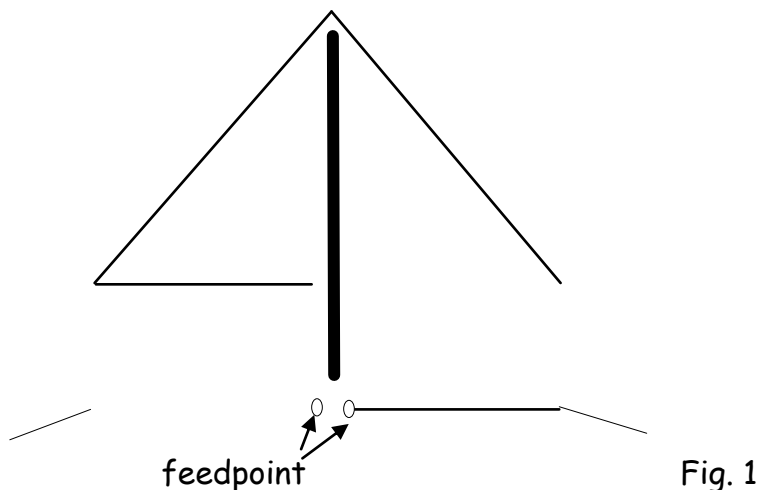
## BASIC ANTENNAS

### PART 35

by

Thomas Atchison W5TV

In Basic Antennas Part 18 we talked about rectangular loop antennas, mounting these antennas either vertically and horizontally. In either case such mounting requires considerable complication. A variation on this is the one wavelength triangle antenna. It can be mounted with the apex on a single vertical mast and the two legs sloping down and folding back toward the mast. We can then feed this triangle at the middle of the bottom wire (See Fig. 1).



The center of the one wavelength wire is attached to the apex of the mast using an insulator. Maximum radiation occurs broadside to the triangle, therefore, the directivity can be changed by moving the two lower corners. The total length can be calculated using the formula

$$L \text{ feet} = \frac{984}{f(\text{MHz})}$$

The two lower corners can be pulled to form the triangle using insulators and string.

Suppose we consider constructing this antenna for use on 20 meters. Selecting a center frequency of 14.2 MHz we see that  $L = 69.3$  feet. In the EZNEC simulation we used a length of 73.5 feet over real ground (See Fig. 2).

EZNEC

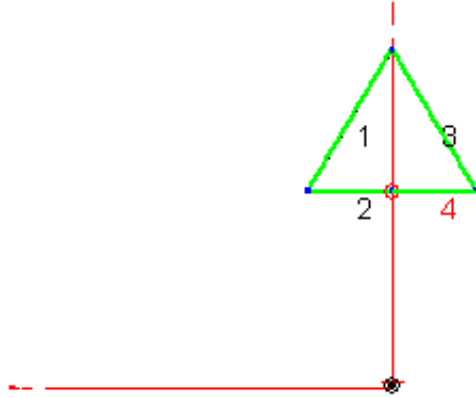


Fig. 2

The antenna is shown in green. Wires 1 and 3 are 24.5 feet long and wires 2 and 4 are 12.25 feet long. The center mast is 50 feet high and the bottom wire is 29 feet above the ground. The impedance at the feed point is about 120 ohms. The SWR sweep from 14 MHz to 14.35 MHz is shown in Fig. 3.

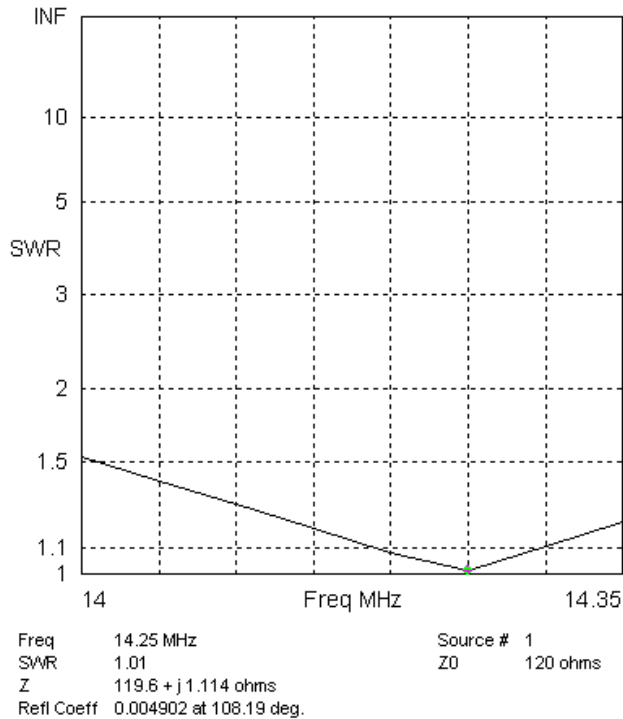


Fig. 3

Observe that the antenna is resonant at 14.250 MHz. If you want to feed this antenna with 50 ohm coax you could use a 2:1 balun or a matching stub.

The elevation radiation pattern for this antenna is shown in Fig. 4.

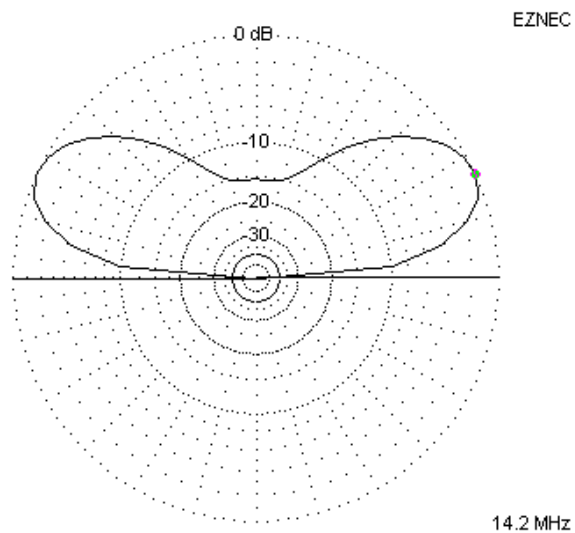


Fig. 4

Maximum radiation occurs at about 25 degrees and it is broadside to the plane of the triangle.

The 3-dimensional radiation pattern is shown in Fig. 5.

EZNEC

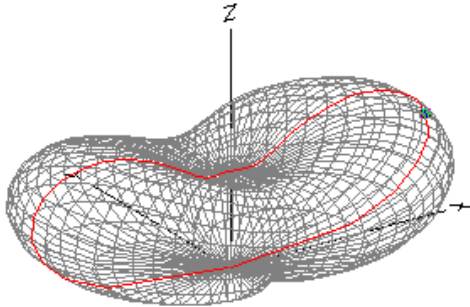


Fig. 5

The elevation radiation pattern is highlighted in red. There is minimum radiation in the plane of the triangle, i.e. off the corners of the antenna.

If you want to avoid the use of a mast cut the wire loop a little long, throw a line over a tree limb to raise the apex, and trim the wire at the feed point to minimize the SWR at your selected operating frequency.