February 2010 **Volume 02-2010**

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 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 3rd. **President Rusty, KD5GEN**, opened the meeting at 7:00 p.m. in the Bailey Library of Christ Episcopal Church. Twenty-three members and 3 guests were present. Each person present introduced himself. Minutes of the previous meeting were approved as published. The Treasurer's report was read.

Unfinished Business:
The Winlink Node needs rebuilding at the Fredonia Hotel.

New Business:

President Rusty – KD5GEN, reported the new antenna has been installed at the City Recreation Center. Coax is in the attic above the employees' break room.

Jerry, K5JLW, reported on **Bert, AC5Z** who recently had surgery for brain cancer. Bert is still in the hospital and is doing well.

Rusty, KD5GEN is acting as PIO for the club. Will be announcing future club meetings in the newspaper.

Army, AE5P announced that the club's liability insurance was due for renewal. Motion made and approved to renew the policy in the amount of $320.

Several club members did well in the January 2009 VHF contest and received certificates from ARRL. Several members participated again in the 2010 VHF contest, and reported conditions were horrible.

On the calendar:
Orange February 27.
Belton April 17

Meeting adjourned at 7:39.

Show and Tell:
K5QE – Type N connectors burned up by RF and water.
W5TXR – 220 and 440 repeaters

Program:
Army – AE5P gave a program on SDR radios, featuring a Flex SDR-1000 and SDR-IQ receiver.

Oscillations From The Chair

The Shuttle Columbia event is a wrap for another year and I certainly appreciate everyone who participated in one way or another. John Jordon, N5AIU was able to get the school facility opened up and everything went very well. The two stations made many contacts plus we had some very good media relations regarding the event.

Since that point in time, we all got to experience Mother Nature's beauty in the form of a small snow and as I type this, we await that possibility again. Army, AE5P and I discussed how amazing it is that snow can build up so high on a small wire antenna when there is little or no wind. I was really amazed at the accumulation on my ladder line. I would have to assume that if we had an ice storm, I can pretty much figure on replacing my antenna because of the loading of the ice. The snow did not have much effect and I did not have any pine limbs attack the antennas or supporting structure. WK5F, Bill had some repair work as a result of snow build up on a pine limb that broke off and came to the ground.

For those of you who missed the chatter during the Monday night net on Feb. 22, I posed the question of why the new ARRL website looks like the old site and not like the QST pictures. AE5P was able to answer the query that they have delayed bringing up the web site to make sure they get everything right. So, if you read the article in QST and want to see the site, it may be awhile before it is ready.

While scratching my head trying to determine what to write, I happen to spot something from the past that had some interesting stuff. The catalogue is a Lafayette Radio Electronics catalogue from 1972. Lafayette was one

of many retailers who sent out catalogues or wish books. All of the 'new' radios in the wish book are now considered antiques or collector items but I occasionally hear someone who is actually using one of the old radios they have refurbished. The radio I looked up was a Drake Model TR-4 SSB/AM/CW transceiver that covered 10-80 meters, had 20 tubes and 6 diodes plus a built-in 100 kHz xtal calibrator. The little unit was advertised as a great radio for mobile or portable work as it weighed in at 21.5 pounds. Wow, what a deal!!! Makes one ready to sling it over your shoulder and head to the mountain top. The radio price was $599.95. If I remember correctly, I would have had to work three months and not have any expenses to pay for this little item. I guess that one of our meetings, all of us dinosaurs need to bring some of the old catalogues, books, Sam's notes or other items just to let some of the new hams see what was out there.

My how times have changed! In 1972, I would probably not have believed someone who told me that in 30 plus years we would have the many technological advances that we now take for granted. And hang on folks, one can just only imagine what amateurs will see in the next 30 years.

Now, back to the present. I appreciate everyone's input to the activities of the club and hope to see another great crowd for our meeting on Wednesday, March 3.

73 until next month. KD5GEN- Rusty

email:
rusty.sanders@att.net

VP's CORNER

The Columbia Special Event held at McMichael Middle School went very smoothly. Several club members had an early breakfast at IHOP. Antenna setup began around 8:00 a.m. We also used the school antennas for 40 meters and the VHF repeater. We had good attendance from local hams, one couple from the Plano area, and one student from McMichael. We made over 200 contacts using the 20 and 40 meter bands. Both the newspaper and local television were here for interviews and one of them actually got on the air and made a contact. The event as a whole went great and we had a lot of good fellowship. Thanks to everyone who helped make the event a big success.

I was out of town on a trip to San Antonio and missed the big snow event. However, I did make several contacts on the 146.940 repeater in Austin on my way there. It has pretty good coverage. I traveled highway 21 all the way from here to San Marcus. I could hit the repeater from north of Bastrop all the way to San Marcus. There wasn't a tone on the repeater but they plan on putting one on it soon.

On a trip to Beaumont recently, I was able to make contacts on the Jasper repeater and Beaumont repeater (147.000) after five and during the evening hours. These are a couple of places to look for a conversation if you travel any of these directions.

Marshall will present a program at the March meeting on constructing an antenna. It should be great. See you at the next meeting

73 de John N5AIU

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VE TESTING

Our next VE testing is scheduled for Wednesday, March 17th 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

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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 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 3rd 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 received over the holidays.

NEWEST HAMS

Chuck Anning – KF5ETJ Upgrade to General

Clint Jones – New Tech

John Jones – New General

No calls had been issued at the time of writing this newsletter, but they are expected to be by the time of our next meeting. Please welcome them to our fraternity and assist them in any way you can.

BASIC ANTENNAS

PART 16

by

Thomas Atchison W5TV

In part 15 we talked about a collinear array with two half-wavelength elements mounted end-to-end. We can add additional half-wavelength elements on each end of this array; however, we must add a phasing loop as we add these elements so that the additional current loops will be in phase (see Fig. 1).

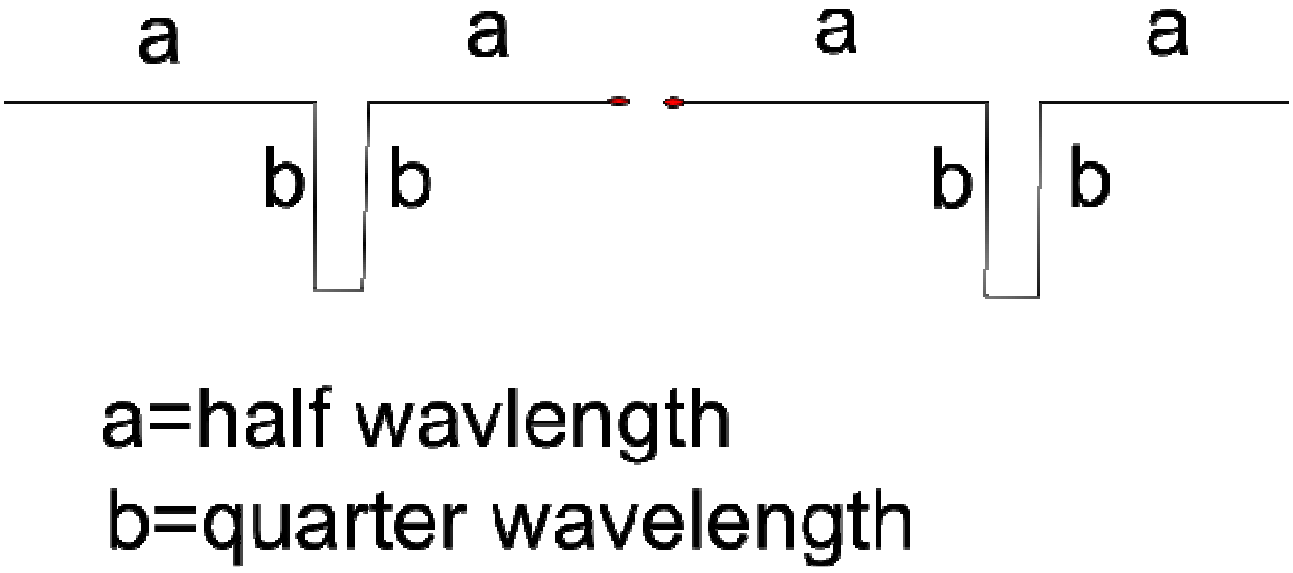
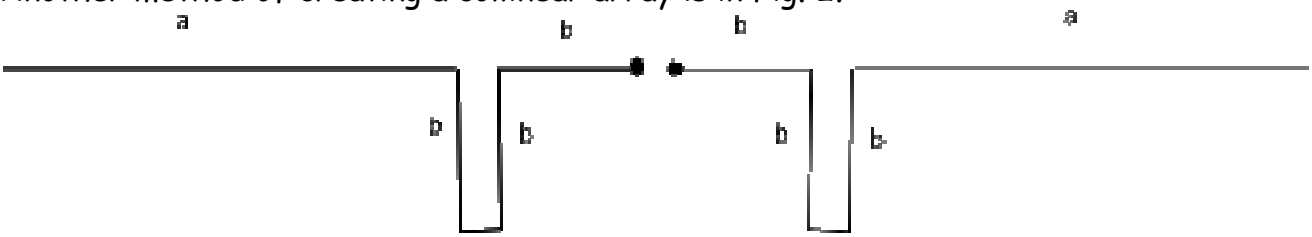


Fig. 1

Each of the horizontal wires is one half wave-length long. The stubs are one quarter wave-length on each leg for a total of one half wave-length. Remember that the phase of the alternating current reverses at each half wave-length. Reading from left to right in Fig. 1, the current in the leftmost horizontal wire labeled **a** has a different phase from the current in the stub **b**. Radiation from the stub is minimized because the two wires are parallel and most of the signal will cancel itself in that quarter wavelength piece. In the next half wave-length horizontal wire labeled **a** the current phase reverses again which puts it in phase with the current in the previous horizontal wire. We are now at the feed point. The other half of the antenna performs in the same way. That means these phasing stubs allow the current in each horizontal half wave-length to be in phase. We therefore have four half wave-length elements that are in phase.

Another method of creating a collinear array is in Fig. 2.



a=1/2 wavelength
b=1/4 wavelength

Fig. 2.

In this case we see that the feed point in the middle is at the maximum current point of a half wave length dipole therefore we have three half wavelength dipoles in phase. One reason for considering this type of antenna is to have lower impedance at the feed point of the antenna. The impedance at the feed point in Fig. 2 is in the neighborhood of 300 Ω, therefore, it has a reasonable match to 300 Ω transmission line.