

Nacogdoches Amateur Radio Club

2011 CLUB OFFICERS

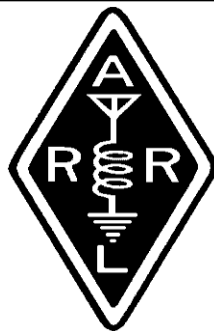
Pres: Rusty Sanders - KD5GEN

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.



MAY MINUTES

The May meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled on May 4th. **President Rusty, KD5GEN**, opened the meeting at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. Twenty-three 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 read.

Contests: A short report was made by members who participated in various

contests and QSO parties during the past month.

Amateur Radio Giveaway: **Army-AE5P** reported on a new program to encourage members to upgrade their license this year. Full details are in this newsletter.

Neches River Rendezvous: will be held on Saturday, June 4th. If you can help, please contact **Steve-KB8QWN** or **Greg-KE5JQV** for details.

6 meter DXpedition: **Marshall-K5QE** reports that the EL58 6M DXpedition planned for June 2-6 has been postponed due to flooding on the Mississippi river.

UPCOMING EVENTS:
Neches River Rendezvous, June 4th.

HamCom / ARRL National Convention in Plano, June 10-11.

ARRL VHF+ June Contest, June 11-12.

Meeting adjourned at 7:31.

Program: Porter Stanaland, Emergency Management Director for Nacogdoches County, presented a fine program on the wild fires ongoing in West Texas, and the threat of such fires here in East Texas.

NEWEST HAMS

This last month featured three VE examination sessions, on May 1 and 18 in Nacogdoches, and a special session on May 24 at the Boy Scout Camp near Gary. Club members **KF5IWF** and **N5PHR** upgraded to Extra, **KC4LUZ** upgraded from Tech to General, and **KF5LDI** from Dibold earned his Tech license. Congratulations to all.

Also, congratulations to our newest VE's: **KD5GEN**, **WK5F** and **KC5MIB**. Many thanks to these Amateur Extra class hams becoming certified as VE's.

OSCILLATIONS FROM THE CHAIR

I hope this newsletter finds everyone in good health

I just got back from a week in Oregon in which I saw a number of interesting items. I suppose as all hams do, we keep our eyes open for antenna systems and other hams. One of the more interesting items I saw was the historical Spruce Goose. As many of you know, this was the wooden airplane built by the late Howard Hughes. The plane is on display at the Evergreen Aviation and Space Museum located in McMinnville, Oregon. I got to take a tour of the flight deck of this monster of a plane. One of the things I noticed on the flight deck was the radio operator

position. The photo of this is at the end of this newsletter. As you will notice, there is no microphone but there is a key for sending Morse code. Many of the aircraft of this era had to use code to cover the distance needed. To see more on the museum and the contents go to the following website, <http://evergreenmuseum.org/#/>

We still need folks to be net control operators for the ARES/Races and Skywarn nets. As one of the TV commercials say, it is so easy that even a Cave Man could do it.

If you can assist in the Neches River Rendezvous, please give me a call and I will pass along the information.

Field day is coming up shortly and AE5P is getting items coordinated. Please take time to help your club during this event. Hopefully, the bands will be open and a lot of contacts can be accomplished.

The people of Joplin, Missouri got hit hard by the storms over the last few days and as always, hams responded to assist in communications. As I visit with people and mention that I am a ham, I find that many people know about hams and have questions on how the hobby works. Publicity of amateur radio operators working emergencies has increased and the public has a growing respect of the hobby.

Our next meeting will be Wednesday, June 1. Hope to see you there.

KD5GEN- Rusty

email:

rusty.sanders@att.net

VP's CORNER

These monthly columns sure do come around often.

I confess, I don't have anything to say this month.

73 de Clarence KC5UBP

email:

clarence404@hotmail.com

VE TESTING

Our next VE testing is scheduled for Wednesday, June 15th 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 1st** 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. 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**.



FIELD DAY 2011

Here is an update on preparations for our Field Day 2011:

We have approval to use the City/County Emergency Command Post trailer at the airport as our Field Day site. Here is the check list of items planned and/or needed so far:

1. Main radio IC-756 from **KD5GEN** with PS and microphone.
2. Data interface for 756, I-mate, CW keying interface from **AE5P**.

3. GOTA rig TS-140 with power supply and microphone from **AE5P**.

4. Data interface for TS-140. **Needed**.

5. Green monster mast from **KD5GEN**, complete with all guy stakes, guys ropes, etc.

6. Mosley TA-33Jr antenna. Need to preassemble it, balun, coax. **AE5P**

7. Butternut vertical. Need coax, post hole digger, ground radial wires, etc. **AE5P**

8. Use White Rover as our VHF station. Need to get it serviced, equipment re-installed, and everything checked out. **Needed** for HamCom/VHF contest also.

9. Print out FD rules.

10. Two laptops for logging. Use N3FJP software. **AE5P**

11. **Breakfast Saturday** at 8:00 at Kinfolks. Setup at airport begins at 9:15.

12. MFJ 269, mosquito spray, sledge hammer,

scratch paper, clip boards. **AE5P**

13. Written aids for GOTA station; band chart, script, callsign card, etc. **Volunteer?**

Food will be handled by **Larry Nolan, KJ5LDN**. He needs a head count for both meals.

Everyone should bring their own drinks and snacks.

Please look over this list and see if you can help with any of these items, or if you can think of anything else that might be needed. Please let **AE5P** know so this list can be updated.

WRITING WANTED

It's a real shame to have to leave this much empty space in our newsletter. If you have something to share with the others in our club, please consider writing a short article and submit it for publication in a future newsletter.



BASIC ANTENNAS

PART 32

by

Thomas Atchison W5TV

An antenna that has been used effectively on 2 meters is the 5/8 wave vertical. A 5/8 wave vertical can be designed to work on other bands effectively but we should realize that this is not a resonant antenna. A 5/8 wave antenna consists of a vertical radiator which is fed at the base. If we plan to feed it with 52 ohm coax then we will need to use either a coil or a matching stub to match the impedance. On commercial 5/8 wave verticals the usual practice is to put a coil in series with the center conductor of the coax to offset the capacitive reactance of the antenna. This coil is usually built into a magnetic mount base. The antenna is then mounted on top of the vehicle so the vehicle serves as a counterpoise or ground plane. For a home station 5/8 wave antenna the usual practice is to mount the antenna on a pole or tower and use a matching stub and ground plane radials. The use of radials is not as important for the 5/8 wave antenna as it is with a $\frac{1}{4}$ wave vertical.

Remember that the simplest antenna is an isotropic radiator. This is a theoretical antenna that radiates the same level of energy in all directions when power is applied to the antenna. Even though this type of an antenna cannot actually be constructed, the use of the concept provides a uniform standard against which the performance of other antennas can be compared. A half-wavelength dipole antenna has a gain of 2.15 dB greater than an isotropic antenna (+2.15 dBi). A $\frac{1}{4}$ wave vertical mounted on a ground plane has a loss of 0.85 dB as compared to an isotropic antenna (-0.85 dBi).

Some of the advantages of a 5/8 wave antenna are 1) it provides approximately 1.5 dBd gain over a $\frac{1}{2}$ wave dipole and 2) it provides a lower angle of radiation than a $\frac{1}{2}$ wave dipole. A $\frac{1}{2}$ wave dipole has approximately 3 dB gain over a quarter $\frac{1}{4}$ vertical ground plane, therefore, the 5/8 wave antenna has a gain of approximately 4.5 dB over a $\frac{1}{4}$ wave vertical ground plane. If we examine a $\frac{1}{4}$ wave ground plane antenna we have maximum gain at an azimuth angle of about 25 degrees. A $\frac{1}{2}$ wave dipole drops that angle to about 20 degrees and the 5/8 wave antenna drops it further to about 16 degrees. As we extend the radiator beyond 5/8 wavelength the wave pattern develops a lobe that has a high angle of radiation. We probably get the best trade off between radiation angle and gain with a radiator of length 5/8 wave.

There are several commercial 5/8 wave antennas available for 2 meters with magnetic mounts. There are also home construction projects available on the Web. An interesting article appeared in QST in the October 1965 issue written by VE7ABK. It is entitled 'Improved Vertical Antenna for 2-Meter Mobile'. This article provides detailed construction information for a 5/8 wave antenna. The particular 5/8 wave antenna that I use has a radiator that is 48.5 inches long with a small coil at the base. It uses a magnetic mount so it can be attached to the top of a vehicle.

PICTURES FROM RUSTY'S TRIP



This is the Radio Operator's station in the Spruce Goose, in the Evergreen Aviation Museum in McMinnville, Oregon. No microphone in sight.



Do you know what kind of antenna this is? Rusty saw this antenna on his recent trip to Oregon and snapped a picture. Can you identify it?