November 2017 Volume 11-2017

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.

OCTOBER MINUTES

The October meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled on October 4th. **President John W5FWR** opened the meeting at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. Eleven members were present. Each person present introduced them self. Minutes of the previous meeting were approved as published. The Treasurer's report was read.

A Nominating Committee comprised of Army AE5P, Tom W5TV and Ralph WD5RAH was appointed to develop of list of qualified candidates for club officers next year. The committee will report their slate of candidates at the November meeting, followed by the election of officers.

Discussion held on the Christmas Party in December. It was decided to 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 two Special Event Stations that NARC hosted this year, the Shuttle Columbia Special Event the first Saturday in February (K5C) and the San Jacinto Day Special

Event on April 21, will be held again in 2018. More details to follow.

The Texas QSO Party was held the weekend of September 23. **Army AE5P** operated his station using the club call W5NAC using both SSB and CW on 40 meters.

Meeting closed at 7:44 p.m.

Show and Tell:
RM K5AGE showed off a new Bluetooth terminal node controller (TNC). Very slick for mobile operations using APRS.

Program:
Army AE5P presented a program on Power Pole connectors; what they are, what sizes they come in, how to make connections using them, tools available to facilitate making the connections, and how to avoid some of the more common problems with them.

MY 2 CENTS

FOX WILLY ROGER

NOVEMBER 2017

NOVEMBER 2017, as the leader of the nominating committing has conveyed to me the slate of club officers to vote on at the meeting. It looks like my pleas have gotten to the members. December is when I will pass the gavel to the next president.

December is just around the corner with the Christmas pot luck and White Elephant Auction, so bring lots of money and take home many goodies that you can't live without. Come one come all.

Don't forget to come dressed as your favorite Reindeer. AE5P has a special surprise for the winner.

I am using bigger words in this column in hopes that everyone can keep up.

Question:
How does Hamilton Burger keep his job, he hasn't won a case over Perry Mason from the get go?

Why is it called Labor Day when most people don't go to work?

Why are rotating storms called hurricanes no matter what the name that was given to it, shouldn't the male ones be classified as himicanes?

From a friend

What the HELL has happened to this Country?

A town not too far from here had in their town crest a rebel flag showing that at one time the rebel flag was part of that town's history. Today that flag symbol is not to be found on the town's crest. Today many towns have done much the same thing, now all across this nation, taking down flags destroying public statues of that same time frame.

What is going on with you people? All I can think of is that Hitler did the same thing, he destroyed flags, monuments, and even

books and music that didn't suit him, is that what's happening here and now?

People don't be jerks, to use a nice term, destroying flags and monuments to destroy the past doesn't work, it didn't work for Hitler and it won't work now, the past is the past people. Someone once said "more or less" if you don't learn from the past, you would surly relive it. Wake up and smell the roses, the past has gone, done for, so why is all this crap going on?

The past is the past; it won't hurt you unless you let it.

The past is the past, history, you won't change history, good or bad, take what you want from it and move on with your life, destroying will not change anything.

Why doesn't a town secure these monuments and display them along a street or pathway to show the rest of the country that this town is not afraid of the past history.

I heard a school, a place of learning, has decided to change the name of the school. The school was named after a Civil War general, and now the school is to be renamed after the 44th president of the USA, why didn't the students rename the school after a man that did much for everyone, George Washington Carver, a man that accomplished much to the people, all the people of earth. Read a book on his life sometimes.

Jack Taldi
November 2017

The word tree is wiped out after that one.

REMEMBER:

Remember RFD?

Remember when you could work on your car without a computer?

Remember Lil Abner Jeff?

WILL ROGERS:

Never miss a chance to shut up.

Always drink upstream from the herd.

If you find yourself in a hole, stop digging.

The quickest way to double your money is to fold it and put it back into your pocket.

THE CRAZY CAT GUY:

The cooler weather is with us at last and TB has taken to my bed most of the day. She makes a nest, curled up perfects her napping.

Some hams have red-tailed hawks at their shack, and others have buzzards, that right, you heard me correctly, buzzards. About a week ago, a pair of buzzards was resting themselves on my antenna that's located at the 85' level of my tower, the pair was with me for a few weeks, just sitting and watching the cats.

About mid-month, on a Wednesday, during treatment time, about half my cats disappeared, most of the adults and a few kittens. One of the adults was nursing a litter at the time of the catnapping, I don't know if it was Animal control or the man down the block, he came over and told me that I had too many cats. Saturday, in the rain, a kitten appeared on my doorstep, what was I to do, close the door on it?

Does this mean that now that I have half the pride, my column can be half the size?

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!!!

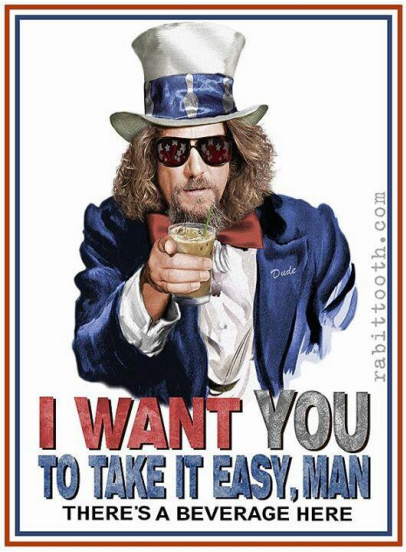
Let me know what you think, but only if it's positive.

KEEP YOUR POWER DRY AND YOUR HEAD BELOW THE HORIZON

HAPPY TRAILS

John Cechin W5FWR
Carrots4ever2@gmail.com

FROM THE VICE PRESIDENT



Propagation with JT65, JT9, and FT8

I have been on the JT65 bandwagon for a few months now, but I am just now starting to understand how and why it works so well. One reason I knew right from the beginning was because of the ability to "hear" signals well below the noise.

Thanks to the QST article in the October 2017 edition, I have learned a bit more about propagation with these modes. The article does a great job of explaining how you can

apply that advantage to a neat propagation mode: "Above-the-MUF" propagation.

A readable signal is still present even when the MUF is below the operating frequency. I will summarize how these modes allow you to capitalize on this.

Propagation does not abruptly cut off when the MUF is lower than the operating frequency. On the QST provided predicted signal strength graph (from the October 2017 article), where the X axis is the smoothed sunspot number, and the Y axis is the SNR, there is a gradual radius of signal loss/strength as the X axis goes from 0 sunspots (25 in this graph to show better resolution) to about 100 sunspots. (*You can find this graph on the last page of this newsletter*)

This graph represents "Above-the-MUF" signals and how we can extend our ability to make contacts when working above-the-MUF". The 10-meter band might be "dead" if you look at the MUF, but in reality, it is still alive if we have the means to hear deeper.

My next goal is to make a contact on a frequency "Above-the-MUF" and prove this works. Look to pages 45-47 in the October 2017 QST for a thorough explanation.

73 de RM Blake K5AGE
k5age@fastmail.com

NOTES FROM OUR EC

If you have tuned into the Monday or Thursday 8:00 pm nets you have heard the phrase, "The net will now standby for anyone having EMERGENCY, PRIORITY, or TIME VALUED traffic, please call net control." We hear it almost every time, but the question has come up just what is Emergency, Priority or Time Valued traffic.

The dictionary definitions (thank you Oxford on-line) are straight forward.

EMERGENCY: a serious, unexpected and often dangerous situation requiring immediate action. Please note the word immediate. I might also add possibly resulting in injury, loss of life or significant damage.

PRIORITY: the fact or condition of being regarded or treated as more important than others.

TIME VALUED: the value of something with regards to time. An example: a short notice call to support a community event, a request for examiners for the following night. Notice they all fall under some time constraint. What do you do? Handle it right then, don't put it off. Keep your head about you and work through it.

The 2017 hurricane season isn't finished yet; we have to wait until Nov 30. I'm writing this Oct 25th.

According to the National Hurricane Center, there is a small disturbance in the Western Caribbean close to Nicaragua that isn't expected to form up. Let's keep our fingers crossed and hope that we come out of the season unscathed, knock on wood.

We've had some changes to our ARES/RACES Net Control Station roster. Welcome aboard, **Jack KG5POU, RM K5AGE** and **Ralph N6RH**. You may remember him as WD5RAH. That's the beauty of the Vanity Call Sign program.

These are our current operators and the days they are working for both ARES/RACES and Skywarn:

ARES/RACES
1st Monday, Jack KG5POU
2nd Monday, Robert KD5FEE
3rd Monday, RM K5AGE
4th Monday, Dr Tom W5TV
5th Monday, Ralph N6RH

SKYWARN
1st Thursday, Ralph N6RH
2nd Thursday, Army AE5P
3rd Thursday, Rusty KD5GEN
4th Thursday, Dr. Tom W5TV
5th Thursday, Army AE5P

Please take some time out of your schedule to check into the nets, Mondays and Thursdays at 8:00 PM local.

73 de John Chapman KC5MIB
jlchapman2@juno.com

VE TESTING

Our next VE testing is scheduled for **Wednesday November 15 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 November 1st at 7:00 p.m.** in the Parish Hall of Christ Episcopal Church.

VE TEST RESULTS

We had two candidates present themselves for testing at our October exam session, both of

them from the Hemphill area. Both were successful in passing their exams for the Technician license and have received callsigns of KG5VNR and KG5VNS. Congratulations to both.

We were pleased to welcome a new Volunteer Examiner to our group at this session. Jack KG5POU has met the qualifications for VE and is now a part of our examination team. Welcome Jack.

NOTES FROM THE EDITOR

Looks like we might finally be getting some cooler temperatures, and many of us are happy to see it. This is a great time to be getting out and completing antenna projects that could not easily be finished in our hot summer weather.

Look over the Upcoming Events of Note on the next page. Many opportunities there to get on the air and improve your station and your operating skills. One simple little trick that can make a big difference in operating is improving your ability to get the other station's callsign the first time and not have to ask for repeats. A trick I learned from pilot friends was to say the other person's call out loud as soon as you hear it. Doesn't have to be on the air just so you say it out loud immediately. Amazing how well this can work. Give it a try.

Remember the club Christmas Party and White Elephant Auction on our regular meeting night in December, the 6th to be exact. We'll have a light pot luck supper with emphasis on desserts, followed by a very short meeting, and the auction. Because of the eating we'll start early at 6:00.

Three operating events next year that all club members should take special note of. First, on the weekend of January 20-21 is the ARRL VHF contest. Club members have had a lot of fun with these events in the past and we hope to do it again in January. We go out as a group, operating 50, 144, 222 and 432, all on FM. If you don't have all 4 bands, no problem, use what you bring. An HT can do it.

Second, the club sponsors two Special Events each year, the Shuttle Columbia Special Event on February 3rd using the special call K5C, and the San Jacinto Day Special Event using the special call K5T. Both callsigns have been approved for our use and application has been made for the special event listings in QST. You can operate either event from the AE5P station or from your home station, whichever you prefer.

Mark your calendars, check your gear, and let's get on the air.

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

CQ WW DX SSB
Oct 28 – 29
http://www.cqww.com/rules.htm

ARRL Sweepstakes CW
Nov 4 – 6
http://www.arrl.org/sweepstakes

ARRL Sweepstakes SSB
Nov 18 – 20
http://www.arrl.org/sweepstakes

CQ WW DX CW
Nov 25 – 26
http://www.cqww.com/rules.htm

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.cqwpxrtty.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.cqwpx.com/rules.htm

SAN JACINTO DAY SPECIAL EVENT
Apr 21-22, 2018

Alternating Current Circuits – Part 2

by
Thomas Atchison, W5TV

Now let's consider what happens to voltage and current if an alternating voltage is applied to a capacitor, C, as shown in Fig. 1.

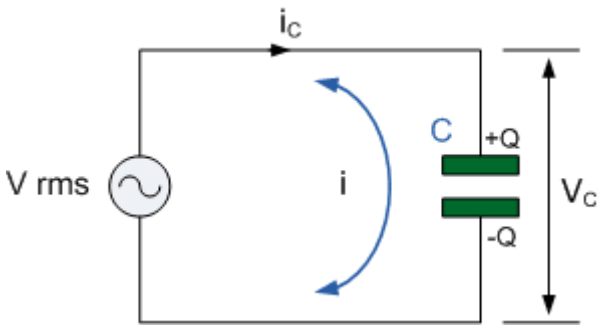


Fig. 1

When we apply an alternating voltage to a capacitor the voltage starts at zero and increases to its maximum value. A charge begins to build on the plates of the capacitor (+Q and –Q). As the charge builds on the negative plate this tries to prevent more electrons from moving onto the plate, consequently, the current decreases. When the voltage builds to its maximum value, the capacitor charges to the full voltage and the current stops.

Next the alternating voltage begins to decrease. The voltage across the capacitor is larger than the applied voltage so electrons begin to move off the negative plate. This changes the direction of current flow i.e. it is flowing in the opposite direction from the previous stage. As the applied voltage decreases to zero, the capacitor current increases as it drains the charge off the capacitor plates. This relationship between current and voltage is shown in Fig. 2.

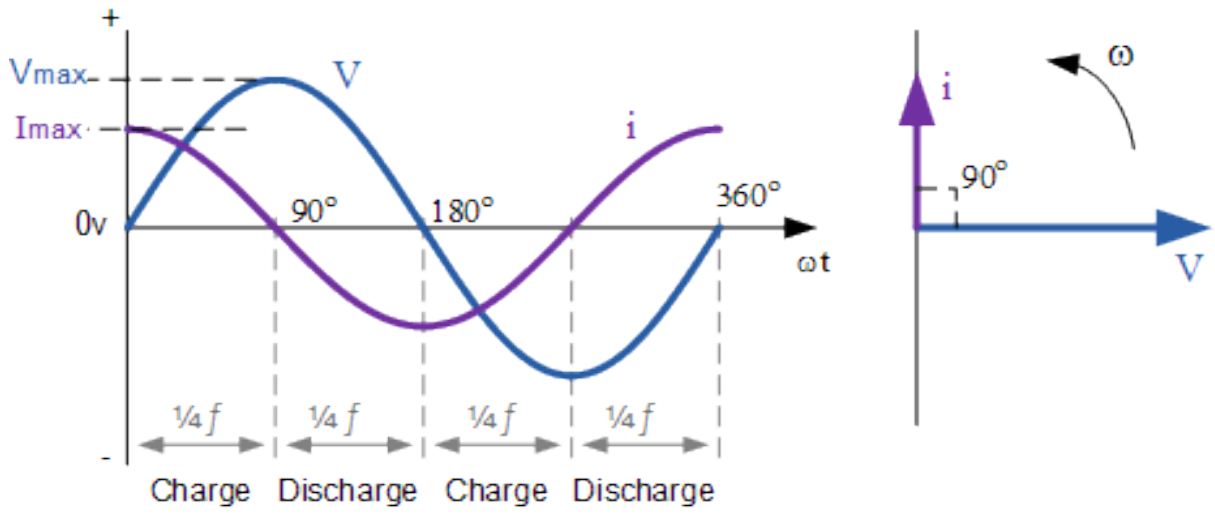
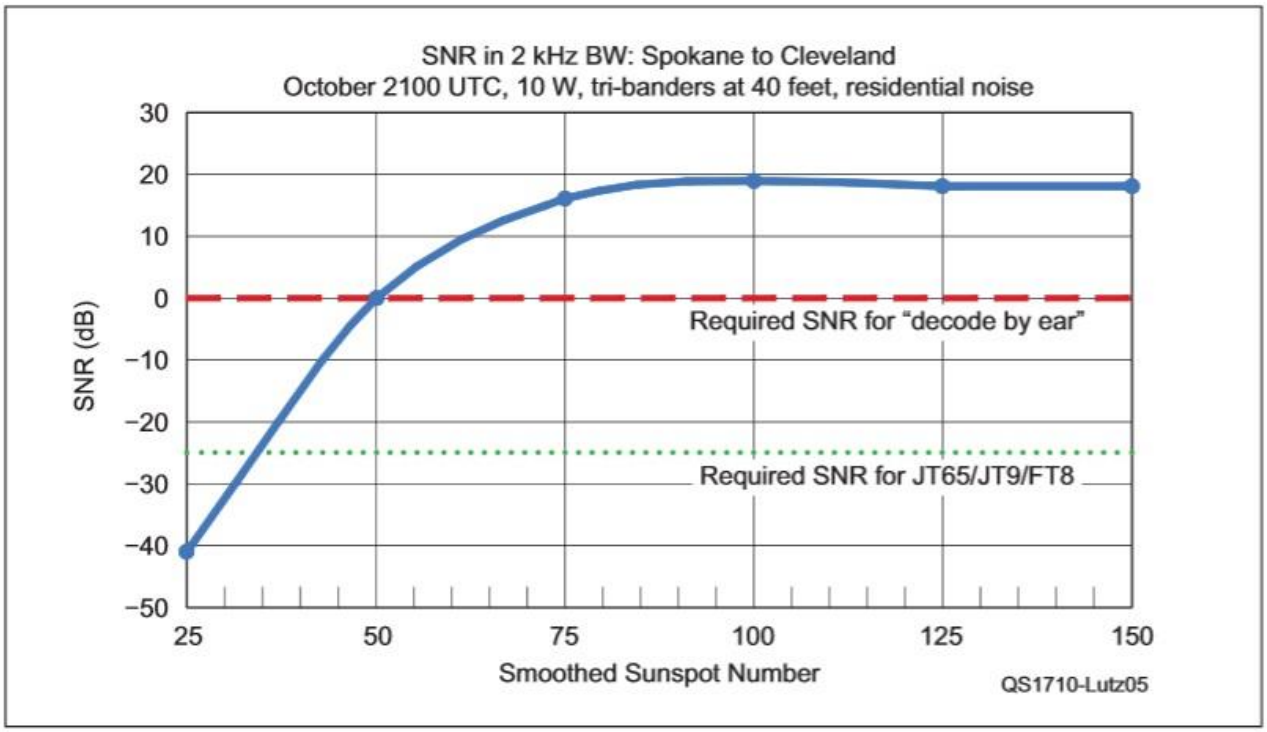


Fig. 2

What we have just discussed is shown in the left graph from 0 to 180°. Notice that the voltage now continues in the opposite polarity. As the voltage increases toward the negative peak, there is a large current to charge the capacitor. This current drops to zero when the voltage reaches its negative peak. Then the voltage begins to decrease toward zero and the current direction reverses. The current increases to its maximum value when the voltage reaches zero. This brings us back to the point where we started.

Notice that these waveforms are 90° out of phase. That is, the current starts at 0° at its maximum value when the voltage is zero. At 90° the current is at zero and the voltage is a maximum. At 180° the voltage is zero and the current is maximum of opposite polarity. At 270° the voltage is maximum negative polarity and the current is again zero. At 360° the voltage is back to zero and the current is a maximum like we started. In this case we say that the current leads the voltage by 90° or we may say that the voltage lags the current by 90°. The diagram on the right hand side of Fig. 2 is a representation of this phase difference.

We will use this information for later discussions concerning AC circuits.



Graph for Vice-President's column.