

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.



DECEMBER MINUTES

The December meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled on December 1st. **President Rusty, KD5GEN**, opened the meeting at 6:05 p.m. in the Parish Hall of Christ Episcopal Church. Nineteen members and six guests were present. Each person present introduced himself. Minutes of the previous meeting were approved as published. The Treasurer's report was read.

Treasurer Army AE5P made a motion to donate \$300 to the church as a thank you for letting us

use their facility twice each month. Approved.

Army made another motion to spend up to \$700 to purchase a video projector for the club. Approved.

New Business:

CQWW CW contest: Discussion on this contest by club members who participated. N5YA reported on the fine performance by N5NU using the N5YA station.

Shuttle Columbia Special Event Station:

Discussion held on our annual special event station. Location will be the International Church of Nacogdoches on the Southwest Loop. Two complete HF stations are planned.

Meeting adjourned at 7:15 followed by an excellent

pot luck supper and White Elephant auction, which netted the club \$293. Many thanks to all who participated.

Oscillations From The Chair

Hello to each of you. I trust that you had a great Christmas.

I must pass along this little story. Christmas morning, all the kids and grandchildren were to meet at my house at 9 to open presents. One of my sons and his family live next door and they have two children, ages 9 and 6. I called my daughter-in-law shortly before they were due to come over and asked her to get the kids to look closely at my antennas. I related to her that sometime late during the night, I heard a noise like something had run into the antennas, either the beams or the long wire. If she would, get the grandchildren to look up at the antennas to see if the reindeer or Santa's sleigh might have hit the

antennas on the landing approach to their house.

I then sat back and watch the outdoor cameras. True enough, the grandchildren could barely walk for looking intently up at the antennas to determine if there was damage from Santa's landing. The grandson came into the house and told me that he thought one of the elements on the beam was bent and maybe one was missing. I told him I would check it out later. Aren't grandchillens great!

The NARC will be having the Columbia Shuttle event in February and there is a lot to do in preparation for this. At the next meeting, we will need to appoint someone to chair the event. We have a location already at the International Church of Nacogdoches located at 1610 SW Stallings Drive. This is on the inside of the loop, south of Durst Street and north of South Fredonia. Andy, KE5EXX, indicates there will be no problem in locating

antennas and having a place to set up the equipment.

We will need someone to handle public relations for the event, notifying the news media and hopefully getting some air time. It would be great if we could get some scout troops to come by and see what is going on and maybe get on the air.

I have a number of drinks left from the Christmas party and we can order pizza for lunch.

There will be a few more decisions that we can finalize during the meeting on January 5.

Army, AE5P, handled out some survey sheets during the last meeting and if he has those summarized, we can get a report from him on the consensus of what our members want.

We also have membership dues coming up so be sure and bring your checkbook or exact change.

In June, we have the ARRL field day coming up and hopefully our club will be an active participant this year. Please be thinking about this event, where it can be held and how you can help.

Until the meeting, I hope you all enjoyed your Christmas holiday.
KD5GEN- Rusty

email:

rusty.sanders@att.net

VP's CORNER

So the New Year is here and I don't have a New Year's resolution. There are too many things that I should put into that resolution if I make it. I think I'll just concentrate on energy independence in a broad sense. Maybe a solar panel, marine battery and white LEDs for light inside and outside my house. Also 12VDC output to power other devices.

I have frequent power outages in my area and a low voltage system would be great for backup power.

I have been thinking about doing this for a long time.

Also I've been wondering if a windmill connected to car alternators would work in this area.

Lots of experimenting to do.

73 de Clarence KC5UBP

email:

clarence404@gmail.com

VE TESTING

Our next VE testing is scheduled for Wednesday, January 19th 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 January 5th 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 program using the club's

new video projector is planned.

Feedback

At the December meeting, Army passed out a questionnaire to everyone present, gathering information on everyone's operating preferences, equipment, and interests. Of especial interest was finding out what kind of programs the majority of the members would like to see. The overwhelming choice was antennas and antenna modeling. We will do our best to present some programs in these areas, beginning with our first program of the year. Further feedback from our members is very welcome.

BASIC ANTENNAS**PART 26**

by

Thomas Atchison W5TV

Suppose we have an array consisting of two vertical antennas and we want to feed them so that the currents on the two vertical elements are equal and in phase. This is not a simple task; however, we will discuss one method here. In this discussion all references to the length of a transmission line will refer to the electrical length of the line. If any number of loads are connected to a common driving point through transmission lines of equal impedance and of length $\lambda/4$ then the currents in the loads will be forced to be equal and in phase, regardless of the load impedances. (Fig. 1)

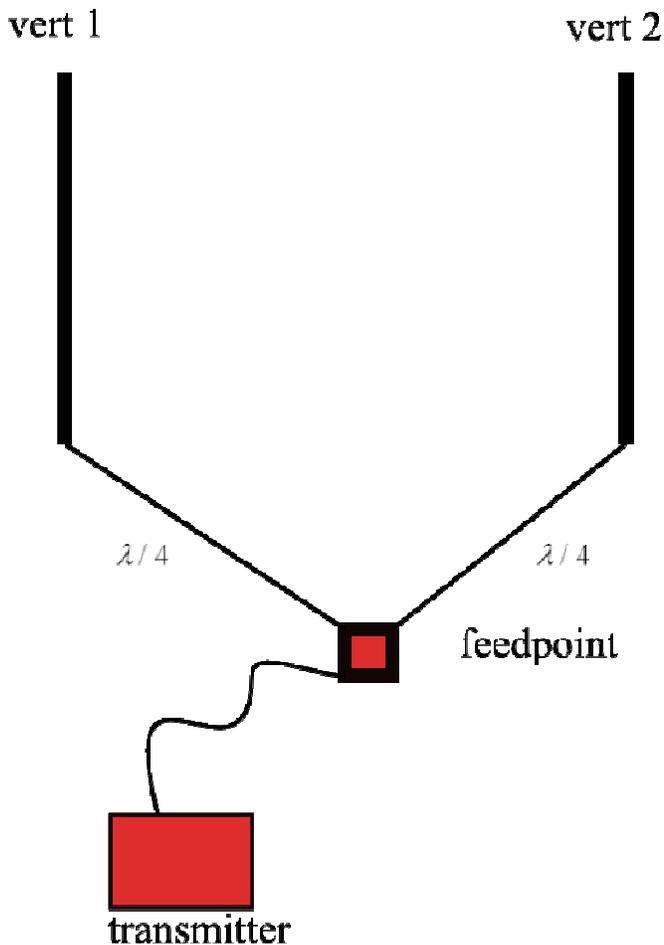


Fig. 1

If we need to change the phasing so the currents in the two vertical elements have the same magnitude but have a phase shift of 180 degrees then we can use a property of transmission lines of length $\lambda/2$. That is, if we have a transmission line of length $\lambda/2$, then the phase of the current out differs from the phase of the current in by 180 degrees.

Now suppose we want to feed the vertical elements so that the currents are equal in magnitude but 180 degrees out of phase. In that case we use transmission lines of different length from the feedpoint to the vertical elements. That is, we use transmission lines with the same characteristic impedance but one is of length $\lambda/4$ and the other is of length $3\lambda/4$. Here we are taking advantage of the phase reversal of a transmission line of length $\lambda/2$. (Fig. 2)

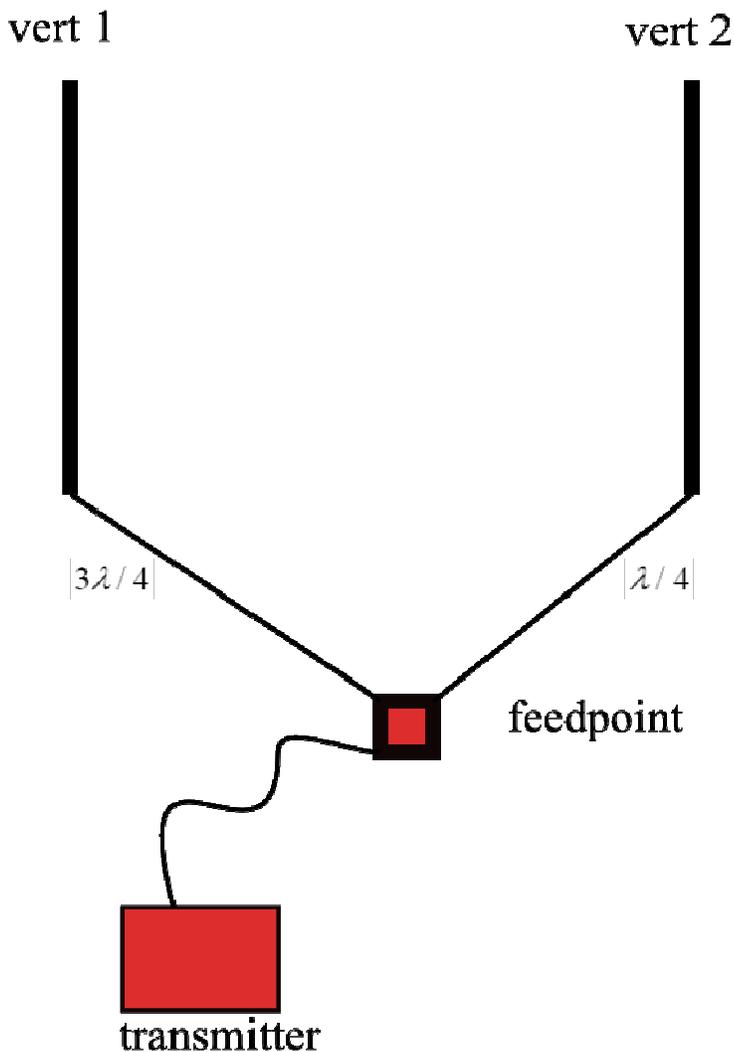


Fig. 2

If an array has two **identical** elements and the elements are fed in phase or 180 degrees out of phase, both elements will have the same feed-point impedance regardless of the transmission line length. In practice, the two elements in the array are not identical because of their proximity to surrounding trees, buildings, or other antennas and because of differing ground systems. If we use this current-forcing method of feed we can ignore the differing impedances of the elements.

In our next installment we will consider different spacing of the vertical elements and how that will change the radiation pattern.

***** ANTENNA RAISING INCIDENT *****

(EDITOR'S NOTE: This was found on a bulletin board in Fort Wayne, Ind. It is a ham's reply to a query from his insurance company.)

"I'm writing in response to your request for additional information for Block Number 3 of the Accident Reporting Form. I put "poor planning" as the cause for my accident. You said in your letter I should explain more fully, and I trust the following details will be sufficient."

"I am an amateur radio operator and on the day of the accident, I was working alone on the top section of my new 80' tower. When I had completed my work I discovered that I had, over the course of several trips up the tower, brought up about 300 lbs. of tools and hardware. Rather than carry the now un-needed tools and materials down by hand, I decided to lower the items down in a small barrel by using a pulley, which fortunately was attached to the gin pole at the top of the tower.

"Securing the rope at ground level, I went to the top of the tower and loaded the tools and materials into the barrel. I went back to the ground and untied the rope, holding it tightly to insure a slow descent of the 300 lbs of tools. You will note in Block Number 11 of the Accident Reporting Form that I weigh only 155 lbs."

"Due to my surprise at being jerked off the ground so suddenly, I lost my presence of mind and forgot to let go of the rope. Needless to say, I proceeded at a rather rapid rate of speed up the side of the tower. In the vicinity of the 40' level, I met the barrel coming down; this explains my fractured skull and broken collarbone. Slowed only slightly, I continued my rapid ascent, not stopping until the fingers of my right hand were two knuckles deep into the pulley."

"Fortunately, by this time, I had regained my presence of mind and was able to hold on to the rope in spite of the pain. At approximately the same time, however, the barrel of tools hit the ground and the bottom fell out of the barrel. Devoid of the weight of the tools, the barrel now weighed approximately 20 lbs. I refer you again to my weight in Block Number 11. As you might imagine, I began a rapid descent down the side of the tower. In the vicinity of the 40' level, I met the barrel coming up; this accounts for the two fractured ankles and the lacerations on my legs and lower body."

"The encounter with the barrel slowed me enough to lessen my injuries when I fell on to the pile of tools, and fortunately only 3 vertebrae were cracked. I'm sorry to report, however, that as I lay there on the tools, in pain, unable to stand, and watching the empty barrel 80' above me, I again lost my presence of mind. I let go of the rope."

