

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, 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.



JUNE MINUTES

The June meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled June 6th. **Vice-President Jack KG5POU** opened the meeting at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. Nineteen members and no guests were present. Each person present introduced them self. Minutes of the previous meeting were approved as published. The Treasurer's report was read.

Army AE5P gave a report on the K5T Special Event.

The ARRL June VHF Contest is coming up this next weekend, June 9-10. A poll of members present showed AE5P, N6RH, WA5GVQ, KT5TE, and W5FWR intending to participate.

After voting last month to cancel Field Day this year, AE5P announced that several members have decided to reinstate our participation in Field Day. Permission has been obtained to use an area at the airport as we have in the past. Permission has also been obtained to use the City/County Mobile Command Post trailer to operate from. More details will be forthcoming as they are developed.

Meeting closed at 7:45 p.m.

FROM THE PRESIDENT



Have you read all the Kenwood love in this month's QST? First, we get a great article on "The Role of Radio in *Die Hard*" which I found fascinating and quite entertaining.

Let me jog your memory. Christmas 1988, Bruce Willis playing John McClane, "Yippee-Ki-Yay- *#!@\$&*", the villain Hans Gruber falling in super slow motion from a skyscraper in the final

scene, showing absolute terror in his face. Ah yes, now you remember.

The article is worth a read, and after reading, you will probably want to have a re-screening of the original *Die Hard*.

Round two of the QST Kenwood love fest is on the very next page. "Ham Volunteers Solve an Amateur Radio Interoperability Problem for the ISS" in which Kenwood has generously donated 10 identical D710GA radios ALONG with the engineering time to ensure they had the embedded safety enhancements to pass certification for ISS use.

Kudos to Kenwood.

73 de RM Blake K5AGE
k5age@fastmail.com

From the VP Chair

Finally on the air!

Well I am finally on the air on HF again. Just a recap on the saga... the problem was not technical but spousal. The problem was solved with some "invisible dipoles" that overcame difficulties of "ugliness" of my past setup. This setup problem also was where the radio was stationed as well but now it is out of public view in the bedroom and putting it in the bedroom was her idea. Regarding the antenna, Army suggested that I use a fan dipole esp. considering that it would be a pain to run too many coax to individual dipoles so that is what I did.

So what did I do that was different? The radio was relocated to a corner in the bedroom from the foyer area on a smaller desk. Also I used monofilament to lash the wire ends of the dipoles instead of 3/16" nylon cord. Next I changed the

setup of the masts so that guys were not needed and they were relocated behind trees so that they would not be seen from the house. These two factors really cut down the visibility of the dipole wires. Another thing that did help was the background of trees kept the wire from being silhouetted.

Performance. Reception and swr are good but there are good days and bad ones but what is needed is side by side comparison to see how much improvement I could make by upgrading to something like a beam. So for now I am content to have the radio set up and not in the box in the closet. The moral of the story is without the support of your spouse hobbies can be truncated and even short-lived so do your best to have agreement on setups and encourage them to participate so they have a stake in what you do.

73 de Jack York

KG5POU

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NOTES FROM OUR EC

Some corrections to last month's column, thanks to Bob (K5ME). Bob worked with the National Weather Service. He provided some enlightenment and corrections. Sub-Tropical Storm Alberto: Alberto was labeled Sub-tropical because it didn't start in the tropics. And I made a couple of goofs about wind speeds. So let's get that corrected, too.

Tropical Storms and Hurricanes are classified using the Saffir-Simpson scale. A tropical depression is 0-38 mph, tropical storm 39-73 mph. Hurricanes: Cat 1 74-95 mph, Cat 2 96-110 mph, Cat 3 (major) 111-129, Cat 4 (major) 130-156 mph and Cat 5 (major) 157+. Bob, thanks and thanks to the NHC/NOAA website (links at the end of the column).

Let's call the next section, "Down the Rabbit Hole." We've all done it, started a web search for some specific information, then

you find something new, interesting or neat and down the rabbit hole you go.

This chase started while I was looking for information about my Brunton Pocket Transit, a multi-function compass. As they say one thing led to another and another and it eventually begged the question, "Where are you?" not necessarily on the web, but physically.

Okay MIB, where are you going with this? Back a few years to August 2005, Hurricane Katrina and yes, we'll get there.

Most of us can answer where we are in a couple of forms, a physical mailing address connected to the house not a PO Box, Maiden Head Grid Square and maybe Latitude/Longitude. A few of us with a good GPS or a topographic map and template can locate a place using the Universal Transverse Mercator (UTM) or Military Grid Reference System (MGRS) grid square system.

Hurricane Katrina showed that search, rescue, relief and recovery were significantly handicapped due to mapping commonality. So where are you? I have a street address, but I'm on the roof and the water is just below the eaves and there are no street signs or house numbers visible. How do you tell a Coast Guard Helicopter or rescue boat where you are? An initiative was started to develop a mapping system to alleviate that problem, the National Grid.

This lead me further down the rabbit hole to the US National Grid Information Center. This site provides information and tools to use the National Grid (NG). The NG overlays on the UTM and MGRS maps. Many topographic maps are already printed with the appropriate notations. Accuracy using this system can be as good as a 10m square (approximately 33 feet by 33 feet). Maidenhead Grid square can't get quite that

precise and based on my reading (another rabbit hole) was developed by hams for hams.

Okay John, why bring this up? Again, where are you, where is it (remember the shuttle disaster and the debris field?) how do you get there, how do you tell the support staff, how do they tell the people in the field.

There are apps for the iPhone and the Android that will locate you and the phone in UTM/MGRS grid format. A number of GPS units will locate and map your location and can be used to map a set of coordinates. My old Garmin Etrex will id my location in UTM coordinates among others. (I leave it set on Maidenhead) On the National Grid site are a number of documents that aren't too awkward to read and links to get some of the manual tools that my military buds may be acquainted with.

This is a not a definitive discourse on mapping or

using a specific feature on your cell phone or your GPS. It was just a trip down the rabbit hole that seemed interesting to our needs.

Thanks to everyone who participated in Field Day this year. Our numbers sounded good especially the bonus points. Remember even though it acts like a contest, it provides real experience if we have to set up something bigger than just a 2m radio on a table top.

73 de John Chapman
KC5MIB

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www.nhc.noaa.gov/aboutss_hws.php

www.brunton.com

www.oldtopographer.net

www.usngcenter.org

www.maptools.com

VE TESTING

Our next VE testing is scheduled for **Wednesday July 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.

Please keep in mind that the Technician license question pool has changed effective July 1.

73 de AE5P

email: ae5p@arrl.net

NEW HAMS

At our VE testing on June 20, two new hams were successful in passing their Technician exam, and two more hams successfully upgraded from Tech to General.

Congratulations to Steve Capp KG5ODZ from Lufkin, and Jonathan Canfield KE5FVC on their upgrades to General, and to Ronald Nix of Alto and Dillon Richardson of Huntington on passing their Technician exams.

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

Pay close attention now; our menu items have changed. The next meeting will be on **TUESDAY, JULY 3RD AT 6:00** in the Parish Hall of Christ Episcopal Church. This will be our annual **Ice Cream Social** night, so bring your favorite flavor of ice cream or topping or whatever you feel will go well with ice cream.

This is a family event, so bring your significant other(s) and plan on a fun evening.

HUNTINGTON HIGH SCHOOL

Huntington High School, under the leadership of teacher Peggy Albritton N5PEG, is forming a High School Amateur Radio Club with the express goal of making a radio contact with the Space Station via ARISS (Amateur Radio on the International Space Station). Lead time for

such contacts is long, and competition is intense with many requirements. Huntington HS was recently advanced to phase two of the process and will be working now to obtain the necessary equipment for the contact. Many thanks to Peggy for leading the way, and many thanks also to Kris Kirkland K5KRK for mentoring the school group. Well done gang!

FIELD DAY

Field Day was held, and it came off pretty well. The goal this year was training rather than just operating, and that was good.

We managed to make 113 contacts, 81 SSB, 30 CW, and 2 digital. Conditions were not very good, but we made contacts anyway.

We had site visits by the NFD Fire Chief and the Mayor, as well as several hams from the area. It was good to see everyone.

Many, many thanks to all who helped and/or

participated. Field Day is not something that just one person can do by themselves. The more who get involved, the better the experience.

Who is going to be Field Day Chairman next year? You may want to get started with planning and making assignments now rather than later.

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.contestcalendar.com/contestcal.html>

Items in RED are NARC Club Events

IARU HF

July 14-15

North American QSO Party, RTTY

July 21

CQ VHF CONTEST

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**CQ WW DX - SSB**

Oct 27-28

ARRL Sweepstakes - CW

Nov 3-4

ARRL Sweepstakes - SSB

Nov 17-19

CQ WW DX - CW

Nov 24-25

ARRL 10 Meter

Dec 8-9

Amateur Radio: How Did It Start?

by

Thomas Atchison, W5TV

As I was thinking about what to write in the Newsletter I mentioned it to my wife and she suggested I consider some of the history of amateur radio. Since we have several new 'hams' that seemed like an excellent idea so here goes.

For many years scientists were trying to understand the nature of electricity and magnetism. In the 19th century Michael Faraday and James Clerk Maxwell established mathematical descriptions of how electromagnetic induction and radiation occurred. In the year 1886 Heinrich Rudolf Hertz demonstrated the existence of radio waves by showing how a spark in his 'resonator' circuit could be made to induce a secondary spark in another circuit located some distance away in his laboratory. The resonator later became known as a transmitter and the secondary circuit became known as a receiver.

In 1896, Guglielmo Marconi brought together various ideas and inventions using 'Hertzian' waves to produce a practical communications system. In that year, 1896, Marconi used a Hertz oscillator as a transmitter, a tube filled with metal filings called a coherer as a receiver, and aerials on both, to demonstrate that his system could send a message wirelessly over two miles of English countryside. At that time he immediately applied for a patent. In that sense, Marconi became the 'Father' of radio.

In the beginning, wireless amounted to generating high frequency noise at one place which caused an electromagnetic disturbance to be propagated in all directions. This propagated noise was transformed into an audio noise at another place. Turning the noise on and off permitted a person to send telegraphy and therefore a message 'wirelessly'. The combination of a Hertz oscillator and a receiver that would make the electromagnetic wave audible was simple, therefore; electrical hobbyists were able to experiment. These were the first radio amateurs.

Marconi advanced his experiments in England extending his range until he was able to send a signal 32 miles across the English Channel. As the range extended, both professional and amateur experimenters began to be involved with wireless communication as their primary pursuit. This accelerated the development of wireless communication remarkably.

As wireless telegraphy systems were created an early magazine called *Amateur Work* was issued in November of 1901. This magazine described how to build a simple system

based on Hertz' early experiments. There followed several magazines showing the progress by amateur experimenters describing how different people had established wireless systems and communicated with one another. Some of the inventions that followed included the two-electrode vacuum tube diode by John Fleming and the Audion three-electrode vacuum tube by Lee DeForest. The term *radio* was first adopted by the International Wireless Telegraph Convention in late 1906.

An early application for wireless technology was communicating with ships at sea. Marconi's experiments in England led to the adoption of radio aboard Royal Navy ships. In the United States the Navy established a wireless telegraph board to advise the service about the use of radio. The board recommended it be given a full trial and the Navy elected to deploy equipment from DeForest and his US based company.

In the United States the first commercially produced wireless telegraphy transmitter/receiver system was made available to experimenters and amateurs in 1905. In 1908, students at Columbia University formed the Wireless Telegraph Club of Columbia University, now the Columbia University Amateur Radio Club. This is the earliest recorded formation of an amateur radio club, collegiate or otherwise. By 1910, many thousands of transmitters were in operation and the experimentation of these wireless systems created a problem of inadvertent and sometimes malicious interference with commercial and military systems. Much of the interference occurred because amateur operators used crude spark-transmitters that created wide signals across a large part of the spectrum.

After the RMS Titanic sank in 1912, the United States Congress passed the Radio Act of 1912 which restricted private stations to wavelengths of 200 meters or shorter (1500 kHz or higher). These 'short wave' frequencies were considered useless at the time and the number of radio hobbyists in the United States dropped by about 80%. The Radio Act of 1912 marked the beginning of the federal licensing of amateur radio operators and stations.

In 1914 the American Radio Relay League was founded by Hiram Percy Maxim. He thought that messages could be sent more reliably over long distances if relay stations were organized and this led to the name.

Of course this was only the beginning. One thing we should remember, our roots are in experimentation. We must continue to advance the knowledge base as much as possible. Who knows when and where the next big step will be made.

MY TWO CENTS

FOX WILLY ROGER

JULY 2018

REMEMBER ICE CREAM SOCIAL THIS MONTH.

I haven't had so much fun, with my clothes on, in many years, what I'm talking about is **Field Day**. FD, to me is a time to learn, hone my skills, and most of all, have fun, I am, what is called "a laid back operator" so that's why I prefer N.A.R.C.'s method of contesting.

I understand that Jack Taldi has a load to say this month, again, what the subject is still up in the air, but if you read the column you will still be confused as ever. As you know, Jack touches home on many subjects, a test will be given at the July meeting, so read and enjoy.

Did everyone give a **BIG HELLO** to **COLLINS**? As you may remember, last month I made the announcement about the newest club/ham member in this area so say hidey-ho to her when you meet.

I, for one, do not subscribe to the practice used by the **HAM** community on the use of all abbreviations, I know, I know, these were set up for use in **CW**. The one I am talking about this time is, **YL** and **XYL**. Being a married male or having been a married male, you learn in a very short time that you do not refer to your **YL** as "X", not in anything, unless you like sleeping in your radio shack.

Did everyone get clear of the **IRS** or are you still fighting the fight?

Did you have a green beer to honor St Patrick' day?

The **TWT** is still refusing to open all its eyes.

The freezer is full once more and the cool pops are still having a bad time freezing, I hope I solved the problem, I cleaned out the freezer.

Well its yard work time again and again I managed to cut it a few weeks ago; all I need now is a hay bailer. The volunteers that were to do the yards for me, were a no show, or

did the reminder slip off the calendar, who knows? The back yard is yet another story, I think it's going to take a bit more than a mower and a hedge clipper, maybe a bulldozer or maybe I should take up the offer from Hollywood to make a Tarzan movie using my back yard?

QUESTION:

Why is it a person will go out and purchase a new car with 1000 HP, where is he/she going to use that entire HP?

Why is it when you put food in the microwave, the food comes out hot and cooked, but ants are still alive and walking around, what goes?

Why is it that the car manufacture put a donut tire in the trunk?

REMEMBER:

Remember RC & moon pies?

Remember having one broadcast radio?

Remember sitting around that one radio and listening to Jack Benny?

COMMENTARY:**What the hell is going on?**

This month I will throw out some thoughts to you to chew on.

What I'm talking about is "**GUN CONTROL**". What is gun control? I'm sure, it's not the joke about using both hands, this is a very hot issue with me as well as the world. The past has seen many reports on the news about the end of innocence and safety of the young and older people in our world. The cry has gone out for gun control, what that means, I, as well as many, means many things to many people, not all are clear. This is not new, shooting between persons or gangs or wars have been going on since the gun was invented, and before that the weapons were whatever was handy. Still the cry goes out "gun control" it is unfortunate that this is happening at an alarming rate, better news coverage has kept the world apprised of these disasters.

I for one am in full agreement with a gun control, what that is not all can agree there is a lot of talk about more laws, I believe that the laws we now have should be revamped and enforced, for me, a few days or weeks wait period to purchase a gun would not be out of the question, or a system of facial recognition and perhaps palm readers be stationed at every place that sells guns. These systems would be connected to a federal department responsible for keeping the records. Big brother, maybe, but how else can we protect the people that hunt or just enjoy the sport of shooting? If you know of a

better way, let the government know, a stiffer jail time might help. I believe a more extensive background check would also help in many cases. Many question many answers. In the past the government banned all for what the few have done. Be careful the government doesn't punish all for the few.

It's not just one thing of a few things that will solve this problem, but it will take many people, working together, to get the job done.

Many countries have tried many things and many countries have some success, but not 100%.

Having said that, it's not the end of it, you can bet in some up and coming NL's, this and other subjects will surface again.

GUEST COLUMNIST

JACK TALDI

THE CRAZY CAT GUY:

"The pride has now one member, **Tuff Guy**, for about a week or so **Tuff Guy** was on personnel time, he will not say what or where but he showed up with a grin on his face walking the walk, that tells so much.

TB has another new game, as I reported in the last NL, she calls it charging the open door. **TB** Has taken to running out the front door and checks out everything out, then she refuses to come back in till she's good and ready, today **TB** refused to come back into the QTH, I then got a fly swatter and slapped her on the back legs and on the butt, **TB** looked at her back side, then looked at the fly swatter and then looked at me and kept doing what she was doing, still with in her comfort zone. She doesn't do that every time and that makes it more difficult to figure her game out. **RP** is just the opposite; she could care less and knows the outside is not a safe place for man or a fur person.

Heckle and Jackal paid me a visit the other day, then a third buzzard joined them and after a bit two of them took off for the unknown, I don't know who flew off with who, to tell the truth, they all look alike to me, and left the third to guard the house, there is always something going on at this QTH.

I now have a black wasp living with us, it doesn't bother us and we don't bother the wasp. A good living arrangement for all. I think I will call it "BOSTON BLACKIE"?

**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 HORIZON

HAPPY TRAILS

John Cechin W5FWR
Carrots4ever2@gmail.com

ARDUINO PROJECT CONTEST

At the May 2018 meeting of NARC, the Arduino Project Contest was announced. The object of the contest is to promote interest, provide an educational opportunity, and give the members the chance to win some money.

Here are the rules:

Entry into the contest is limited to dues paying members of NARC, current in dues as of the May 2, 2018 meeting.

There are two entry categories. One is for members 50 years old and younger. The other is for members over 50 years old.

The object of the contest is to acquire the necessary hardware to build a project of the member's choice based on an Arduino micro-computer, and demonstrate his/her creation at the July 2018 NARC meeting. (**Changed to August NARC meeting**)

The member will also be required to program the Arduino as necessary using the appropriate language, and load the program into the Arduino as required.

The projects will be judged by the members present at the August NARC meeting. First prize in each category (<50, >50) will win \$250 cash. If there are at least 4 entries in a category, a second prize of \$100 will also awarded.

There are many sources of hardware currently available. One such source is this ad from Banggood for just \$21.99 with free shipping:

https://www.banggood.com/Geekcreit-UNO-R3-Basic-Starter-Learning-Kit-No-Battery-Version-For-Arduino-p-1133595.html?utm_design=114&utm_source=emarsys&utm_medium=Mail_promotion180427_email&utm_campaign=newsletter%E2%80%94emarsys&utm_content=talis&sc_src=email_2977938&sc_eh=4c88e32686c583ea1&sc_lid=188964&sc_lid=115481913&sc_uid=6dZ2sLx4uH&cur_warehouse=CN

Members are not limited to using this particular kit, although it does appear to be an excellent starting point at a very reasonable price. Many books are available to show how to assemble and program an Arduino to perform useful tasks. You have approximately 60 days to make this happen. Put on your thinking cap, order the material needed, and let's see what you can produce.

Remember, first prize is \$250 cash in each of the two categories.

Questions? Direct them to AE5P.

Since these rules were originally sent out to all current members right after the May meeting, several things have popped up requiring some changes.

The first Wednesday in July is July 4th, which may well require the meeting date to be changed. Also, the July NARC meeting is normally our annual Ice Cream Social, and it probably would not be appropriate as a time to judge Arduino projects. When the rules were first prepared, it was expected that the shipping time to receive the Starter Learning Kit from Banggood would be about a week. It has turned out to take at least 3 weeks.

Given these things, I am changing the project completion date to the first Wednesday in August, when the projects will be judged by the members at our August meeting. Don't wait until mid-July to start this.