

# 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.



## SEPTEMBER MINUTES

The September meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled on September 6th. **President John W5FWR** opened the meeting at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. Ten members were present. Each person present introduced them self. Minutes of the previous meeting were approved as published. The Treasurer's report was read.

The ARRL September VHF contest is scheduled for the weekend of

September 8<sup>th</sup>. A poll of club members who regularly participate in the VHF contests found that everyone was already committed to other events that weekend. As a result, there will not be any roving by NARC in this contest.

**John W5FWR** has a birthday coming up September 21. Cash is always accepted in lieu of presents.

The Texas QSO Party is scheduled for the weekend of September 23. **Army AE5P** is planning to operate from his station using the club call W5NAC. Several other club members indicated they intended to operate in this event also.

**Army AE5P** reported on the status of the club's Winlink Gateway station on

the roof of the Fredonia Hotel. The equipment has been rebuilt and/or replaced and is back in full time service on 145.050 MHz. Army also reported on the status of the weather station on the 147.320 repeater. Thanks to assistance from **Andy KE5EXX**, the weather station is once again reporting the correct temperature.

Meeting closed at 7:53 p.m.

**Program:**

**Army AE5P** presented a program on the club's "Orange Box Radios" and how they can be used on VHF/UHF voice repeaters. Written instructions and frequency assignments were passed out at the meeting and can also be found on the club website at

<http://w5nac.com/about/repeaters/#OrangeBox>.

**MY 2 CENTS  
FOX WILLY ROGER**

**OCTOBER 2017**

OCTOBER 2017, now that the TXQSOP is history, and in the books as they say, I had forgotten how much fun can be had working radio. I hope to get in on some more fun soon. But now it's time to look to tomorrow for more fun. This month is the time a committee is appointed, unless someone jumps up and declares "I will do it, I will be an officer"; now all that we have to do is wait for the meeting next week. The only thing is that we have to wait for a month to find out who the lucky winner is. Remember that slackers can run also, if my memory serves me right, two slackers have already been officers, but this doesn't mean they can't run again.

I am using small words in this column; this is because this club has so many extras and some PhD's too.

Well FALL has arrived on the 22<sup>nd</sup>, how's all that cool weather feeling? Time to get out the snow chains and snow shoes also the warmer clothes, don't forget the snow shovels, have fun in all that cold white stuff, remember too, skiing down Powers street, instructions for this and other games can be found on the club's web site, have fun and be safe.

With fall comes Halloween, Thanksgiving and Christmas and deer season, and New Years, then we get to start all over again, contests, contests, and contestants, fun, fun, fun.

Question:

Why doesn't someone come up with white ants or soft shelled fleas?

Why are they called Jelly Beans, they are not filled with Jelly?

Why does the big toe grow on the inside of the foot, and the thumbs as well?

Why is the tube on the toilet paper roll bigger than the roll of toilet paper?

The word tree is slow but sure, as long as you don't push her.

**REMEMBER:**

Remember in the old TV/movies always had a VW as a bystander or a crash subject?

Remember a cup of coffee for 5 cents?

Remember Mutt and Jeff?

**WILL ROGERS:**

Never squat with your spurs on.

Never slap a man who's chewing tobacco

Never kick a cow chip on a hot day.

There are two theories to arguing with a woman. Neither works.

**THE CRAZY CAT GUY:**

The HCs "house cats" have finely mastered the hot season; I wonder how long it will take to adjust to the cooler weather?

The YCs "yard cats" have learned to stand up and eat out of the spoon I use to dish out the food. A few of them have perfected a sort of jumping game, when a piece of food is falling to the ground, one of the YCs will jump up and either catch or knock the food to a spot away from the rest of the cats. One cat has used the wall to chase after and grab the food.

Most of them have mastered eating from the spoon; in fact some of the cats will stand on the other cats to get closer to the spoon.

Gray Cloud has taken to go on walk-about, short ones, but I hope he finds a better home, that would be one down and twenty three to go, if any one requires a feline, all you have to do is catch them.

Like the Brothers Cloud, the kittens are alike in coloring; the only difference is the color on the ears is darker on one than the other one.

Like the HCs, the YCs have adjusted to the hot season, eat, eat, and eat, sleep and s.... play seems to been removed from the menu.

I did find a lot of feathers in the front yard that means that one or more of them have learned to hunt, do they have classes for the art of hunting, makes you wonder?

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

Spaces 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

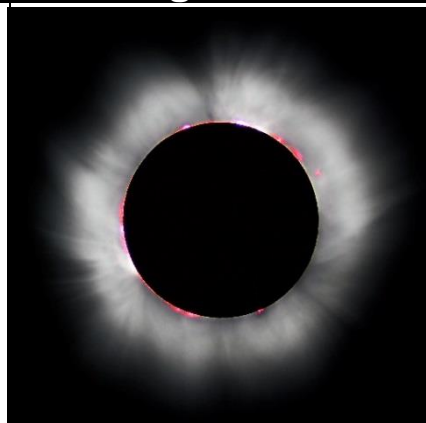
John Cechin W5FWR  
[Carrots4ever2@gmail.com](mailto:Carrots4ever2@gmail.com)

## FROM THE VICE PRESIDENT



Sometimes life gets stressful. We have made major changes at the office with both our software and also our team. I am quite sure this is the hardest I have worked in my life because of the issues. Little time for radio fun. I did get to walk outside for the Eclipse. I pondered what effect it had on HF propagation. See my attached article below from the ARRL September Newsletter.

**More Professional and  
Citizen Research  
Suggests Eclipse Briefly  
Affected HF Propagation**



Both professional and citizen scientists conducted formal and informal investigations into the effect of the August 21 solar eclipse on HF radio propagation. Nathaniel Frissell, W2NAF, of [HamSCI](#), has said it will take some time to get a more scientific analysis of data that was compiled during the Solar Eclipse QSO Party. He and others are investigating whether the sudden absence of sunlight during the eclipse -- and especially of solar ultra-violet and x-rays -- would briefly change the properties of the upper atmosphere.

Professional ionospheric researcher Dr. Phil Erickson, W1PJE, head of the Atmospheric Sciences Group at [MIT's Haystack Observatory](#), said he can

say categorically that there was a definite, large, and measurable effect in the ionosphere from the eclipse.

"We saw a 2X reduction in electron density during the eclipse for at least 45 minutes to 1 hour," Erickson told ARRL. "This reduction had direct impacts on HF propagation along the bottom side."

Erickson said many models and observations exist from previous eclipses that demonstrate these effects. Erickson said MIT researchers used a "megawatt-class Thomson scatter radar," which can directly measure the plasma state of the ionosphere, including electron density, across a huge area in the eastern US.

73 de RM Blake K5AGE  
[k5age@fastmail.com](mailto:k5age@fastmail.com)

## NOTES FROM OUR EC

September has been a very rough month not so much locally as nationally and internationally. Hurricanes Harvey, Irma and Maria all brought destruction and loss of life. Puerto Rico took huge hits. Devastation may not be a strong enough word. Many are being deployed.

I have an acquaintance who is going to work in a mobile water plant.

The American Red Cross has asked for ham radio operators to deploy for 3 weeks. The requirements are very specific as they are also asking to double as shelter volunteers.

My friend has the luxury of being issued a deployment kit. He is required to bring a personal bag and knowing him, I expect he has a "Houdini" bag with some of his magic tricks.

Could you deploy? What could you deploy with? A V/UHF station including

antenna, a complete HF station, a laptop with WinLink or FLdigi, basic tools? What's in your P (personal) bag, bug out bag, AWOL bag? Do you have a bag of magic tricks with extra connectors, repair parts, interface cables etc.

Here is a short list of items. It's not all inclusive as it would take a couple of pages considering the format of our newsletter:

- Kantronics KPC-3 Plus
- Yaesu FT-8800
- DB9 to DB25 serial cable
- Astron 18 amp switching power supply model SS-18
- Power cord for Astron power supply
- 12 feet red/black zip cord (12 AWG)
- 20 feet fused red black Zip cord (14 AWG) terminated with power poles
- 2 feet red black Zip cord (10 AWG) terminated with power poles and alligator clips
- 100 feet parachute cord also called 550 cord
- 1 pair Panasonic headphones terminated in 1/8 inch stereo plug

6 Foot power strip  
USB to 2-port serial  
converter

Obviously there are more items but you get the idea. Both Andy and Robert have put together good kits, you can talk to them.

A last little bit on the Puerto Rico situation. If you get any questions concerning health and welfare direct them to <https://safeandwell.communifyos.org/cms/index.php>

Even though there are hams in country they will not have all the resources to help search. The above website will be the best bet.

73 de John Chapman  
KC5MIB  
[jlchapman2@juno.com](mailto:jlchapman2@juno.com)

## VE TESTING

Our next VE testing is scheduled for **Wednesday October 18 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](mailto: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 October 4th at 7:00 p.m.** in the

Parish Hall of Christ Episcopal Church.

## VE TEST RESULTS

We did not have anyone present themselves for testing this month, but the VE team was out in force as always, and good discussions were had on a variety of topics.

## TEXAS QSO PARTY

Definitely one of the most fun operating events of the year, the Texas QSO Party was held the weekend of September 23 - 24. Several club members, including Army AE5P, Tom W5TV, Ralph WD5RAH, John W5FWR and Roger KOYY participated in the event. One of the highlights reported by Army was working former club member Tommy N5DUX from his QRP station on the beach in Galveston. Tommy sent the following report on his efforts:

This past weekend, Texas QSO Party was a lot of fun - as it usually is! It's easily my favorite operating event.

Last Spring I moved down to Galveston Island. The new accommodations don't exactly allow for a sizable HF setup at home so I had to get a little creative this year. The solution was a kite antenna! It's essentially just a kite-supported 40m end-fed halfwave, but being so close to salt water... it performs really well.

I wasn't sure if I'd have power available from the operating position at Dellanera park across from where I live, so I opted to go QRP this year and use my KX2 radio. For Day 1 I ran battery operated which limited my radio to 5W output (10W on SSB is still considered QRP). I still worked some 20 counties with that setup -- and I wasn't even on the air most of the day!

For Day 2 I was able to use a power supply and get the "full" 10W out.

Participation drops off significantly on Day 2 with pretty much all the same players you heard the day before plus rovers moving from county to county.

The antenna setup is basically a parafoil kite with a 40m EFHW hung from it. The wind did a great job except for one period during the afternoon of Day 1 when the kite did come down. :( The wind was a little light on Saturday and it came down --- I did still manage to work a QSO with my antenna laying on the ground! Sunday, the wind was better and it stayed up *no problem* with 10-15mph winds coming off the water.

Both days it was actually very enjoyable in the shade with a nice breeze. It's possible I was more comfortable this year than in years past sitting in my old shack with an A/C going!

At any rate, here are pictures of the setup:  
<https://imgur.com/a/WptKg>

It was great hearing and working Army as W5NAC both days!

73,  
Tommy, N5DUX

## 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>



## Alternating Current Circuits - Part 1

by  
Thomas Atchison, W5TV

Continuing our discussion of AC circuits, let's consider what happens to voltage and current if an alternating voltage is applied to a resistor,  $R$ , as in Fig. 1.

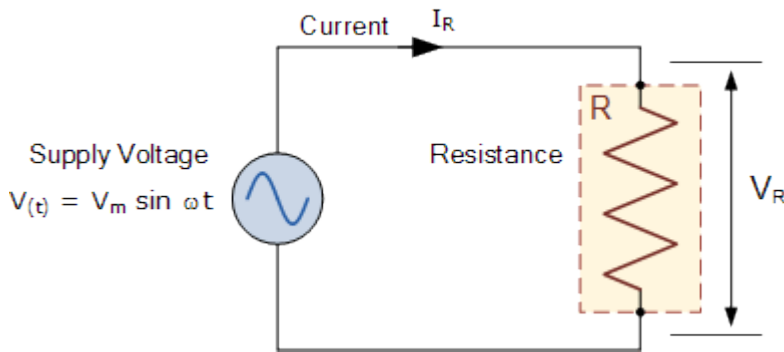


Fig. 1

As the voltage,  $V(t)$ , varies, the current through the resistor varies. In fact, as the voltage increases, the current increases. When the voltage reaches its maximum then the current will reach its maximum. As the voltage then decreases then the current decreases. The voltage and current are plotted on the same graph in Fig. 2.

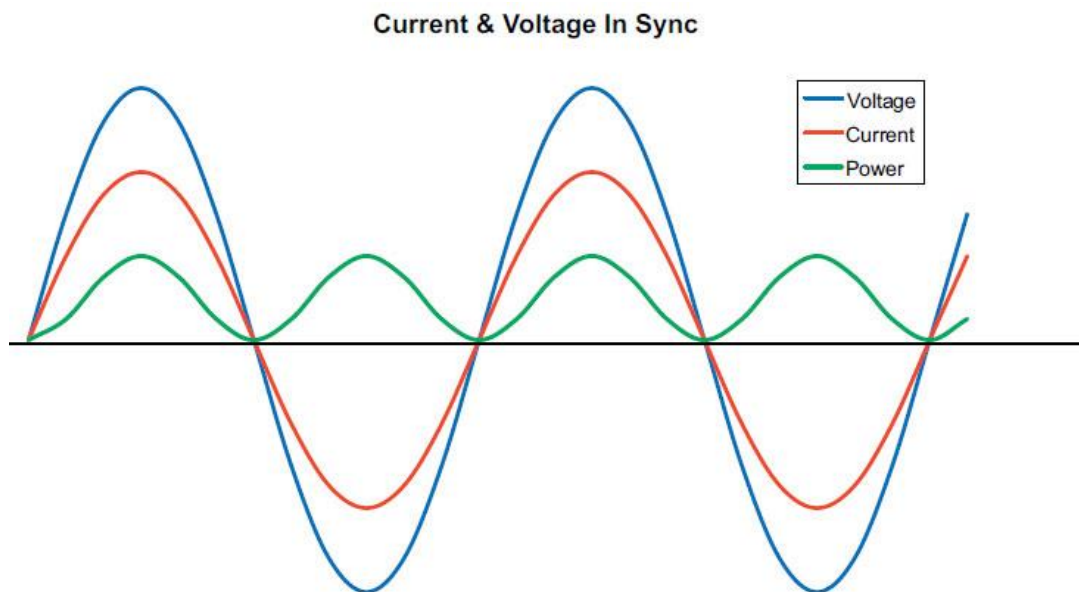


Fig. 2

Recall that the power is given by  $P = I * V$ , where  $P$  is power in watts,  $I$  is current in amperes, and  $V$  is voltage in volts. We see that the current waveform and the voltage waveform are rising and falling at the same time. Because of their relationship to power, the power waveform also rises and falls at the same time. We say these waveforms are **in phase**. That is, if two signals have the same frequency and reach their positive peak values at the same time, we say the signals are in phase.

We can graph any one of these waveforms using a different horizontal axis.

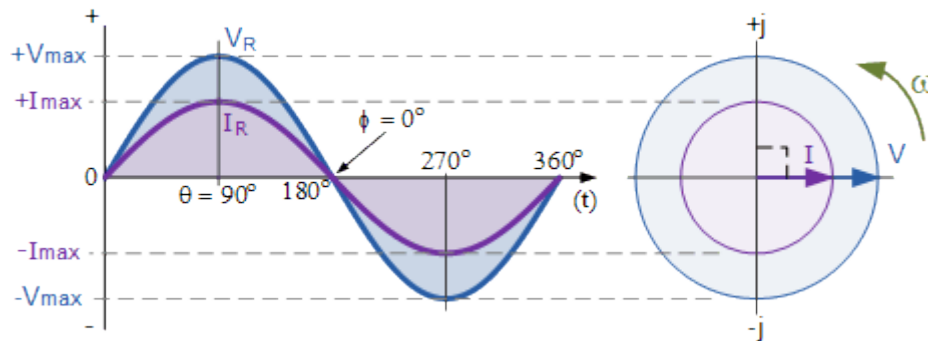


Fig. 3

In Fig. 3 we have related a cycle of a waveform to the rotation of a wheel. Each point along the waveform corresponds to a rotation angle on the wheel. We use the angle measurement to indicate the phase between two waveforms. This process allows us to make phase measurements that don't depend on the actual wave frequency.

To illustrate this further, suppose we had two signals as shown in Fig. 4.

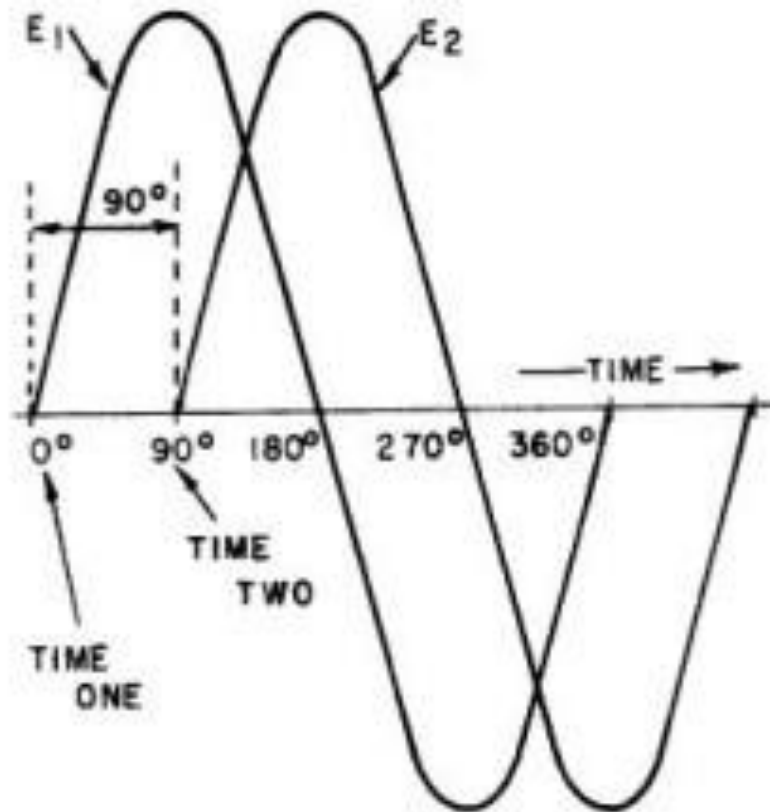


Fig. 4

Signal  $E_1$  and  $E_2$  are not in phase. They may have the same frequency but they do not reach their maximum positive values at the same time. We observe that signal  $E_1$  reaches its maximum at a point where signal  $E_2$  begins. This difference is shown on the graph as 90 degrees. We describe this by saying that the signals are out of phase by 90 degrees. We also say the signal  $E_1$  leads signal  $E_2$  by 90 degrees or that signal  $E_2$  lags signal  $E_1$  by 90 degrees.

In the next article we will see what happens to alternating voltage and current signals in a capacitor.