May 2018 Volume 05-2018

Nacogdoches Amateur Radio Club

2018 CLUB OFFICERS

Pres: RM Blake - K5AGE

Vice Pres: Jack York - KG5POU 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, offerina trainina 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 organized scheduled meetings and events and having fun.



APRIL MINUTES

The April meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled on April 4th. President RM K5AGE opened the meeting at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. Seventeen members and no quests were present. Each person present introduced them self. Minutes of the previous meeting approved as published. The Treasurer's report read.

Radio Sport: Bob K5ME reported he entered the UK DX contest, making one contact on CW (of course).

The San Jacinto **Special Event** is scheduled for April 21-22, using the call K5T. This will be handled similar to how the Shuttle Special Event was done in February. Members are encouraged to operate the event from their home stations using the special K5T callsign. Robert KD5FEE K5ME, Jack KG5POU and Tom W5TV all indicated they were interested in operating in this event.

The June ARRL VHF contest will be held the weekend of June 9-10. AE5P, Army Jim WA5GVQ, Dale K5BDD, Bill KT5TE, Tom W5TV, N6RH and Ralph all indicated they were interested in participating. While this certainly will make a good group, there is room for more. Please

contact **AE5P** if you want to play.

Army AE5P reminded everyone of the Neches River Rendezvous scheduled for June 2, with a backup date of June 16. Additional operators are needed to help provide communications for this event. If you can help. please contact Steve KB8QWN in Lufkin (kb8gwn@gmail.com) or AE5P Army (ae5p@arrl.net).

Meeting closed at 7:22 p.m.

Program:

Army AE5P gave presentation on operating in countries other than the United States. There is a wealth of information on the legalities of this on the ARRL web site. As Army discovered, if you are in a country that does not have English as their first language, you might just have a little issue in communicating with the locals.

FROM THE PRESIDENT



"A jack of all trades is a master of none"

One could spend a lifetime learning the trades and exploring the avenues that make up the greatest hobby in the world. But instead of discussing my projects, I want to spend next words mv acknowledging the people who have just discovered Ham Radio. This is the greatest hobby in the world, and the greatest piece in this hobby, is you. You are the reason we keep going, you are the reason this hobby is so great. Wherever you are, whatever avenue you wish to explore in radio, you will meet the best people in the world. I certainly have met the best people I have ever known in my short time as a Ham. We welcome you with open arms and are excited to hear about your next project.

73 de RM Blake K5AGE k5age@fastmail.com

From the VP Chair PART II - MY RADIO DRAMA

The saga continues for my HF antenna The latest news is that I have made progress on the domestic home front in part because of my guarantee to make it unobtrusive to a large degree and much more so than the old antennas. The design at this point will be a group of inverted V dipoles set at a peak of 27 feet. I am using some square tube as the mast but it has not been erected yet. The most important part of the project has the successful been clearing of trees and shrubs in the area to be occupied by the antennas.

The other part of the equation now is the inside accommodation. The deal made for this portion of the project is that it must be private, not like it was before... in the back door foyer.

Something about being an "eyesore" and "too open for Luke" who at 5 years old is "easily tempted" remained the final comment on the old setup.

I must admit that my spouse does have the right idea to make the radio setup more aesthetic with my given parameters of building space inside the house, so the burden is a good one.

I should be ready next month and on the air if all goes well. I look forward to it because I sure do miss my radio play time. Part of the fun though is the building of the antennas.

73 de Jack York KG5POU

gtjakco@yahoo,com

NOTES FROM OUR EC

We all remember the ditty, "April showers bring May flowers..." We've had a bit of rain this month. The official NWS reporting station recorded 2.83" as of 0001 23 April. We are only about 1/2 inch above normal for the 23rd and we still have a few days left.

We received a hard rain along the front line on the 13th. I decided to take a short run around the loop after work just as the front arrived. Short run is right, I only made it as far as FM 225 and decided to head it home as the rain was very heavy.

Robert (FEE) and one other ham were on the 32 repeater. I didn't catch the other ham's name or call sign. That storm system produced some hail and winds here. However, 17 tornadic events occurred across the ARK-LA-TX region during that storm cycle.

I don't know how many of you have α separate weather radio with an alerting feature, or how many of you check the various weather reporting pages on the web or monitor radio/TV stations or cable services. The NWS/Shreveport office requested the assistance of spotters during that event.

Some questions for you to consider and please email me back with your thoughts:

Q1. Do you turn on your hand held or other radio and monitor the 32 repeater?

Q2. What is the easiest way to contact the local hams when a weather event occurs? Text messages, phone calls, regular emails, smoke signals? How can we ramp up the spotters and hams in the local area in a quick and timely manner, even if you don't leave the house?

One last pitch: Neches River Rendezvous and Field Day are coming up.

73 de John Chapman KC5MIB jlchapman2@juno.com

VE TESTING

Our next VE testing is scheduled for Wednesday May 16 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.

Please keep in mind that the Technician license question pool will change effective June 1. If you or someone you know is thinking about taking the Tech exam, the May exam date will be the last opportunity to do so with the current question pool.

73 de AE5P

email: <u>ae5p@arrl.net</u>

NEW HAMS

Our VE exams in April saw David Sampson KG5ZCL upgrade to General from the new Tech he received the previous month. Congratulations to David.

TWO METER CLUB

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 (PL repeater 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 May 2nd at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. We are hoping for a program. If you have suggestions for program topics, please let AE5P know.

SAN JACINTO DAY SPECIAL EVENT

San Jacinto Day is the celebration of the Battle of San Jacinto on April 21, 1836. It was the final battle of the Texas Revolution where Texas won its independence from Mexico and led to the formation of the Republic of Texas not long after.

This is the second year of the San Jacinto Day Special Event by NARC which we hope will become an annual affair. We will again be using the special call of K5T for the event.

Operators this year included Tom W5TV, Bob K5ME, Rusty KD5GEN, Roger KOYY, Robert KD5FEE and Army AE5P.

The operation this year produced 471 contacts, with 429 via SSB and 42 via CW. All contacts have been confirmed via LOTW and the requests for paper QSL's have begun arriving. Many thanks to everyone who participated for making this event a success.

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.contestcalend ar.com/contestcal.html

<u>Items in RED are NARC</u> <u>Club Events</u>

DAYTON
HAMVENTION
GREENE COUNTY
FAIRGROUNDS, OH
May 18-20

<u>CQ WW WPX - CW</u> May 26-27

HAMCOM - PLANO June 8-9

ARRL JUNE VHF
June 9-10

ARRL Field Day
June 23-24

IARU HF

July 14-15

North American QSO Party, RTTY July 21

<u>CQ VHF CONTEST</u> July 21-22

North American QSO Party, CW Aug 4

SHREVEPORT
HAMFEST
Aug 10-11

North American QSO Party, SSB Aug 18

ARRL September VHF
Sept 8-9

Texas QSO Party Sept 29-30

<u>CQ WW DX - S5B</u> Oct 27-28

Nacogdoches ARC ARRL Sweepstakes -

<u>CW</u> Nov 3-4

<u>ARRL Sweepstakes -</u> <u>SSB</u> Nov 17-19

<u>CQ WW DX - CW</u> Nov 24-25

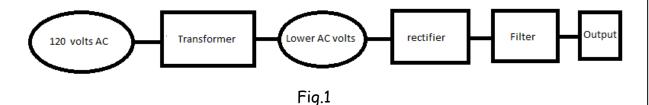
ARRL 10 Meter
Dec 8-9

RECTIFICATION

by Thomas Atchison, W5TV

We talked about diodes in the last article and I mentioned the process of rectification. I would like to pursue this idea a step further.

Most of you have a power supply in your shack that converts 120 volts AC from your house plug into a DC voltage that is around 13.8 volts. The first step in this process is to use a transformer to change the 120 volts AC to a lower AC voltage. After this we then must convert the lower AC voltage to a DC voltage. This conversion is referred to as rectification. The output of the rectifier will be a combination of DC and a superimposed AC ripple on the DC. The DC component is desired and the AC ripple is not desired, however, it is unavoidable. Most loads cannot tolerate more than a small amount of AC ripple; therefore, we need to include some form of filtering to reduce this undesired ripple. A block diagram of this process is shown in Fig. 1.



Let's focus on the box labeled rectifier in Fig. 1. This could consist of a half-wave rectifier, however, we have noted in previous articles that this is not a very efficient rectifier because it only converts half of the AC signal into a DC signal. In this case the ripple is large and there is a better way. A better alternative is to use a full-wave rectifier. One type of full-wave rectifier that is used is a bridge rectifier.

In the rectifier block a bridge rectifier would look like the schematic shown in Fig. 2.

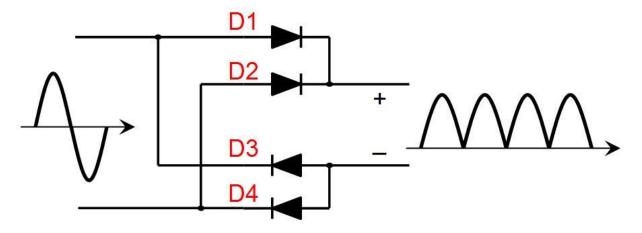
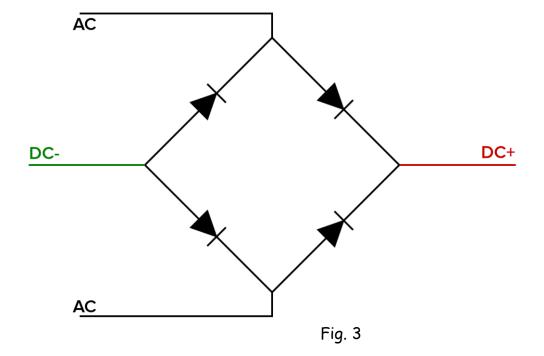


Fig. 2

Observe that during the positive cycle of AC input current flows through D1 and D3 with D2 and D4 reversed biased. The output is the first positive pulse on the right hand side. During the negative cycle of the AC input, current flows through D2 and D4 with D1 and D3 reversed biased. The output is the second positive pulse on the right. The AC cycle repeats giving a sequence of DC pulses as shown on the right.

Most schematic diagrams show the bridge rectifier as shown in Fig. 3.



I will leave it to the reader to show that these two are equivalent. It is my opinion that it is easier to see the behavior in Fig. 2 than in Fig. 3.

If the RMS AC voltage at the **input** is denoted by $E_{\rm RMS}$, the peak DC **output** is denoted by $E_{\rm PEAK}$, and the average DC **output** is denoted by $E_{\rm AV}$, then we have the following:

$$E_{PEAK} = 1.4 E_{RMS}$$

and

$$E_{AV} = 0.9 E_{RMS}$$

There is still considerable ripple in this DC output; therefore, we will need to discuss some smoothing filtering in order to produce a usable power supply. There are several alternatives for filtering. I will look at a couple of those in the next article.

MY TWO CENTS

FOX WILLY ROGER

MAY 2018

If you remember, last **NL** I did not comment on America's pastime, the **IRS**, I also did not mention **St Patrick's** day, two of this nations favorite holidays, how many of you partied on those days? Today I found out that I could not multi-task, I was fixing an omelet when it was time to add an egg, well it didn't end up in the omelet but it did in my coffee, proof positive, you too can do this, all it takes is practice. I haven't seen my hummingbird lately but the nectar is going down. The laxative/ant project hasn't deleted any further, every time I add the juice, it seems to rain, so I guess I'll have to wait for deep summer. The plan was to choose an ant mound, but there are so many of them now, I'll have to get some spray paint to mark the residents.

Last NL I reported that TWT had opened one eye, yesterday I saw another eye was open, how many eyes TWT has is still a mystery.

The freezer is still cold and all the food is OK, as far as the cool pops, that mystery is still a mystery, some freeze and others?

The blackberry crop is coming along just dandy, all this rain is doing its job, the only reason why I'm not harvesting is this on again off again cooler weather.

Well it's yard work time again, the other people on the block have already cut their yards more than once. The back yard is yet another story, if all plans work out I will have plenty of firewood for next year and maybe some for 2020.

This weather has got to get and stay warmer soon. I can't stand the cold and the warmth feels much better on my joints.

QUESTION:

Why is it when you drive down a country road and come across birds at the side, that most birds will up and fly away in front of your car and the Doves generally fly away from your car?

What is the difference between natural food and un-natural foods?

Why is it that one of the bad things about getting old is remembering how much things used to cost?

REMEMBER:

Remember when the food store sackers asked "paper or plastic" it meant containers?

Remember lawnmowers did not have power assist other than pushing?

Remember your first: date, car, kiss, dance, fishing trip, remember?

COMMENTARY:

What the HELL is going on with the government?

Did you hear about the latest nominee for a department director? This time it was for the head of the VA. It seems like the committee didn't like him because he spent too much money at his last posting. Come on congress, who of you is 100% pure? None of you can walk on water, or ever will, no one is pure? Congress was voted into office to help the PEOPLE of the country, it seems that ever since the 45^{TH} president was sworn in, all have been working to foil him in any direction the president tries to take. Hey guys, when the 46^{TH} president gets here all of you will say "how bad he was" and the congress will be patting themselves on their back and saying how good they were. The voters are sure lucky the country is? Four or eight years shot to hell. People that time can't be gotten back, if you don't believe me, try it.

It seems to me that congress gets rich, off of us, in office, they don't even, I was going to say work, but I haven't a word to use, a full year.

The "G MEN", why does it seem that the only time a report comes out it's an after the fact, or they also were present, or a case of someone that wasn't running? What happened to the investigation part?

GUEST COLUMNIST JACK TALDI

THE CRAZY CAT GUY:

"The pride has now one regular member, one Fluffy and sometimes Tuff Guy. Snow flake, it seems has gone on a walk-a-bout, I haven't seen him for weeks. I am missing all my friends, but not the food bill.

TB has a new game she made up herself, and it has to do with a paper bag. Now the paper bag is not new to this household, but what she does with it is. TB hides in the bag and comes out with as much racket as possible, nothing new there. The new kicker now is she makes a racket going into the bag and makes a bigger racket when it's time to exit and bolts from the bag, no matter what direction the opening is. TB after removing herself jumps onto the back of the closest kitchen chair, her eyes has a wild look and her ears folded back along the head makes up a devils look, and the game repeats until she's tired. The best thing is if I can catch her unaware of my where bouts and attack the bag, TB comes out of the bag ever wilder than usual.

RP also has sort of a game. Her head pops up from her prone position, looks around and a few seconds later jumps up and runs to whatever she was thinking of. After a rest time RP will repeat the action, but in a different quest. This is about the only "play" that RP does, so there's not a lot to report about.

The buzzards still visit; I think I will name them, how about Heckle and Jackal?

As reported last NL about my freezer when it seemed to stop cooling, the Cool Pops I had stored there would not freeze, but the other contents were still hard and cold. I checked on the goods a week later, expecting to find a lot of food gone bad, everything was still frozen solid, all except the Cool Pops. Time to put the thinking cap on, the food that was in the box for a long time was AOK, the Cool Pops were still the same as when I put them in the freezer, but cold. A few days of hard thinking I came up with a theory of why this was happening. No circulation was the answer, did you come up with the same answer? I removed some items, rearranged others, and what do you know, frozen Cool Pops, there is Joy in Muddville tonight. With the circulation restored and the Cool Pops are now all eaten, go figure.

Well my yard flowers are in bloom as well as the Redbud tree and don't forget the Black berries too. If all the blackberry blooms are any indication, I will have a hell of a crop of berries. They will keep my eggs, cheese, onions and other things company in my

omelets. Soon it will be pollen season, that yellow powder on everything, kind of looks like a snowfall.

I saw the first Hummingbird today, I put out some nectar in the Redbud tree, hope they come back.

I'm getting hungry for that second rabbit, I guess it's time to look for another recipe, it has to be just right for a great rabbit, maybe I can cook it for Easter. I don't know about you but I get tired of same old, same old.

What about this weather, cold in the morning and t-shirts in the afternoon, yes this is Texas, wait a bit and the weather will change again.

DOGS HAVE MASTERS
CATS HAVE SERVANTS

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

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

LIVE WELL, LAUGH OFTEN, LOVE MUCH!!!

KEEP YOUR POWER DRY AND YOUR HEAD BELOW THE HORZON

HAPPY TRAILS

John Cechin W5FWR

Carrots4ever2@gmail.com