December 2022 Volume 12-2022

Nacogdoches Amateur Radio Club

2022 CLUB OFFICERS

Pres: Bill Rascher – KT5TE

Vice Pres: Aaron Baker – KI5FIQ

Sec/Treas: Army Curtis - AE5P

Visit our web site at

https://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 2nd. **President Bill KT5TE** opened the meeting at 7:00 p.m. in the Nacogdoches City/County Emergency Operations Center off FM 3314. Self-introductions were made by everyone present. Minutes were approved as published. Treasurer's report read.

The 2023 Nominating Committee recommended a slate of KI5FIQ for President, KI5POH for Vice President, and AE5P for Secretary-Treasurer. After discussion, the Secretary was directed to cast a unanimous ballot for slate. New officers will be installed at the December meeting.

The first on-air business meeting will be held December 28th, 8:00 p.m. on the club's 146.84 repeater. All dues paying club members are encouraged to participate. Moving the business portion of the meeting to this format should greatly shorten any remaining business at the regular meeting, leaving more time for presentations and programs.

When asked to suggest topics for club programs, the list included WSPR, grounding, RFI in the shack, mobile operations, setup and operation of club's Orange Box radios,

winlink operation including KA node to remote iGate, HF winlink using VaraHF, Peer to Peer winlink, RTTY, APRS, Fox hunting, using a Hot Spot, and more.

Andy KE5EXX gave a report on APRS and asked for approval to build and install an APRS iGate. Andy has a donated 2M radio to use for this and plans to use a Raspberry Pi for the computer. His request was approval for the club to purchase a TNC-Pi for $150 or less. Request was approved.

The October OTA Challenge was won by **Ralph Hollingshead N6RH.** The Challenge was to make the most contacts in the CQ WWDX SSB contest. Ralph was awarded a copy of "HF Dipoles for Amateur Radio". Congratulations Ralph.

Meeting closed at 8:14 p.m..

FROM THE PRESIDENT

This year seems to have flown by so quickly. December has arrived and it is time for our annual dinner and auction. Be sure to make a note of the meeting time, 6:00pm on December 14th, and the location will be at Clear Springs Cafe. The second Monday of the month for our monthly meeting is unusual, but necessary for scheduling. Clear Springs Cafe should be a good choice for our meeting location and they have a website to view the menu ahead of time; https://www.clearspringsrestaurant.com/nacogdoches

Hope to see you at our December 14th Christmas party & meeting.

73, Bill KT5TE

bill@watershipfarm.com

FROM THE VP CHAIR

I think I say this every month, but can't believe November is already over! Not too much going on radio wise. Didn't even get time to build that antenna that I was hoping to do (maybe during Christmas break? ;))

Looking forward to playing with APRS here soon. I dabble with selfhosted home automation and one of the integrations is tracking via APRS and I can trigger automations (such as lights turning on and off) based on if the APRS server detects the GPS ping at the house or away from it. So will be a fun project to work on.

Also looking forward to the Skywarn Recognition Day coming up this weekend. Will be several Skywarn spotters and NWS offices on the air this weekend so if you hear them, give them a shout!

Anyway, I hope everyone has a good Christmas and good holiday break (if you

get one), and if I don't get to see y'all at the party, hope to see y'all soon!

73 de Aaron Baker KI5FIQ

baker.barisax@gmail.com

NOTES FROM OUR EC

I started this Thanksgiving day. The mill provided us with a BBQ sandwich. It was raining and I had an invitation to spend a late Thanksgiving meal with some friends. I hope everyone enjoyed the day with friends, family and good food.

Hurricane Season 2022 is almost over at least calendar wise as well as weather wise. Let's look at the tale of the tape: 16 total tropical depressions, 14 total tropical storms, 8 hurricanes with 2 categorized as major being CAT 3 or higher. The Wikipedia page has a good history of the season; link at the end of the column.

We had some rain right at 1 inch and a light steady sprinkle. The rain was a welcome relief and has been this past week with some more predicted for this week (28 Nov - 4 Dec).

As Fall changes to Winter, we keep an eye out for the storms and the cold. Winter can be every bit as disastrous as the spring time storms. Today is the 29 Nov and some of our friends on the other side of the Sabine River are keeping a weather eye out for some nastiness. Can you believe we had temps in the 80's? Oh wait, this is Texas and any weather event is certainly possible.

As far as this winter season is concerned, I hope we don't go through the same weather event as Snowmageddon.

And with that thought, how prepared are you? Back up batteries, portable antenna, food, water, etc? Are there fresh batteries in the smoke and carbon monoxide detectors? We've covered these topics in many of past years columns and bears repeating.

The club Christmas event will be at Clear Springs this year 14 Dec. Yes, we will have the White Elephant auction, so please come for good company, good food and a good time. Look for more information elsewhere in the newsletter.

Has your wish list been sent to Santa or whoever gets your Christmas goodies? And good luck trying to arrange for good DX we are already starting to see it. Maybe there will be a magical opening on 6m to Alaska, gee who knows. Time to stop the rambling. I hope everyone has a blessed Holiday Season, however you celebrate it.

See you on the nets.

https://en.wikipedia.org/wiki/2022_Atlantic_hurricane_season

https://www.nhc.noaa.gov/

73 de John Chapman KC5MIB
kc5mib@arrl.net

VE TESTING

We had one applicant for the November VE test session.

Dillon Richardson from Bullard passed his Tech exam and is now KI5YVB.

Congratulations to Dillon.

Many thanks to VE's **Rusty KG5GEN, Ralph N6HR, Mike AA5HH, Mike W5NXK, Robert KD5FEE** and **Army AE5P**.

Remember that we give in-person VE tests the third Wednesday of **EVERY** month. For the latest information always check the club website at:

https://w5nac.com/ve-testing/

73 de AE5P.

email: ae5p@arrl.net

TWO METER CLUB NETS

Please join us each week for the two-meter nets sponsored by NARC. All stations are welcome to check into the nets.

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

Our next meeting will be the annual Christmas Party and White Elephant Auction to be held at Clear Springs Café beginning at 6:00. Members and their spouse are cordially invited to attend. We will be ordering off the regular menu.

Please remember to bring any items you may have for the White Elephant Auction, wrapped or not. All proceeds from the auction will go to the club.

HAMLIST

Are you on Hamlist? Check it out and join at: https://w5nac.com/about/email-reflectors/

JANUARY MEETING

Our first business meeting on the air will be Wednesday December 28, 8:00 p.m. on the club's 146.84 repeater. All club members are encouraged to participate. You must be a current dues paying member to vote on any measures that are raised.

The next NARC meeting will be Wednesday January 4th at the Nacogdoches City/County EOC. Meeting begins at 7:00; doors open at 6:30. Come early for socializing before the meeting. After a very short business meeting, we will have what promises to be a most interesting program on RACES, presented by Mike Miles WD5EFY.

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 https://www.contestcalendar.com//contestcal.html

ARRL 160M Contest
2200Z Dec 2 to 1600Z Dec 4, 2022
http://www.arrl.org/160-meter

ARRL 10M Contest 0000Z Dec 10 to 2400Z Dec 11, 2022
http://www.arrl.org/10-meter

ARRL RTTY Roundup
1800Z Jan 7 to 2400Z Jan 8, 2023
http://www.arrl.org/rtty-roundup

North American QSO Party – CW
1800Z Jan 14 to 0559Z Jan 15, 2023
http://www.ncjweb.com/NAQP-Rules.pdf

ARRL January VHF Contest
1900Z Jan 21 to 0359Z Jan 23, 2023
http://www.arrl.org/january-vhf

North American QSO Party – SSB
1800Z Jan 21 to 0559Z Jan 22, 2023
http://www.ncjweb.com/NAQP-Rules.pdf

Check out the many contests listed on the Contest Calendar link shown here. There are many State QSO parties and 'Parks-On-The-Air' events that may be just right for you. Check 'em out.

NWS Integrated Warning Team Miniseries: Probabilistic Messaging 101 (Part 1)

By Aaron Baker KI5FIQ

This topic is a little long, so we'll break it down into a few parts.

Probabilistic vs. Deterministic Forecasting

Currently the NWS uses Deterministic messaging when producing our forecast products. This type of messaging is when you give an exact value of whatever product you're forecasting. "The high will be 95 degrees for Nacogdoches today"; "We can see an inch of rain in Lufkin tomorrow". The reason why providing a singular value of a forecast (especially when it comes to snow/ice/rain/etc.) is that there is error involved, especially when you look ahead into the future. A good example of this is looking at the forecast cone map of a hurricane that the hurricane center puts out. The "cone of uncertainty" is the error of where the center of the storm could end up in that location at that timeframe.

Now let's look at probabilistic forecasting. It's basically the same thing, but instead of a singular value it can be done in one of two ways: a range of amounts or the probability that an area will reach a threshold of an event (temp, rainfall, tornado, etc.). You're probably thinking why is the NWS looking at moving in this direction? Think about it; when you hear or read about the high temperature for the day, do you take it for face value or do you in your head give it plus minus an amount? Turns out, in a study from 2008, 30% of the participants were already assuming a 10-degree range when given a temperature forecast, so they thought, why not give them the true range that we are expecting.

That's all for now. Next month we'll talk about the theory behind this, and the advancements already made towards this. If you're a social media person, give NWS Shreveport a follow as they've been experimenting with this on some of their graphics (I actually saw a post just as recent as the Monday night cold front).

Get Your Warning On!

By Russel Sanders KD5GEN

The City of Nacogdoches and Nacogdoches County now have a great software system designed to alert its residents to several emergency conditions and 'good to know' conditions.

One can be made aware of tornado warning, hazardous materials evacuations/shelter in place orders, police activity in your area requiring one to keep doors locked, flooding issues, water outages or boil water notices, and traffic issues.

The system is called locally Nac-Wise and may be accessed via the web at www.nacwise.com or (936) 715-3322. This is based on a software suite called Hyper-Reach.

The county and city use the software for emergency and non-emergency contacts of their employees or special teams such as SWAT. The other use is to notify local citizens of events of importance.

If you are signed up on the system and the National Weather Service issues a Tornado Warning, you will be called or texted if you are in the polygon warning area. All of the publicly available (white pages) landline numbers have been pulled from the DETCOG database and are in the system. Recently, during a tornado warning in the very northwest tip of the county, seven residences were called and warned of the possible event. Those seven were the only ones in the Tornado Watch polygon in Nacogdoches County.

Should you be signed up with the system and you are traveling through a city or county that uses this same system, you will be notified on your cell phone of possible emergency issues in that area.

You can sign up for calls, text messages or both on your cell phone. In addition, should you have a landline, you may also put it as a contact number. I have my cell phone, landline, and also set up where I will get a notification on my home computer should an alert come across.

Signing up is so easy a Cave Man or Rusty can do it! I went in on my cell phone last night and was signed up in less than three minutes. I first went to the Hyper-Reach

web page which is accessed by going to www.nacwise.com. This will open the hyper-reach sign-up web page.

Put in your municipality, street name, house number and zip code. Following that, you enter your name, language preference and if the person has special needs (such as assistance in evacuating), there is a check box for that. Finally, you enter the numbers that you prefer to receive the notification. Again, you can have all your cell phones receive a call and/or text plus you can have your landline receive a voice message if you so desire.

Once you have entered that information, you simply click on the "Submit" icon and you are registered.

If you desire to have the Hyper-Reach app for your cell phone, you can go to the app store and download it free. Once you get a notification on your app, you can share the notification with others should you so desire.


NAC
ALERT
Nacogdoches
the oldest town in Texas
Sign up for Emergency Alerts from the City of Nacogdoches.
WWW.NACWISE.COM
or call 936-715-3322 and follow the prompts
Scan to sign up!
English Spanish

Why Do Hams Contest? – and Why You Should Too

By Jim Edmondson, N5JGE

Background

Contesting or "radiosport" is a competitive activity where amateur radio operators try to contact as many other stations as possible in the contest period. Contest are sponsored by various amateur radio societies such as the ARRL, radio enthusiast magazines such as CQ Magazine and radio clubs such as Deutscher Amateur Radio Club (DARC). CQ Magazine claims that their World Wide SSB and CW contests are the largest in the world with 35,000 participants each.

Since there is no one organization that sets contest rules, contests can be quite different from the one another. However, there are some common factors. Competitors can operate individually or as a club. There is a specific information exchange that must be made both ways for a valid contact in a contest. Scoring is based on the number of contacts and "multipliers" – more on those later. Each operator must keep and submit a detailed log to get credit in the contest standings. Operators can also submit their log as a "checklog" which will not be scored for the contest. Rather, this allows the operators that they worked to get credit for the QSOs. (It is a good practice to submit a checklog if you make any contacts with contest participants, even accidentally.)

Contest are available for almost every amateur band and mode. CW, SSB and RTTY are the most popular modes and 80M, 40M, 20M, 15M and 10M are the most common HF bands. Contests are available for other modes, including PSK-31, FT8 and FT4, and other bands, including 160M, 6M, VHF and UHF.

Why Contest?

So, why do amateurs participate in contests? The most obvious reason is for the challenge of competing against other top operators for high score. While this takes good operating skills, it also takes stamina and dedication to stay on the air as long as possible up to the maximum time allowed by contest rules.

Some amateurs compete against their prior scores to track improvements in operating skill. Participating in contests can increase operator skills: by learning to efficiently use the capabilities of your station (rig, antenna, amplifier, software, etc.), learning how your signal propagates under different conditions, exchanging information quickly and accurately over the air and developing the stamina and focus

to keep operating over hours of intense activity. Your scores over the years help track your progress.

Other amateurs use contests to make many contacts in a short time period. Think about it – there are literally hundreds or thousands of ham radio operators that want to complete a QSO with you and they are on the air at the same time, on the same sub-bands and using the same mode! This is a great way to collect DXCC, grids, counties, etc. on new bands. These operators are called "casual contesters" because they are not competing for top score in the contest, but selectively making QSOs based on other criteria. State QSO parties are a great way to collect counties, while world-wide contests can yield that rare DX or grid.

While this might be considered sacrilegious among old school CW operators, contesting can help you make CW contacts without being proficient at CW. Many contesters rely on PC software to send the required exchange information via CW. Skilled CW operators can decode the replies by ear. Those less skilled at CW can use software to help decode gaps in their ear decoding. This works mostly because the exchanges are short and specified bits of information. Relying on software, however, might lead to more "busted" QSOs due to incorrect decoding – use with caution.

One possible benefit of contesting for high-level competitors is that it is an activity that can provide a way to experience "brain flow". In brain flow, you "are focused so intently on getting to the next level that you don't know what is going on around you. You have no sense of time passing. You feel great. You are 'in the zone'. [Brain] flow is a state of peak enjoyment that occurs when you are doing something that is difficult and you are highly skilled at …" according to Richard Huskey, Assistant Professor of Communication and Cognitive Science at University of California. Routinely experiencing brain flow can be good for your well-being – networking areas of the brain, warding off depression, preventing burnout and increasing resilience. All great reasons to put together that contesting station and improve your contesting skills!

Operating in a Contest

You can find a handy contest calendar at WA7BNM Contest Calendar: Home. You can also find upcoming contests in the Contest Corral column in *QST* each month, the *National Contest Journal* (NCJ) and ARRL's *Contest Update Newsletter*.

I'll use the next major SSB contest to illustrate how to operate in a contest. This is the NCJ North American QSO Party (NAQP). It is a good contest for beginners because it is only 12-hours long and is limited to 100W. The contest takes place 1800 UTC January 21 – 0559 UTC January 22, 2023. This gives you well over a month to get ready and try this contest.

Since this NAQP is SSB, the primary thing that you need to do is decide on logging software, learn to use it and to study the rules at the link below, I'll just hit the highlights here. I am most familiar with AC Log (N3FJP) and N1MM+, both of which support this contest. N1MM+ has a lot more capabilities, however, I found the learning curve to be quite steep. For casual contesting using SSB, I find that AC Log works very well.

The figure below is the NAQP contest summary from the WA7BNM Contest Calendar. The basic rules are shown here such as the mode, bands, operator classes, maximum operating hours, maximum power levels, exchange and scoring details. Most of this is self-explanatory. Contest standings and awards are determined for each operator class, for example Single Op QRP, Single Op Low, Single Op QRP Assisted, etc. Multi-Two means that for stations with multiple operators, only two transmissions can be made simultaneously on different bands. Single Ops can only operate for 10 of the 12 hours with breaks of at least 31 minutes between the previous and next QSOs. The exchange for North American stations is your name

North American QSO Party, SSB

Status:	**Active**
Geographic Focus:	North America
Participation:	Worldwide
Awards:	North America
Mode:	SSB
Bands:	160, 80, 40, 20, 15, 10m
Classes:	Single Op (QRP/Low) Single Op Assisted (QRP/Low) (starting in 2022) Single Op Overlay: Youth Multi-Two (Low)
Max operating hours:	Single Op: 10 hours Multi-Two: 12 hours
Max power:	LP: 100 watts QRP: 5 watts
Exchange:	NA: Name + (state/DC/province/country) non-NA: Name
Work stations:	Once per band
QSO Points:	NA station: 1 point per QSO non-NA station: 1 point per QSO with an NA station
Multipliers:	Each US state/DC (including KH6/KL7) once per band Each VE province/territory once per band Each North American country (except W/VE) once per band
Score Calculation:	Total score = total QSO points x total mults
E-mail logs to:	(none)
Upload log at:	http://www.ncjweb.com/naqplogsubmit/
Mail logs to:	(none)
Find rules at:	http://www.ncjweb.com/NAQP-Rules.pdf
Cabrillo name:	NAQP-SSB
Cabrillo name aliases:	

Future Dates	
1800Z, Jan 21 to 0559Z, Jan 22, 2023	Logs due: 0559Z, Jan 29
1800Z, Aug 19 to 0600Z, Aug 20, 2023	
1800Z, Jan 20 to 0600Z, Jan 21, 2024	
1800Z, Aug 17 to 0600Z, Aug 18, 2024	
1800Z, Jan 18 to 0600Z, Jan 19, 2025	
1800Z, Aug 16 to 0600Z, Aug 17, 2025	
1800Z, Jan 17 to 0600Z, Jan 18, 2026	
1800Z, Aug 15 to 0600Z, Aug 16, 2026	
1800Z, Jan 16 to 0600Z, Jan 17, 2027	
1800Z, Aug 21 to 0600Z, Aug 22, 2027	

and state for US stations, name and DC for Washington, DC, name and province for Canadian stations and name and country for other NA countries (eg: Mexico) and just name for non-NA entities.

Stations can only be worked once per band and each non-duplicate QSO counts 1 point. Logging software typically warns the operator when they try to enter a callsign that has already been worked, known as a "Dupe". Multipliers are given for each US state, DC, Canadian province and North American country (excluding US and Canada).

As a scoring example, let's say that you have worked 10 stations in 7 different states. This gives you a score of 10 times 7 or 70 points. Now, let's say that another operator worked 20 stations, but they were all in 3 states. That operator would only get 60 points, so the power of multipliers can be quite dramatic and different strategies can be used to maximize points if that is your goal. Some logging software will report the value of a new multiplier in terms of how many non-multiplier QSOs would be needed to increase your score by the same amount as one multiplier QSO.

To actually work the contest, you can pick a frequency and call CQ. This is called "Running". As in all aspects of ham radio, listen, listen, listen to other operators calling CQ and learn the cadence. The CQ call will typically include "Test" (for contest) or, in our example, "NAQP". If there are multiple contests ongoing it is better to be more specific and call CQ NAQP. An exchange might go like this:

CQ'ing Station: CQ NAQP XX5XXX
Answering Station: YY6YYY
CQ'ing Station: YY6YY this is Tom from Texas
Answering Station: XX5XXX this is Bob from California
CQ'ing Station: TU Bob CQ NAQP XX5XXX.

The other way to operate is to find stations that are calling CQ and answer them. This is called "Search and Pounce". The exchange is the same in both cases.

After the contest, you should import your log into your main logging software and export your log in the format required by the contest. This is usually "Cabrillo" format which the logging software will generate for you. Cabrillo files are usually uploaded to the contest log website or emailed to the sponsor.

That's it for the basics of contesting. It is kind of like football – once you make that first contact, you will be over your nervousness and get "in the zone". Give it a try!

Reference

Study Looks at Brain Flow, and How People Achieve It | UC Davis

Resources

NCJ NAQP Rules