Shark News

The Official Newsletter of CMARC

December 2021

From the Desk of the President:

At this time, I would like to thank everyone for a good year and Wish Everyone

A Very Merry Christmas and a Happy New Year.

Please be safe out there.

A little business currently it is time for our annual Dues. Please try to have them in by January 3, 2022. Use the form on the website with your dues it helps us keep the record up to date.

We are having the Eleventh Annual CMCARC Christmas Social at the Villas Dinner on December15, 2021, at 17:00 HRS (5:00 PM). If you would like to come out, PLEASE call me by radio or phone to save you a seat by December 7, 2021.

Please use the website, it will help all of us.

Respectfully submitted,

Robert H Myers Jr. KD2HIP

President CMCARC

- - - Tech Corner - - -

RF Power ???

RF (radio frequency) power is often described using confusing terms.
In this Tech Corner we will summarize some RF Power “Terms” we often hear.

As Amateur Radio Operators we are often asked (or we may ask) how much power
are you running? Often we will respond with and or hear the other operator say
(for example) 25 watts, or common on HF, 100 watts. Most of the time we state
a value out of our radio manual. Ok so to get to the point, there are many ways to
describe power. Power is most often in Amateur Radio referred to as Average Watts or (PEP) Peak Envelope Power, these two are different, we shall explore.

When power is just stated as “Watts” then by default it is understood to be “Average Watts” that being for example FM. Now if we are talking about HF (like 40 meters SSB) and someone answers with "100 Watts” then it is most often
accepted as PEP (Peak Envelope Power) but again these two are indeed different.

Now if you are a purest for electrical or electronic terminology then “Watts” just all by itself, is always “Average Watts”. There are times when someone will say Watts as “Power RMS”. This is <u>not</u> a correct term and when it is used the person is intending to mean “Average Power”. Now in FM and many digital modes there is less confusion, as power is almost always just plain old Watts and
is “Average Power”.

Ok now in plain AM (as does still exist on the low bands) when a transmitter is

active and transmitting a carrier, but the operator is NOT talking (no modulation)
then the output carrier level is just pure Watts, that being "Average Watts" power.
Again, both Watts (just by itself) and/or Average Power are the same.

Ok now we get to SSB (Single Side Band). SSB is a member of the AM family of modulation. When an operator of an SSB transmitter keys on the transmitter but has NOT yet spoken into the microphone, there is at that time ZERO power leaving the radio for the antenna. Its output power is just zero. So in SSB there
is no base carrier power level. RF power to the antenna does not appear until the operator speaks into the microphone. When the operator speaks into the microphone and RF now appears in the form of a side band only. It may be the lower side band (LSB) or the upper side band (USB), as selected.

Ok, now for either standard AM or SSB when the operator speaks into the microphone we now have a modulated RF output signal to the antenna. This voice modulated RF is a complex waveform that causes the RF going to the antenna to have many varied amplitude levels, some high and some low in amplitude. If we pick out sections of the RF signal (over time) that are high in amplitude level, this is when the laud speech or audio modulation peak positive components are present.

So at this point in the RF signal we are now looking at what is called the large RF envelope or peak envelope. At this point the RF is stronger with more RF power then when softer or lower levels of audio modulation are present. So at these high audio peak positive envelope points, if we measure (sample or capture) its average RF power, this is what is called PEP (Peak Envelope Power). It only lasts for short narrow periods of time of at least one complete RF power cycle, but typically is many RF cycles. Again, only when high audio modulation positive peak components are being transmitted.

SUMMARY

Its time to summarize and put the ribbons on these RF Power level tidbits.

Average Power or just Watts (W_{av}) are the following:

- An FM signal, regardless of modulation
- An AM signal with no modulation
- Many types of Digital signals.

Peak Envelope Power (PEP) in watts are the following:

- An AM signal at its Max high audio modulation
- An SSB signal at its Max high audio modulation

Average Power and Peak Envelope Power are only equal to each other for an FM signal or an un-modulated AM signal. This is because they both have a flat un-changing amplitude. (Also other modulation types with un-changing amplitude)

Last, but not least, there is no term called RMS power. There can be RMS voltage or RMS current but NOT RMS power. The product of RMS voltage times RMS current is Average power.

There is another term called “Peak Power” (not PEP), we have not covered this here. It is a form of instantaneous power. We can cover this at another time.

Please Note: if you see on a radio watt meter or on an antenna tuner reading called “PEAK”, this is most often actually PEP.

Any questions or thoughts on any of the above, just write me, call me or when you see me, lets talk. Many times I learn from folks who can better explain or clarify concepts.

As always, enjoy Amateur Radio.

Lou WA2GKH

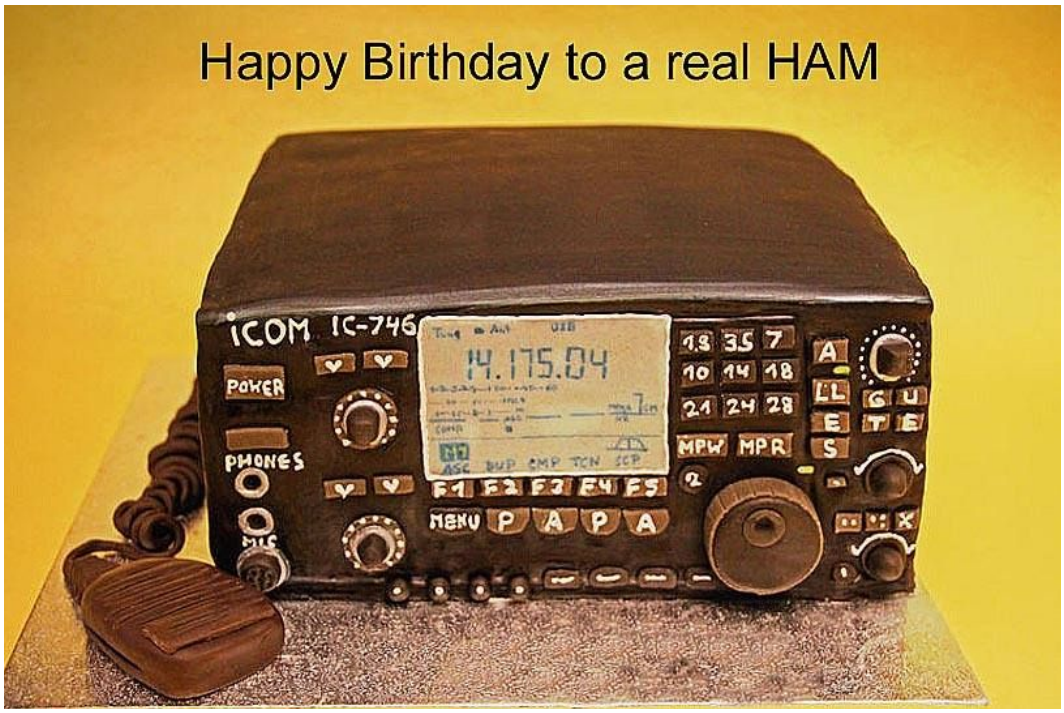
Remember, “Tech Corner” is yours. Please consider writing a piece for Tech Corner about your station, projects or what you are interested in.

Santa Net 2021 On The Air!

Every year on 3916 kHz, we give good little boys and girls a chance to talk to Santa Claus at the North Pole! It is indeed a magical experience to experience kids talking with Santa through the magic of Amateur Radio! The Santa Net is on the air every night, November 26, 2021 through December 24, 2021 at 2015 Hours Eastern. To participate in The Santa Net, just have your kids prepared to tell Santa their top 2-3 gift wishes.

For more information, go to : http://www.cqsanta.com and http://www.facebook.com/3916santanet

There is also one on All Star Network. Once I find out the day and time. I will pass along the information.



DECEMBER

Paul Wolcott W2JTD

Ronald Hinker KD2RZA

Ronald Isaacson N3TLQ

Robert Myers, Jr. KD2HIP

Cindy Russell K2WRF

Carl Schmoyer N3KED

ARRL NEWS

YOTA Month Continues to Expand into the Americas

11/30/2021

December is **YOTA Month**, celebrating and encouraging Youth On the Air. Amateur radio operators who are 25 years old and younger will be on the air as special event stations around the world throughout December in celebration of youth in amateur radio. YOTA Month stations will be on all bands and modes at various times.

In the US, the call signs will once again be K8Y, K8O, K8T, and K8A. Three new DXCC entities will be participating for the first time. Argentina will be active as LR1YOTA, Cuba as CO0YOTA, and Peru as OA0YOTA. Other countries may be added. Listen for these stations, as well as all call signs with YOTA suffixes.

Last year, 28 operators in the Americas participated in YOTA Month, and this year, Youth in the Americas anticipates an increased level of youth activity from South America. Last year, young hams around the world surpassed their goal of 100,000 contacts during YOTA Month, with a final tally of 137,000. Stations in the Americas logged 14,700 of those contacts.

Overlapping with YOTA Month is Round 3 of the YOTA Contest, which is on December 30, 2021, 1200 – 2359 UTC.

More information about YOTA Month is available on the **Youth on the Air** website, sponsored by Icom America.
For more information about YOTA Month participation in the Americas, **contact** YOTA Month Coordinator Bryant Rascoll, KG5HVO or assistant Kees Van Oosbree, W0AAE.

Slow-Scan TV Transmissions from ISS Set for December 1 – 2

11/29/2021

Russian cosmonauts on the International Space Station (ISS) plan to transmit slow-scan TV (SSTV) images on December 1 – 2 on 145.800 MHz FM using SSTV mode PD120.

The transmissions from RS0ISS will be part of the Moscow Aviation Institute SSTV experiment (MAI-75) and will originate in the Russian ISS Service Module (Zvezda) using a Kenwood TM-D710 transceiver. Transmissions are scheduled for December 1 from 1210 – 1910 UTC and December 2 from 1140 – 1720 UTC. Dates and times are subject to change.

The signal should be receivable on a handheld transceiver with a quarter-wave whip antenna. Use the widest channel spacing.

Predictions for ISS pass times are available on the AMSAT website. Visit the Amateur Radio on the International Space Station (ARISS) SSTV blog for **more information**.

ARISS-USA Announces New Senior Leadership

11/30/2021

The US segment of Amateur Radio on the International Space Station (**ARISS-USA**) has augmented its senior leadership team with five new members. In May 2020, ARISS-USA created a new 501(c)(3) nonprofit charitable organization to enhance and expand ARISS initiatives in the US. ARISS says the new membership will support the variety of new functions and roles within ARISS-USA.

Martin “Marty” Schulman, NV3H, will be Associate Director, working with Executive Director Frank Bauer, KA3HDO, in delegating routine tasks, enhancing perspective, and backing up the executive director as necessary. He will also serve as a member of the ARISS-USA Board of

Directors. Schulman has more than 30 years of experience in telecommunications, programming, and computer security, and is an active volunteer with the Sterling Park Amateur Radio Club (**SPARC**) in Virginia.

Tom Henderson, W9YW, has been named Secretary, with a primary duty of ensuring that the internal matters of the organization run smoothly and efficiently. He will record and keep the minutes of all meetings of the Board of Directors. Henderson will also serve as the custodian of the ARISS-USA minute book and additional books and records as the Board may direct. His background is in IT infrastructure and systems security research. He is currently the president of the Bloomington Amateur Radio Club (**BARC**) in Indiana.

Jena Dunham, KE0AOA, will serve as Director of Volunteer Resources and be responsible for recruiting, training, and retaining volunteers, which are necessary to ARISS-USA's mission. She will also maintain the volunteer database, manage subscriptions to the mailing lists, and generate policies regarding volunteer conduct. Dunham is an experienced nurse practitioner in Kansas and has served as a volunteer for 4-H (America's largest youth development organization) and the Stormont Vail Hospital system.

Rita DeHart, KC4RMS, has been tapped as Director of Public Engagement. DeHart will be responsible for raising public awareness of the ARISS program. This includes the management of all means of communication with the public. She will also be responsible for managing conference participation. She has 46 years of experience in the electric power industry and is an active member of the Tampa Amateur Radio Club (**TARC**) in Florida.

Randall "Randy" Berger, WA0D, will be the Director of Engineering and be responsible for planning and executing the development of hardware and software systems that will enhance the primary goals of ARISS-USA, specifically STEAM (science, technology, engineering, the arts, and mathematics) education and backup communication for crew members on human spaceflight vehicles. His scope of engineering involvement will

support the efforts of ARISS and includes everything within the engineering purview of ARISS, such as ham radio on the ISS, the Lunar Gateway project, satellite development, and future government and commercial space ventures. Berger is an experienced technology officer and has been involved with amateur radio since the 1970s.

In addition to Executive Director Bauer, the new team members will join Treasurer Carol Jackson and Director of Education Kathy Lamont, KM4TAY. The senior leadership team will also work closely with long-time ARISS-US delegates Rosalie White, K1STO (ARRL), and Dave Taylor, W8AAS (AMSAT).

The Director of Business Development and Director of Operations positions currently remain vacant.

Saturday, December 4, 2021 @ 0000 to 2359 Hours UTC
https://www.weather.gov/crh/skywarnrecognition
SKYWARN Recognition Day was developed in 1999 by the National Weather Service and the American Radio Relay League. It celebrates the contributions that SKYWARN volunteers make to the NWS mission, the protection of life and property. Amateur radio operators comprise a large percentage of the SKYWARN volunteers across the country. The Amateur radio operators also provide vital communication between the NWS and emergency management if normal communications become inoperative. All SKYWARN spotters provide critical weather information before, during and after adverse weather strikes. This includes reports of rain and snow, ice and wind, storms and tornadoes, flooding and fire. This is our 24 hours to recognize all of the SKYWARN spotters serving our nation!

Local CMC Skywarn Weather Net at 19:30 HRS on 146.610 PL 88.5 (NCS N2JAI Bill or NCS KC2AAX Pete)

December 2021 Contest Calendar WA7BNM Contest Calendar : https://www.contestcalendar.com

+ QRP Fox Hunt	0200Z-0330Z, Dec 1
+ Phone Weekly Test - Fray	0230Z-0300Z, Dec 1
+ CWops Mini-CWT Test	1300Z-1400Z, Dec 1
+ VHF-UHF FT8 Activity Contest	1700Z-2000Z, Dec 1
+ CWops Mini-CWT Test	1900Z-2000Z, Dec 1
+ Walk for the Bacon QRP Contest	0000Z-0100Z, Dec 2 and 0200Z-0300Z, Dec 3
+ QRP ARCI Topband Sprint	0000Z-0300Z, Dec 2
+ CWops Mini-CWT Test	0300Z-0400Z, Dec 2
+ CWops Mini-CWT Test	0700Z-0800Z, Dec 2
+ RTTYOPS Weeksprint	1700Z-1900Z, Dec 2
+ NRAU 10m Activity Contest	1800Z-1900Z, Dec 2 (CW) and 1900Z-2000Z, Dec 2 (SSB) and 2000Z-2100Z, Dec 2 (FM) and 2100Z-2200Z, Dec 2 (Dig)
+ SKCC Sprint Europe	2000Z-2200Z, Dec 2
+ NCCC RTTY Sprint	0145Z-0215Z, Dec 3
+ QRP Fox Hunt	0200Z-0330Z, Dec 3
+ NCCC Sprint	0230Z-0300Z, Dec 3

+ K1USN Slow Speed Test	2000Z-2100Z, Dec 3
+ ARRL 160-Meter Contest	2200Z, Dec 3 to 1600Z, Dec 5
+ UFT Meeting	0500Z-0800Z, Dec 4 and 1500Z-1800Z, Dec 4 and 0700Z-1000Z, Dec 5
+ Wake-Up! QRP Sprint	0600Z-0629Z, Dec 4 and 0630Z-0659Z, Dec 4 and 0700Z-0729Z, Dec 4 and 0730Z-0800Z, Dec 4
+ PRO CW Contest	1200Z, Dec 4 to 1159Z, Dec 5
+ Two-Meter Classic Sprint	1300Z-1330Z, Dec 4
+ INORC Contest	1400Z, Dec 4 to 1359Z, Dec 5
+ FT Roundup	1800Z, Dec 4 to 2359Z, Dec 5
+ K1USN Slow Speed Test	0000Z-0100Z, Dec 6
+ OK1WC Memorial	1630Z-1729Z, Dec 6
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Dec 7
+ ARS Spartan Sprint	0200Z-0400Z, Dec 7
+ RTTYOPS Weeksprint	1700Z-1900Z, Dec 7
+ NAQCC CW Sprint	0130Z-0330Z, Dec 8
+ QRP Fox Hunt	0200Z-0330Z, Dec 8
+ Phone Weekly Test - Fray	0230Z-0300Z, Dec 8
+ CWops Mini-CWT Test	1300Z-1400Z, Dec 8
+ VHF-UHF FT8 Activity Contest	1700Z-2000Z, Dec 8
+ CWops Mini-CWT Test	1900Z-2000Z, Dec 8
+ CWops Mini-CWT Test	0300Z-0400Z, Dec 9
+ CWops Mini-CWT Test	0700Z-0800Z, Dec 9

+ RTTYOPS Weeksprint	1700Z-1900Z, Dec 9
+ NCCC RTTY Sprint	0145Z-0215Z, Dec 10
+ QRP Fox Hunt	0200Z-0330Z, Dec 10
+ NCCC Sprint	0230Z-0300Z, Dec 10
+ K1USN Slow Speed Test	2000Z-2100Z, Dec 10
+ PODXS 070 Club Triple Play Low Band Sprint	0000Z, Dec 11 to 2359Z, Dec 13
+ ARRL 10-Meter Contest	0000Z, Dec 11 to 2400Z, Dec 12
+ TRC Digi Contest	0600Z, Dec 11 to 1800Z, Dec 12
+ SKCC Weekend Sprintathon	1200Z, Dec 11 to 2400Z, Dec 12
+ ARI 40/80 Contest	1300Z, Dec 11 to 1300Z, Dec 12
+ International Naval Contest	1600Z, Dec 11 to 1559Z, Dec 12
+ QRP ARCI Holiday Spirits Homebrew Sprint	2000Z-2300Z, Dec 12
+ CQC Great Colorado Snowshoe Run	2100Z-2259Z, Dec 12
+ K1USN Slow Speed Test	0000Z-0100Z, Dec 13
+ 4 States QRP Group Second Sunday Sprint	0100Z-0300Z, Dec 13
+ OK1WC Memorial	1630Z-1729Z, Dec 13
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Dec 14
+ RTTYOPS Weeksprint	1700Z-1900Z, Dec 14
+ QRP Fox Hunt	0200Z-0330Z, Dec 15
+ Phone Weekly Test - Fray	0230Z-0300Z, Dec 15
+ CWops Mini-CWT Test	1300Z-1400Z, Dec 15
+ CWops Mini-CWT Test	1900Z-2000Z, Dec 15

+ Walk for the Bacon QRP Contest	0000Z-0100Z, Dec 16 and 0200Z-0300Z, Dec 17
+ CWops Mini-CWT Test	0300Z-0400Z, Dec 16
+ CWops Mini-CWT Test	0700Z-0800Z, Dec 16
+ RTTYOPS Weeksprint	1700Z-1900Z, Dec 16
+ NCCC RTTY Sprint	0145Z-0215Z, Dec 17
+ QRP Fox Hunt	0200Z-0330Z, Dec 17
+ NCCC Sprint	0230Z-0300Z, Dec 17
+ AGB-Party Contest	1600Z-1700Z, Dec 17
+ Russian 160-Meter Contest	1800Z-2200Z, Dec 17
+ K1USN Slow Speed Test	2000Z-2100Z, Dec 17
+ OK DX RTTY Contest	0000Z-2400Z, Dec 18
+ RAC Winter Contest	0000Z-2359Z, Dec 18
+ Feld Hell Sprint	0000Z-2359Z, Dec 18
+ ARRL EME Contest	0000Z, Dec 18 to 2359Z, Dec 19
+ Padang DX Contest	1200Z, Dec 18 to 1159Z, Dec 19
+ Croatian CW Contest	1400Z, Dec 18 to 1400Z, Dec 19
+ Stew Perry Topband Challenge	1500Z, Dec 18 to 1500Z, Dec 19
+ ARRL Rookie Roundup, CW	1800Z-2359Z, Dec 19
+ Run for the Bacon QRP Contest	2300Z, Dec 19 to 0100Z, Dec 20
+ K1USN Slow Speed Test	0000Z-0100Z, Dec 20
+ OK1WC Memorial	1630Z-1729Z, Dec 20
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Dec 21
+ RTTYOPS Weeksprint	1700Z-1900Z, Dec 21

+ SKCC Sprint	0000Z-0200Z, Dec 22
+ NAQCC CW Sprint	0130Z-0330Z, Dec 22
+ Phone Weekly Test - Fray	0230Z-0300Z, Dec 22
+ CWops Mini-CWT Test	1300Z-1400Z, Dec 22
+ CWops Mini-CWT Test	1900Z-2000Z, Dec 22
+ CWops Mini-CWT Test	0300Z-0400Z, Dec 23
+ CWops Mini-CWT Test	0700Z-0800Z, Dec 23
+ RTTYOPS Weeksprint	1700Z-1900Z, Dec 23
+ NCCC RTTY Sprint	0145Z-0215Z, Dec 24
+ NCCC Sprint	0230Z-0300Z, Dec 24
+ K1USN Slow Speed Test	2000Z-2100Z, Dec 24
+ Gedebage CW Contest	1200Z, Dec 25 to 1159Z, Dec 26
+ RAEM Contest	0000Z-1159Z, Dec 26
+ DARC Christmas Contest	0830Z-1059Z, Dec 26
+ K1USN Slow Speed Test	0000Z-0100Z, Dec 27
+ QCX Challenge	1300Z-1400Z, Dec 27
+ OK1WC Memorial	1630Z-1729Z, Dec 27
+ QCX Challenge	1900Z-2000Z, Dec 27
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Dec 28
+ QCX Challenge	0300Z-0400Z, Dec 28
+ RTTYOPS Weeksprint	1700Z-1900Z, Dec 28
+ QRP Fox Hunt	0200Z-0330Z, Dec 29
+ Phone Weekly Test - Fray	0230Z-0300Z, Dec 29
+ CWops Mini-CWT Test	1300Z-1400Z, Dec 29
+ CWops Mini-CWT Test	1900Z-2000Z, Dec 29
+ CWops Mini-CWT Test	0300Z-0400Z, Dec 30
+ CWops Mini-CWT Test	0700Z-0800Z, Dec 30

+ YOTA Contest	1200Z-2359Z, Dec 30
+ RTTYOPS Weeksprint	1700Z-1900Z, Dec 30
+ NCCC RTTY Sprint	0145Z-0215Z, Dec 31
+ QRP Fox Hunt	0200Z-0330Z, Dec 31
+ NCCC Sprint	0230Z-0300Z, Dec 31
+ Bogor Old and New Contest	0900Z-2359Z, Dec 31
+	

Southern NJ Section News December 2021

Tom Preiser N2XW SNJ Section Manager
n2xw@arrl.org

I hope everyone had a great Thanksgiving. Now its time to think about Christmas. I hope you all get a little something Ham-Radio related for Christmas.

ARRL Club Newsletter

On Tuesday November 23rd the ARRL published the ARRL Club Newsletter. The last time that this newsletter was published was December 2009. Some folks over the years have made the comment that clubs are dead. That is not the sentiment of today's ARRL leadership. Clubs are an essential part of the success of our organization, and we want to help them in any way that we can. Progress is often a challenge for many folks, and the way to help them with that is most often communication. If we know what is happening, we have the chance to adjust as we go. The best way for us to move forward together is to communicate from Headquarters to the field and for the field to have a way to communicate to ask questions and get answers from us. This newsletter will highlight some of the great things that clubs are doing. We want your feedback, and we want to know how your club is dealing with an ever-changing world. Let us know. Send your feedback to clubs@arrl.org (Mike Walters W8ZY)

Make sure your club is sending a copy of your newsletter to clubs@arrl.org . Congratulations to the South Jersey Radio Association in having one of your newsletter articles published in the first edition.

Skywarn Recognition Day

Skywarn recognition day will be December 4, 2021 from 0000z to 2400z. Check out the Skywarn Recognition Day website for more information on how to participate. https://www.weather.gov/crh/skywarnrecognition (Dennis Dura K2DCD)

Ham Test Prep Classes Set to Begin

It's been in the planning stages for a while now, but we are finally ready to announce the start date of the GCARC FCC License Test Preparation Classes. The program, which will be headed up by Chris AD2CS, is slated to begin on Monday January 3, 2022 with a Technician class. The General class will start on Tuesday January 4, 2022, with the Amateur Extra class firing up that same week, on Friday January 7, 2022. Each class will run for eight weeks, making the finish dates for the inaugural class February 28, March 1, and March 4. This is no coincidence, as the scheduled GCARC VE FCC Exam Session is Thursday, March 11.

Classes will run, as was already stated, for eight weeks, seven of which will be instructional in nature, and the eighth week being a student-driven review session. Chris AD2CS will be the lead instructor and will be ably assisted by Gary N2QEE, Chuck WA2TML, and Jim N2GXJ. All of these instructors hold Amateur Extra licenses. From time to time, there may be some specific topic help provided by other club members. Class times will be confirmed as the start date draws nearer, but you can expect the sessions to run 2-1/2 to 3 hours, and generally starting at 1800 hrs local time. Breaks will be provided during the sessions.

The student cost for the class is a modest $15.00. Every student will receive a copy of an excellent exam prep study guidebook (valued at about $20) as well as an electronic copy of the applicable question pool. It is recommended that the student bring a flash drive to the first class onto which the study guide question pool will be loaded.

There will also be assorted classroom handouts provided to enhance learning. Every student is encouraged to bring a notebook and pen(s), and to be prepared to take some notes.

The classes are open to anyone with an interest in getting licensed as a ham radio operator or who is looking to upgrade an existing license. The sessions will be held in the GCARC clubhouse at the 4H Fairgrounds on NJ Route 77 in Mullica Hill, NJ. Students who successfully complete the program will be issued a Certificate of Achievement for having done so.
Interested individuals, or anyone who needs more information should reach out to Chris AD2CS at 1-856-689-6783 or at ad2cs@arrl.net.

Lastly Best Wishes to everyone for a Happy and Safe Holiday Season. Looking forward to a New Year with good propagation and many amatuer radio contacts. (N2XW)

December

National Fruitcake Month

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 Advent Day	2 Cyber Monday	3 Make a Gift Day	4 National Cookie Day	5 Bathtub Party Day	6 St. Nicholas Day	7 Earmuff Day
8 Candle Lighting Day	9 Pastry Day	10 Lager Day	11 International Mountain Day	12 Gingerbread House Day	13 Salesperson Day	14 Day of the Horse
15 Cat Herders Day	16 Chocolate Covered Anything Day	17 Maple Syrup Day	18 Bake Cookies Day	19 Re-Gifting Day	20 Sangria Day	21 Humbug Day
22 Date Nut Bread Day	23 Festivus	24 Egg Nog Day	25 Christmas Day	26 Candy Cane Day	27 Make Cut Out Snowflakes Day	28 Chocolate Day
29 Tick Tock Day	30 Bacon Day	31 New Years Eve				

DailyHolidayBlog.com


DECEMBER 7, 1941
PEARL HARBOR
REMEMBRANCE DAY
75th Anniversary of Pearl Harbor


#NationalGuardBirthday
December 13th
National Day
NATIONAL GUARD
ALWAYS READY ALWAYS THERE
National Guard Birthday
www.NationalDayCalendar.com

Seasons Greeting Everyone, it has been so much fun making this newsletter for the club. I do appreciate all of the support from everyone and also Lou, thank you for always having interesting article for Tech Corner. If this your first time seeing the Club Newsletter, Welcome. Please remember this is a Club News Letter, so any comments, questions or suggestions are welcomed. Please let me know.
I hope everyone has a Merry Christmas and Happy Healthy 2022.

A Ham's Night Before Christmas
https://youtu.be/c_9REVC4dtc

THIS SPACE FOR “RENT” (aka Call For Articles)

For “Rent”? Sort of... Rather, do you have any news of interest to the SHARK readers. Have you run across Some amateur radio related news items? How about links to homebrew projects or new equipment?
Have you worked or played with a new technology.
Or maybe you’re one of the more experienced operators in our community.

You don’t have to be a Pulitzer Prize winner to submit an article. I’ll take anything, but would love to get articles that are at least two pages in length (single-spaced). Photos are great, too! Please remember, any submissions
need to be free of copyrights. Creative Commons are okay, but I will need references to be able publish them with attribution.
Thanks & 73 DE KB2YJD, Editor