

Nacogdoches Amateur Radio Club

2017 CLUB OFFICERS

Pres: John Cechin - W5FWR

Vice Pres: RM Blake - K5AGE

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 and having fun.



NOVEMBER MINUTES

The November meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled on November 1st. **President John W5FWR** opened the meeting at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. Fourteen members and one guest were present. Each person present introduced them self. Minutes of the previous meeting were approved as published. The Treasurer's report was read.

The Nominating Committee comprised of Army AE5P,

Tom W5TV and Ralph WD5RAH presented their recommended slate of candidates for 2018 Club officers. The slate included RM K5AGE for President, Jack KG5POU for Vice President, and Army AE5P for Secretary/Treasurer.

After asking for nominations from the floor, the Committee's recommended slate were accepted and voted by acclamation. The new officers will be installed at the December meeting.

Discussion held on the Christmas Party in December. We will continue our practice of holding the party in conjunction with our regularly scheduled December meeting, but starting an hour earlier than normal to accommodate a light pot

luck meal followed by our White Elephant Auction.

The Shuttle Columbia Special Event (K5C) will be held the first Saturday in February (2/3/2018) and the San Jacinto Day Special Event (K5T) on April 21, 2018. The special callsigns have been issued and the Special Events registered with ARRL to appear in QST.

A special "Interop Training Exercise" is scheduled for the weekend of November 4-5. Details have been published on Hamlist and other outlets.

Meeting closed at 7:30 p.m.

Show and Tell:

RM K5AGE showed off a dual band (2M/70cM) J-Pole antenna from KI5LR in Lufkin. Gary is selling these for \$40 with a \$10 discount offered to hams over 65. This is a very good looking antenna that has gotten excellent reviews.

MY 2 CENTS FOX WILLY ROGER

DECEMBER 2017

DECEMBER 2017, Mark this date on your calendars. This is the date that FOX WILLY ROGER closes my nine years as a club officer of the N.A.R.C. I would also like to take this opportunity to thank the members of this club for allowing me to serve, and also to be in the presence of a fine group of folks, thank you.

The Christmas party is with us once again, the time that many friends get together, the YL's on their arms and smiles on the faces of all, a time for all to enjoy good company, good food, and good fun, all this for only two bits.

QUESTION:

How come some fruits and veggies have thick skins and others have thin ones?

Why is sand glued to cardboard called Emery Boards?

Why are most gardens planted in straight rows, why not in circles or wiggles?

The word tree has straddled down for a long winter's nap.

REMEMBER:

Remember store bought un-sliced bread?

Remember when spark plugs and oil were \$0.10?

Remember when the service stations had attendants?

WILL ROGERS:

Good judgment comes from experience, and a lot of that comes from bad judgment.

If you're ridin' ahead of the herd, take a look back every now and then to make sure it's still there.

Lettin' the cat outta the bag is a whole lot easier'n puttin' it back.

After eating an entire bull, a mountain lion felt so good he started roaring. He kept it up until a hunter came along and shot him. The moral: When you're full of bull, keep your mouth shut.

THE CRAZY CAT GUY:

Another cat disappeared this week, one of the grays. Now there seems to be anywhere from nine to a dozen cats that show up at meal time. The buzzards have moved on for now, I hope forever, but I still check the tower a few times a day, just in case.

In the last newsletter I introduced the latest addition to this feline funny farm that I'm calling chapter 13, the bringing upon yet another, her name, this week, Sweet Pea. The game plan is to get her old enough and put her outside with what's left of the pride.

Sweet Pea must be about three weeks old, your guess is good as mine on this one, and doesn't care

one bit for kitten food, she could have told me all this before I purchased that food. I wonder how it tastes. SP is a joy to watch grow up. SP is still too small to jump on to anything taller than a few inches, she has figured out how to climb and has learned it well, the only thing is, climbing is a one way trip, up only, as yet. SP follows me all around like a puppy. All SP wants is company, she will climb my leg to play a little and sleep a lot. So this NL is being prepared with one hand. Bed time comes and she follows me to the bedroom and settles into one of my house slippers, to sleep the night away.

Do you think she saw Cinderella?

**DOGS HAVE MASTERS
CATS HAVE SERVANTS**

**"THOUSANDS OF
YEARS AGO CATS
WERE WORSHIPED
AS GODS
THEY HAVE NEVER
FORGOTTEN"**

Space for rent, contact W5FWR for information.

**LIVE WELL, LAUGH
OFTEN, LOVE
MUCH!!!**

**BE THE KIND OF
WOMAN/MAN THAT
WHEN YOUR FEET HIT
THE GROUND EACH
MORNING THE DEVIL
SAYS, "OH CRAP,
THEY'RE UP!"**

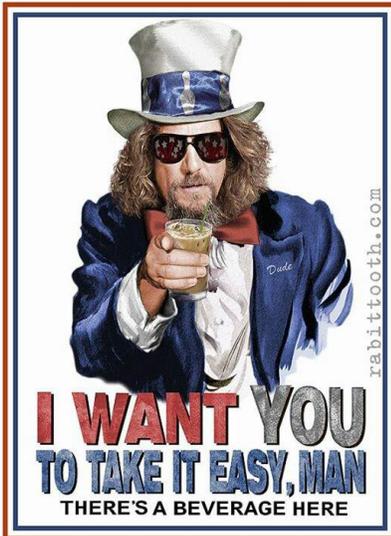
Let me know what you think, but only if it's positive.

**KEEP YOUR POWER DRY
AND YOUR HEAD BELOW
THE HORIZON**

HAPPY TRAILS

John Cechin W5FWR
Carrots4ever2@gmail.com

FROM THE VICE PRESIDENT



Ham Radio's Excitement is Poorly Translated to Words.

The excitement of ham radio happens all over the place, and I'm not just talking about the location of said excitement. I am talking about every minutia we all love to get into.

I have been just as excited about an amazing conversation on SSB as I have had about finding the right "bleeping" drivers to bring some digital Frankenstein piece of equipment to life. Or, for a more tactile sensation, as

satisfying as a power pole crimped just, right. And I know you have too in your own way, especially the longer you have been a ham.

When I listen to the stories of my fellow club members, I feel like I am right there with them, exactly like a successful writer makes you feel THERE with written word.

That kind of talent, either in spoken word, as my fellow members seem to have, or in any another way, sharing a ham memory is one big way we can perpetuate this hobby, amaze another, or boor them to death.

I believe in the community of amateur radio. I believe in people. And I generally believe in peoples' stories, as too much skepticism can cripple a man, just as bad as a bum knee.

73 de RM Blake K5AGE
k5age@fastmail.com

NOTES FROM OUR EC

Hurricane season is over. I won't go over the score card for this season. All that data is available on the NOAA Wikipedia site. Harvey came and went. We weren't terribly inconvenienced by him.

Hugh Stegman, a writer for SPECTRUM MONITOR magazine, made some observations in the October and November issues concerning Harvey, Irma and Marie. Ham radio was not very effective, mainly because everyone thought their pretty cell phones would take care of it. (Haven't we heard this before?) When ham radio was used, voice was the mainstay. Problem with voice as a few of our CW and data friends remind us is you may have to repeat the information a number of times to get it across. The ARRL mobilized a few hams to assist Puerto Rico. Old fashioned, doubtful? DOD is weaving HF back into their plans. Sexy, no it

is not. Even though HF radio takes less infrastructure to work, you have to bring more equipment to the table. Radio, antenna, computer... I'll let you fill in the rest of the blanks.

I'm going to steal a phrase from a book and movie series, "Winter is coming." And it is not the most predictable. Here in East Texas, a light dusting of snow will shut the town down. Is your HF station ready, are your antennas ready? We won't have many days left before you won't be able to work on them.

Winter weather besides cold and damp can also bring that dreaded word-tornadoes. Yep, winter can generate some very nasty stuff. I looked at some Weather Service historical data from 1991 - 2010. Every month had tornadoes with largest numbers in the spring and early summer, however more than 50 tornadoes noted in December, January and February. It is something to see

lightning in a snow storm on the horizon in December. It's something to think about.

How are you going to spend your evenings on 160, 80, 60 or 40 meters this winter? Has anyone applied to the Utility Council to operate on 2200m (135 KHz) or 620m (472 KHz)? What do you think it will take to get on the air besides lots more copper for an antenna and a lot of acreage? By the way has any one worked 60m?

It is almost time to call 2017 closed. I hope everyone enjoys the Christmas gathering. Don't spend all of your money on one item in the auction. Merry Christmas and best Greetings of the season, may your holidays be blessed.

73 de John Chapman
KC5MIB
jlchapman2@juno.com

VE TESTING

Our next VE testing is scheduled for **Wednesday December 20 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

TWO METER CLUB NETS

Remember to join us each week for the two 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.

NEXT MEETING

The next meeting will be **Wednesday December 6th at 6:00 p.m.** in the Parish Hall of Christ Episcopal Church. Remember this is not only our December club meeting, but also our Christmas Party with pot luck supper and White Elephant Auction.

Note the earlier than normal starting time of 6:00 to accommodate eating. We will have a very short business meeting followed by our annual White Elephant Auction to benefit the club. The eating is pot luck, so bring a light dish, dessert or appetizer to share if you can. The club will provide paper goods and drinks.

This meeting is open to family and friends. Your spouse and kids are most welcome.

VE TEST RESULTS

One applicant this past month, and one new ham. Please welcome Chance Moore, now KG5WDO. Chance lives up Cushing way and will hopefully be checking into our 2M nets and attending our meetings. Please make him feel at home.

Remember, we hold VE testing sessions the third Wednesday of each and every month. Walk-ins are welcome.

UPCOMING EVENTS OF NOTE

Mark your calendars for the following events coming up in the next few months. Full information on these events and much more can be found at <http://www.hornucopia.com/contestcal/contestcal.html>

ARRL 160M Contest

Dec 1 - 3

<http://www.arrl.org/160-meter>

ARRL 10M Contest

Dec 9 - 10

<http://www.arrl.org/10-meter>

2018

ARRL RTTY Roundup

Jan 6, 2018

<http://www.arrl.org/rtty-roundup>

North American QSO Party, CW

Jan 13, 2018

<http://www.ncjweb.com/NAQP-Rules.pdf>

North American QSO Party, SSB

Jan 20, 2018

<http://www.ncjweb.com/NAQP-Rules.pdf>

ARRL VHF Contest

Jan 20-21, 2018

<http://www.arrl.org/january-vhf>

SHUTTLE COLUMBIA SPECIAL EVENT

Feb 3, 2018

CQ WW WPX RTTY

Feb 10-11, 2018

<http://www.cqwprrtty.com/rules.htm>

ARRL INTL DX - CW

Feb 17-18, 2018

<http://www.arrl.org/arrl-dx>

North American QSO Party, RTTY

Feb 24-25, 2018

<http://www.ncjweb.com/NAQP-Rules.pdf>

ARRL INTL DX - SSB

Mar 3-4, 2018

<http://www.arrl.org/arrl-dx>

CQ WW WPX - RTTY

Mar 24-25, 2018

<http://www.cqwp.com/rules.htm>

SAN JACINTO DAY SPECIAL EVENT

Apr 21-22, 2018

Electronic Circuit Simulators

by

Thomas Atchison, W5TV

We have been discussing AC circuits over the past few months. More recently I have become interested in simulation programs for electronics. As computers have increased in speed we find that they can solve mathematical equation almost in real time, therefore, electrical circuits can be simulated with good accuracy. This permits us to determine how a circuit will perform without actually building the physical circuit. I understand that many laboratories now use simulation programs to perfect their circuits before they go into production.

One of the more popular simulation programs in the beginning was called SPICE. SPICE stands for Simulation Program with Integrated Circuit Emphasis. It is a general-purpose open source analog electronic circuit simulator. It is used to check the integrity of circuit designs and to predict circuit behavior. Circuit simulation programs, of which SPICE is the most prominent, take a text netlist describing the circuit elements and their connections, and translate this description into equations to be solved. SPICE was developed at the Electronics Research Laboratory of the University of California, Berkeley by Laurence Nagel. The first simulation, SPICE 1, was presented at a conference in 1973. It was originally written in FORTRAN. SPICE 2 was presented in 1975 and was a better version which became very popular. The last FORTRAN version was 2G.6 in 1983.

SPICE 3 was developed by Thomas Quarles in 1989. It was written in C, uses the same netlist syntax as the previous versions, and added X Window System plotting. The source code for SPICE 3 is currently covered by the BSD license.

Today a few IC manufacturers have groups continuing to develop SPICE-based circuit simulation programs. Texas Instruments makes available a freeware Windows version of software called TINA-TI. It includes their version of SPICE and comes preloaded with models for the company's integrated circuits. TINA is an abbreviation for Toolkit for Interactive Network Aalysis. There is a general version of TINA that was created and developed by DesignSoft. Their first Windows version was released in 1993. As far as I know TINA is currently at version 10 released in 2013. The TINA-TI version is a free limited version of TINA for the support of TI integrated circuits.

SPICE became popular because it contained the analyses and models needed to design integrated circuits of the time, and was robust enough and fast enough to be practical to use. SPICE 2 contained the following analyses:

1. AC analysis
2. DC analysis
3. DC transfer curve analysis
4. Noise analysis
5. Transfer function analysis
6. Transient analysis.

Earlier I mentioned the word **netlist**. In electronic design, a netlist is a description of the connectivity of an electronic circuit. In its simplest form, a netlist consists of a list of the electronic components in a circuit and a list of the nodes they are connected to. A network (net) is a collection of two or more interconnected components. Most netlists refer to descriptions of the parts or devices used. Each time a part is used in a netlist it is called an 'instance'. An 'instance' can be anything from a MOSFET transistor or a bipolar transistor to a resistor, capacitor, or an integrated circuit chip. Networks (nets) are the 'wires' that connect things together in the circuit.

A different simulator is Gnucap which stands for Gnu Circuit Analysis Package. It is a general purpose circuit simulator. It is not based on SPICE, but some of the models have been derived from the Berkeley models. The engine for this simulator is designed to do true mixed-mode simulation, i.e. combinations of analogue and digital circuits. You can find more information at <http://www.gnu.org/software/gnucap/gnucap.html>.

Electric VLSI Design System is a flexible and powerful system that can simulate many different types of circuit designs. The user interface is quite sophisticated and runs on all popular workstations (Windows, Macintosh, and UNIX). It can be found at <http://Staticfreesoft.com/electric.html>.

Another circuit simulator for Windows can be obtained at the following URL: <http://www.softpedia.com/get/Science-CAD/Circuit-Simulator.shtml>. This is a Java-based simulator that is interactive. It makes use of animations and colors to help visualize the many elements in a circuit. It comes with a pre-existing library of circuit demonstrations so all you have to do is select which one you want to run. The simulations are grouped in various categories such as 'Basics', 'Passive Filters', 'Diodes', 'Transistors', etc. You can also add elements to the prepackaged circuits so they can be customized to suit your needs. To use this simulator you will need a browser that has Javascript enabled. I have used Google Chrome successfully with this package.

If you have an interest in pursuing circuit simulation I hope this brief note will help you get started. **Merry Christmas.**