CrossTalk

Issue 62:07 62 Years Of Service To Our Community July 2021

2021 Club Officers

President :	**Anthony Starr, K3TS**
Vice President :	**Jeffrey Welsh, KD2AZI**
Treasurer :	**Alan Arrison, KB2AYU**
Recording Secretary :	**Karl Frank, W2KBF**
Corresponding Secretary :	**Ronald Block, NR2B**

Trustees - 4 year term

Charles Lanard, KD2EIB	***(2018-2021)***
James Wright, N2GXJ	***(2019-2022)***
Mark Gottlieb, KK2L	***(2020-2023)***
Robert Fields, KC6AOH	***(2021-2024)***

Board of Directors - 3 year term

Jeffrey Garth, WB2ZBN	***(2019-2021)***	**Herb Dyer, KT2Y**	***(2020-2022)***
James Clark Sr, KA2OSV	***(2021)***	**Charles Colabrese, WA2TML**	***(2021-2023)***
Robert Durham, W2RAD	***(2020-2022)***	**William Price, NJ2S**	***(2021-2023)***

This Month's Calendar

General Membership Meeting
Wednesday, July 7, 2021 @ 1930
In-Person & ZOOM
Pfeiffer Community Center

Tech Saturday Forum
Saturday, July 10, 2021 @ 0900
W2MMD Clubhouse

Board of Directors Meeting
Wednesday, July 21, 2021 @ 1900
W2MMD Clubhouse

Monday Night 2 Meter Digital Training Net
Restarting on Monday, July 12 @ 1900

Tuesday Night 10 Meter Rag Chew Net
Every Tuesday @ 2000 - 28.465 MHz

Tuesday Morning 2 Meter Rag Chew Net
Every Tuesday @ 1100

Thursday Night 2 Meter Rag Chew Net
Every Thursday @ 2000

147.180 MHz & EchoLink : W2MMD-R

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President's Message

By the time most of you read this, **Field Day 2021** will be history, but as I write this, it is but a few days away. Almost every piece of HF gear I own (except for the amplifiers) are packed away in my camper, along with four or five antennas, an AB-577 mast from **AB2E**, lots of tools, cables, and hardware, and just about anything else that I think we might possibly need. If there is one word which sums up Field Day perfectly, it is **PREPARATION**. If you have good preparation, you will have a good chance at having a great Field Day. To say that I am anxious, and chomping at the bit, would be entirely appropriate. Field Day is by far my favorite amateur radio event of the year.

Speaking of annual events, another one that I am very fond of is held over the first week in July every single year. It is the **13 Colonies (http://www.13colonies.us)** event, and I not only love working it, but I am also one of the operators for **K2I**, the **New Jersey** station. The idea is to work all 13 Colonies, plus the 2 bonus stations, and earn a nice certificate. It is a lot of fun, and from our location here on the East Coast, it is relatively easy to work them all. I routinely do it on the first day or two of the event, often just using the 40 meter band. I encourage all of you to check it out. You can look for the spots on **DX Summit (http://dxsummit.fi)** or **eHam.net (https://www.eham.net)**. Go to the **QRZ** page of **KU2US (https://www.qrz.com/lookup/ku2us)** for more information. You will not regret it.

During the month of June we held our first in-person General Membership and Board of Directors meetings of the year, and both were quite successful and enjoyable. The ZOOM meetings got us through the COVID era and allowed us to stay active and keep the Club together, but even as convenient as they were, they paled in comparison to an in-person meeting. I for one am very happy to be able to get back to meeting in person, and I look forward to being able to keep doing it, especially now that the weather is nice. Maybe in the winter time if a blizzard is upon us, we can do another ZOOM meeting, but for now, I am happy to do them in person once again. And for those who cannot make it, we are committed to having a live ZOOM simulcast of the meetings, so we will have the best of both worlds.

For those of you with VHF capability, the summer E-skip season has been perking up lately, with many reporting 6 meter contacts to Europe. If you are looking to increase your VHF DX totals, now is the time to do it, as the E-Skip season is a short one. Someday I am going to put up that 6m beam that is in my shed, but for now, just let me know if any of you work any good ones. It may encourage me to get that job done!

This month, we welcome back **Gene Schoeberlein, AA2YO**, of West Deptford, who is returning to GCARC after a brief absence from the Club. Great to have you on board.

That is about all I have for this month. I hope all of you are having a great summer, and are getting your antennas in shape for the fall DX season. And don't forget the NAQP phone and CW contests next month in August. They are a blast to operate and you don't need big power or big antennas. Until then, 73 and hope to see you all at the next meeting.

de K3TS

General Membership Meeting

Wednesday, July 7, 2021 @ 1930 Hours

Pfeiffer Community Center

Williamstown, NJ

The Meeting Will Also Be Broadcast Live Via ZOOM
All members will be e-mailed the ZOOM log-in instructions

Welcome Back Former Club Member :

Eugene Schoeberlein, AA2YO, who has an Amateur Extra Class license and lives in West Deptford Township, NJ. Gene started with the Club in 1995. Gene is a prolific 40M CW Field Day operator and former CrossTalk editor.

We are glad to have you as a member of the Club and hope to see you regularly at Club meetings, events, and activities. We hope to hear you on the Monday night 10M Rag Chew Net. Also on the Monday night Digital Training Net, the Tuesday mornings and Thursday nights 2M Rag Chew Nets on our 2M Repeater or EchoLink node : W2MMD-R.

Need a ride to a Club meeting, event, or activity?

Just send a message to the Club's e-mail reflector asking if a member can pick you up

GCARC <*at*> MAILMAN <*dot*> QTH <*dot*> NET

All Club members have access to this FREE e-mail service

w2mmd.org

www.facebook.com/W2MMD

twitter.com/w2mmd_gcarc

Facebook

Tech Saturday Forum
July 10, 2021 @ 0900 Hours
W2MMD Clubhouse

Q&A Open Session and Socializing

We would like to invite all of our new members as well as our veteran members to our Tech Saturday Forums to help answer any questions and discuss any and all issues the new members have come across as they progress through the ***Amateur Radio Experience.***

The Discussion Theme is a QSO starting point - a way to initiate a conversation. All Tech Saturdays are an open QSO of all subjects of Amateur Radio interest.

All questions are welcome as well as a venue for hams to show off their latest ham radio projects or gadgets. Have a problem programming that HT, we can help! Not sure what radio or antenna to buy, we can help!

All Club Members who would like Clubhouse access to use its radio equipment would have to have some brief "Elmering" on the Clubhouse rules, such as using the alarm system, the A/C and heaters, the antenna system, and the radio equipment.

All are welcome - Hams and Non-Hams - Club Members and Non-Club Members. Take a guided tour of our Clubhouse. Visit our HF and VHF/UHF/Satellite Operation Facilities and our vast antenna farm.

Tuesday Morning 2M Rag Chew Net
1100 Hours
Net Control Hosts : Steve, W2SEF & Greg, W5DO
147.180 MHz Repeater & EchoLink - W2MMD-R
If you would like to be a control operator for this net, please contact Steve, W2SEF

Club Elmers

We are still looking for some more Club Elmers. If you would to add your name to the Elmer's List, send your specialty to w2mmdgcarc@gmail.com. Here is what we have so far :

- **Tony Starr, K3TS : Antenna construction, contesting, and CW**
- **Ken Bozarth, KN2U : Antennas**
- **Jeff Welsh, KD2AZI : Boat anchor repair and operation, Raspberry Pi, Arduino, Python, POTA, Mobile Installation & Operating**
- **Karl Frank, W2KBF : Digital Messaging (FLDIGI, Winlink)**
- **Herb Dyer, KT2Y : DMR radios and programming**
- **Ron Block, NR2B : Lightning protection and grounding**

DA's and DIT's

>>**Gary Reed, N2QEE,** reports : The VE group is awaiting the approval of the use of the Franklinville Library for the second Thursdays of the month. Hopefully we will know in July.

The **Southern Counties Amateur Radio Association (SCARA - http://www.k2br.com)** has scheduled VE sessions July 1, 2021 and August 8, 2021 at the Anthony Canale Training Center, 5033 English Creek Avenue, Egg Harbor Township, NJ 08234.

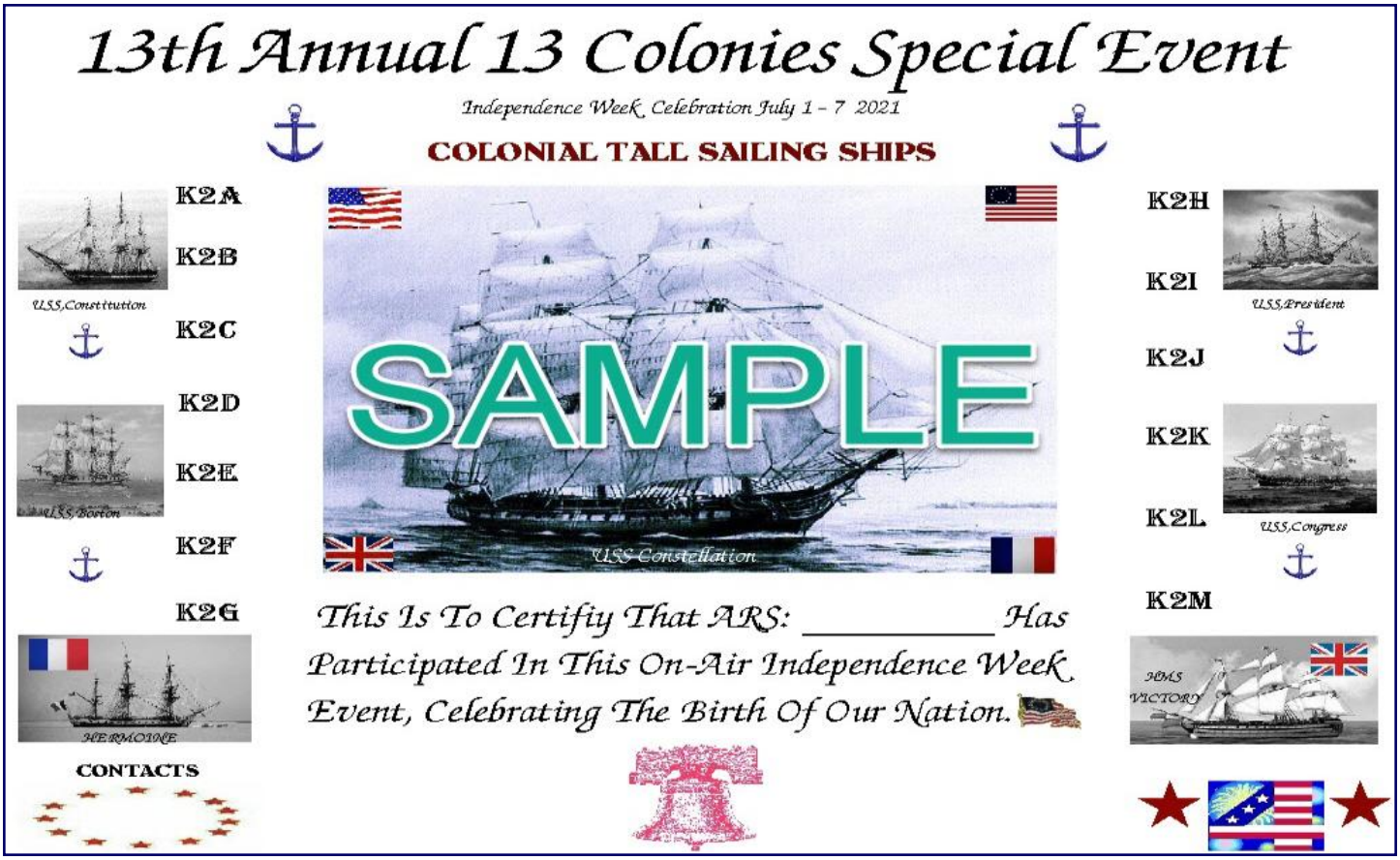
The contact is Lawrence Schall - 609-287-5340 - kb2mn@arrl.net. There are no walk-ins.

>>**Darrin Malone, KD2ALQ,** reports : Technician license classes will be in October and November. Probably Tuesday and Thursday nights 7pm to 9pm with review/test on Saturday morning in November. Looking to run about 4 or 5 weeks. Putting classes together now. Classes will be at the Vineland OEM building. Darrin can be e-mailed at : dbuggsy66@comcast.net.

>>Congratulations to Club Member **Gregg Valentine Sr, KD2VBH**, who upgraded to a General Class license.

>>Condolences to the **Southern Counties Amateur Radio Association (SCARA)** on the passing of club member **Barry Hovey, N2FSG**.

>>**Bob Keogh, KD2NEC** is trying to organize a **Community Emergency Response Team (CERT).** Contact Bob if you wish to participate in this project.



ARRL Southern NJ Section News : July 2021

Tom Preiser N2XW SNJ Section Manager
n2xw@arrl.org

Field Day Successful

Field Day was very successful through out Southern New Jersey. Many clubs were outside and had stations set up. It was good to see everyone interacting with each other and I had a good time talking with everyone. There is so much expertise in so many areas of amateur radio to be found in our area. Whatever your interests are I am sure you can find it at one or more of the clubs in South Jersey.

There were new hams that were getting involved as well as those who had been away from the hobby for a while. Both Tom Devine WB2ALJ, Section EC and myself made visits to almost all of the cubs that were outside and participating. Thank you to all for welcoming us at each site. I am proud of our section for the outstanding performance on Field Day.

Revitalization of Field Services with New Organization

The Field Services that ARRL HQ provides to its member-volunteers is now in the spotlight with a reorganization and a fresh start to Section Manager and Affiliated Club engagement!

The backbone of ARRL, and the Amateur Radio Service, is the expansive field organization of volunteers. This is especially true of our Board members, our "first among peers," who provide leadership to this vast network of engaged volunteers.

During a marathon series of Zoom calls on Wednesday, June 9 with ARRL Section Managers and most ARRL Board members in attendance, the restructuring of the Field Services organization at HQ was announced.

Bob Naumann, W5OV, who has a lifetime of experience as a radio amateur from contesting, to public service, to working with a number of well-known industry retailers, is now serving as the Director of Operations following the retirement of Norm Fusaro, W3IZ. Mike Walters, W8ZY, who has been involved with field volunteers for many years and is currently the Section Emergency Coordinator (SEC) for Connecticut, is now serving as the Field Services Manager. Bart Jahnke, W9JJ, who was managing Field Services, remains responsible for Radiosport and is also taking on the role of Regulatory & Advocacy following the retirement of Dan Henderson, N1ND. The meetings went on to discuss the focus the ARRL Board has placed on Field Services, working to create a new standing committee to oversee its revitalization and growth. Also discussed were the initiatives being undertaken with Section Managers to foster collaboration, share content, undertake projects, and set expectations.

The first project will be a focused census that a dozen Section Managers across the country will be driving with local clubs to understand the disparity between the ever-growing number of licensed hams versus the unchanging number of active hams.

We are very excited to turn the page and begin this new chapter for Field Services, and to continue forward with our digital transformation of ARRL.

Digital Training Net
147.180 MHz Repeater & EchoLink : W2MMD-R
Every Monday @ 1900 Hours

Starting on July 12, 2021, Gary WA3SVW will be teaching a course on WinLink

The Digital Training Net will be on hiatus from June 14 to July 5.

WinLink Information Resources

WinLink Website : https://winlink.org

Installing WinLink And Creating Your Account - A Quick Start Guide YouTube Video : https://youtu.be/qSLghO6RgFU

Quick Setup Guide For VARA FM PDF : https://winlink.org/sites/default/files/RMSE_FORMS/vara_fm_for_winlink_with_signalink_on_windows_v4_0.pdf

VARA FM Software Download Website : https://rosmodem.wordpress.com

Bob KD2NEC suggests viewing K4REF videos on YouTube for information about WINLINK : https://www.youtube.com/user/K4REF/videos

Wednesday Weekly WinLink Exercise - Southern New Jersey Section EmComm Forum https://arrlsouthernnewjerseysection.boardhost.com/index.php

Thursday Night 2 Meter Rag Chew Net
147.180 MHz Repeater
EchoLink : W2MMD-R
Every Thursday @ 2000 Hours

This net has an alternating net control operator
Here is the schedule for the upcoming weeks

Jeff Garth, WB2ZBN : July 1, 2021
Greg Ciraula, W5DO : July 8, 2021
Mary Delemarre, W2TDS : July 15, 2021
Steve Farney, W2SEF : July 22, 2021
Gary Mirkin, WA3SVW : July 29, 2021
Jeff Garth, WB2ZBN : August 5, 2021
Greg Ciraula, W5DO : August 12, 2021
Mary Delemarre, W2TDS : August 19, 2021
Steve Farney, W2SEF : August 26, 2021
Gary Mirkin, WA3SVW : September 2, 2021

If anyone would like to be a net control operator, please notify Jeff WB2ZBN

Regional (Atlantic & Hudson Divisions) Hamfests & Events

July 3, 2021 : Harrisburg Radio Amateurs Club, Firecracker Hamfest & ARRL PA State Convention, Harrisburg Postal Employees Picnic Grounds, 1500 Roberts Valley Road, Harrisburg, PA. **www.w3uu.org**

July 4, 2021 : Murgas Amateur Radio Club, Hamfest & Computerfest, Polish American Veterans, 2 South Oak Street, Plains, PA. **www.murgasarc.org**

July 10, 2021 : Raritan Valley Radio Club, W2QW 2021 Hamfest, Piscataway High School, 110 Behmer Road, Piscataway, NJ. **www.w2qw.org**

July 10, 2021 : Radio Amateurs of Greater Syracuse, RAGS Hamfest 2021, Camillus Elks Lodge #2367, 6117 Newport Road, Camillus, NY. **www.ragsclub.org**

July 10, 2021 : Wattsburg Wireless Association, 2021 NW PA Hamfest, Greene Township Municipal Building, 9333 Tate Road, Erie, PA. **www.wattsburg-wireless.us**

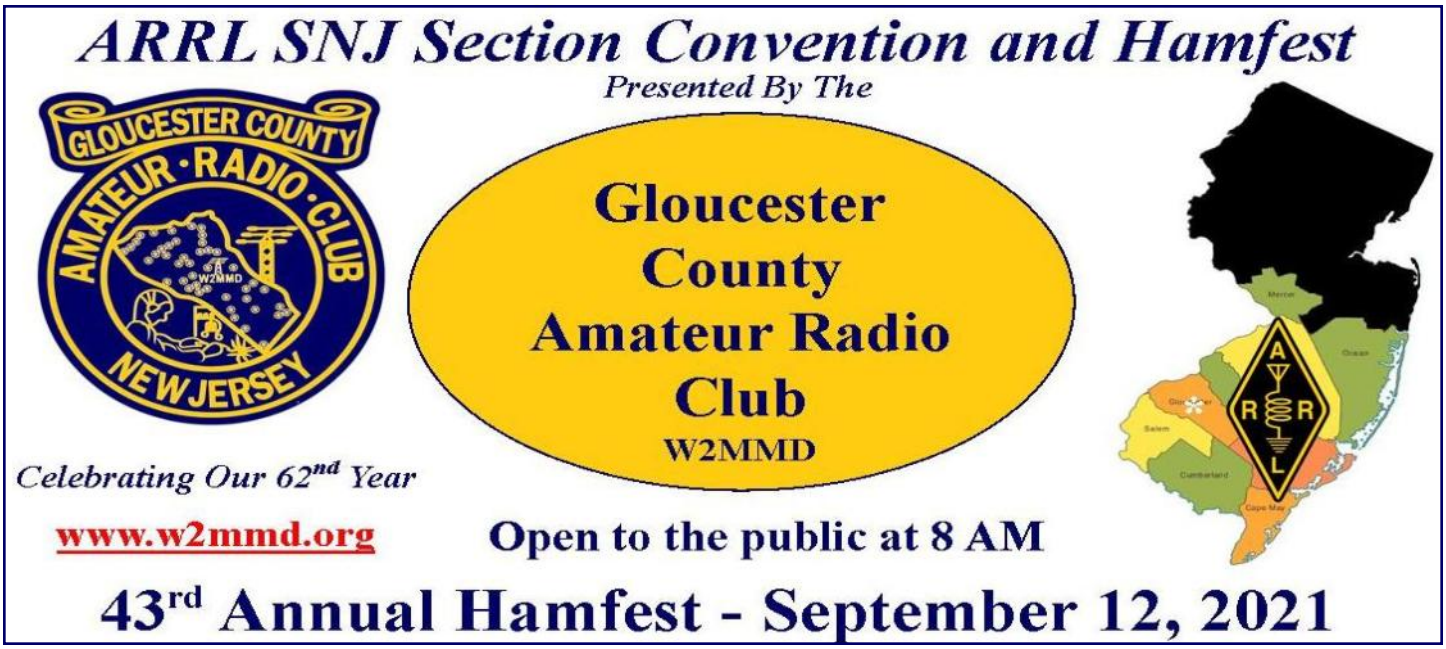
July 17, 2021 : Lancaster Amateur Radio Club, Batavia Hamfest, Alexander Firemen Grounds, 10708 Alexander Road, Alexander, NY. **www.w2so.org**

July 17, 2021 : Mid-Atlantic Amateur Radio Club, 2021 MARC Hamfest, Kimberton Fire Company Grounds, 742 Pike Springs Road, Kimberton, PA. **www.marc-radio.org**

July 18, 2021 : Sussex County Amateur Radio Club, 2021 SCARC Hamfest, Sussex County Farm & Horse Show Fairgrounds, 31 Plains Road, Augusta, NJ. **www.scarcnj.org**

July 24, 2021 : New Jersey Antique Radio Club, NJARC Hamfest/Tailgate/Swapmeet, Info Age Science & History Museums, 2201 Marconi Road, Wall Township, NJ. **www.njarc.org**

July 31, 2021 : Cumberland Valley Amateur Radio Club, CVARC 2021 Hamfest, 1501 Criders Church Road, Chambersburg, PA. **www.w3ach.org**



2021 W2MMD Clubhouse Projects

Shed :

- **Paint Siding**
- **Install Electrical Wiring**
- **Install Lights**
- **Build Ramp**
- **Secure Roof**

Painting :

- **Front Steps**
- **Back Steps**
- **Power Pole**
- **Club Sign**

Generator :

- **Maintenance being handled by Anthony KD2RPI**

Replace Front Door & Screen Door

Front Flood Lights :

- **Replace left flood light**
- **Adjust bulb position on both lights**

Front Steps :

- **Replace top railing boards**
- **Paint platform**

Back Steps :

- **Spray Mold**
- **Power Wash**
- **Paint**

Replace Toilet : WB2ZBN - Project in process. Getting estimates to present to the general membership

We have a 5 gallon bucket of white paint in the Clubhouse. I have a power washer at home that I can bring to the Clubhouse for someone to use. For more information about these projects, please contact Jeff WB2ZBN.

Ready To Kick This Solar Cycle Into High Gear?

By Jim Wright, N2GXJ

Some call it the "Termination Event". Ever hear of it? Me neither, until a recent article by Dr. Tony Phillips appeared on **Spaceweather.Com (https://spaceweatherarchive.com/2021/06/11/the-termination-event)**. Descriptions of this event are not getting picked up in other magazines, including (surprisingly for me) **Forbes.com (https://www.forbes.com),** and others.

As described in the article, the interest in termination events are a relatively new area in study in solar physics, based on measuring time intervals between when oppositely charged bands of magnetism collide at the solar equator.

Controversially, by measuring the time between termination events, a theory using researched data is suggesting solar cycle 25 may be a strong one, going against other predictions. That would be fun!

So which is it? Is cycle 25 going to exceed the "expert's" expectations? Relatively speaking, we won't have long to find out. Things are already starting to pick up! It's a great time to be in HF radio!

KB6NU's Ham Radio Blog

What Amateur Radio Clubs And Services Are Worth Paying For?

By Dan Romanchik, KB6NU

On the **amateurradio subreddit (https://www.reddit.com/r/amateurradio),** someone asked :

> *"I have always wondered what subscriptions/ memberships are worth having? Is ARRL worth the $50/year? What about QRZ $30/year for XML data? Is there something that is a must have ?"*

Several replied in the affirmative about the ARRL :

> *"I joined the ARRL so they can lobby for amateur radio when needed."*
>
> *"I think ARRL is worth it."*
>
> *"If you care about things like DXCC awards, and are in the US, you will need to be an ARRL member. Now that QEX, The National Contest Journal, On the Air and QST digital are all member benefits, I would say you get enough for your $50 to make it worthwhile."*

Of course, there were differing opinions :

> *"They [expletive deleted] up the Parity Act so badly that it's almost hilarious. ARRL will never see a dime from me."*

There were a lot of comments about subscribing to **QRZ.Com (https://www.qrz.com)** :

> *"I spend a bunch of time on QRZ every day, and I log every contact in their logbook, and then send it to LoTW, so the XML is well worth it. Also, will all the time on the forums and the articles I spend I enjoy not having the ads, and supporting what I believe is a fantastic website."*
>
> *"QRZ is worth it so you can integrate with logging software or if you want upload your ADIF file from WSJT-X, if you do FT8, that sort of thing."*
>
> *"I've never felt the need for a QRZ subscription. Only when I was the noobest of noobs and couldn't tell the difference between ON4 and OH2 did I ever run up the 100 lookup a day limit. Now with… alternate… lookup services even hitting the limit might not matter for most hams."*

KB6NU's Ham Radio Blog - Continued on page 11

There were some comments about supporting local groups :

> *"You should definitely seek out your local club(s) and join whatever ones seem like a good fit to you. You can learn a lot from a good club, and having a couple of hands to help with antennas/ loan equipment is a fantastic benefit."*
>
> *"I donated to the repeater I use the most."*

As for me, I am a member of the ARRL, and at various times, have been a member of :

- AMSAT **(https://www.amsat.org)**
- Amateur Radio Lighthouse Society **(ARLHS - https://arlhs.com)**
- TAPR **(https://tapr.org)**
- QRP Amateur Radio Club International. **(QRP-ARCI - https://www.qrparci.org)**
- Quarter Century Wireless Association **(QCWA - https://qcwa.org/qcwa.php)**
- Northern California DX Foundation **(NCDXF - https://www.ncdxc.org)**
- Michigan QRP Club **(https://www.miqrp.net)**
- ARROW Communication Association - Amateur Radio club in Ann Arbor **(https://w8rp.org)**

My membership is current in AMSAT, ARLHS, QRP-ARCI, MI QRP Club, and ARROW.

I would encourage you to become an ARRL member and a member of other groups that serve your particular interest in amateur radio. I like operating from lighthouses, so I'm a member of ARLHS. If you're a big DXer, join NCDXF. If you're a QRPer, then QRP-ARCI is the group for you. I think that joining these groups will really help you have more fun with ham radio.

You probably belong to your local club if you're reading this column, but I'm curious about what other amateur radio subscriptions you have or which services you pay for. Feel free to email me and let me know which groups you support and why you do so.

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Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (**KB6NU.Com**), the "No Nonsense" amateur radio license study guides (**https://KB6NU.Com/study-guides**), and often appears on the ICQPodcast (**https://icqpodcast.com**). When he's not paying his dues, he teaches online ham radio classes and operates CW on the low end of the HF bands.

Field Day 2021 Highlights : W2MMD SNJ 7A

Drone pictures courtesy of Bob KD2GFL

Karl W2KBF setting up the WinLink Station

Jon WB2MNF, Greg W5DO, in the Satellite Station

More pictures on the 2021 Field Day web page

Field Day 2021 Highlights : W2MMD SNJ 7A

Tony K3TS's tower on Saturday night lit up by the 4H field lights

Future ham in training

"Old Salty Veteran"

Field Day 2021 Highlights : W2MMD SNJ 7A

Field Day team discussing which way to point a vertical

Al KB2AYU always comes up with some great Field Day ideas, a HEAD-MOUNTED crank-up tower!

Jim N2GXJ praying to the propagation gods for more contacts

Field Day 2021 Comments : W2MMD SNJ 7A

Greetings All;

I just wanted to take a moment to thank everyone for coming out, pitching in, and helping make FD2021 one of our best in years. With a good head start on Friday, everything went up in time for the start, and in general was ready to go at 1400 local time on Saturday. We had a few issues with the Wine Festival, but managed to overcome most of them and get our stuff done while they did their thing.

I had plenty of good operators this year, so I was able to get around and visit every station and the Clubhouse and I must say I was impressed with what I saw. Everyone had their ducks in a row and were busy making contacts. We had some nice fireside chats late on Saturday night, and a great breakfast on Sunday morning. Even the weather spared us from its worst offerings, though we did have a shower or two, and some real SNJ summer mugginess. But somehow we got it all done.

Finally, I really would like to thank everyone for all the help in breaking down the 80/20 CW station and antennas. We were packed up in record time, and off the site long before the wine enthusiasts called it a weekend. I really did appreciate that, as I was starting to wear down by that point.

My wife asked me why I am so enamored with Field Day every year when it is SO MUCH WORK. And of course I told her, because it is SO MUCH FUN! And that said it all.

Now if you missed it, you missed a lot, so try your best next year to be there. You will not regret it. I hope to see everyone out at the next meeting on July 7th. Until then, 73!

de K3TS

Todd, KA2YNT and Greg, W5DO

I would like to thank the both of you for all your hard work making the 80 Meter Phone Station a BIG SUCESS this year. We made 474 contacts, the best I have ever done. I certainly hope that you had as much FUN as I did. You are both more than WELCOME to join me once again next year for FIELD DAY 2022, when we go for the BIG 500. Once again, THANK YOU for your hard work.

73,

JIM, KA2OSV
aka Old Salty Veteran

Jim,
You are more than welcome. And I want to thank you for the use of the station, mentoring and fun discussions. It's been a while since I talked with another Navy guy who also knew amateur radio. It was a lot of fun and I would enjoy coming back next year and operate for a few hours. Thanks for the fun ol' salty veteran and thanks again for your service.

Todd, It was great to meet you. You operated like a pro. Thanks for helping me stay within the guardrails. I hope we can operate again together.

Greg, W5DO

Field Day 2021 Comments : W2MMD SNJ 7A

Bravo to all helpers/coordinators/operators for the very successful 2021 FD!

Special thanks to Vinnie N4NYY for all his work to make it run smoothly, and to Al KB2AYU who does countless things at the site throughout the year to make everything run smoothly.

Great to see so many out in force to participate and help!

The food was exceptional (who needs a food truck or wine tasting event?)!

73 to all, and looking forward to next year already!

Darrell AB2E

Another enjoyable Field Day is in the books. It was great to not have to worry about Covid. Thanks to everyone who came out, especially WB2ZBN, Jeff and the hospitality/food crew.

Al KB2AYU

QST de W1AW
Space Bulletin 008 ARLS008
From ARRL Headquarters
Newington, CT June 21, 2021
To all radio amateurs

SB SPACE ARL ARLS008 MIR-SAT1 CubeSat Expected to Deploy from the ISS on June 22

MIR-SAT1 (Mauritius Imagery and Radiotelecommunication Satellite 1), the first amateur radio CubeSat from the Indian Ocean island nation of Mauritius, is expected to be deployed from the International Space Station (ISS) on June 22.

MIR-SAT1 will carry an amateur radio V/U digipeater (a downlink of 436.925 MHz has been coordinated). MIR-SAT1 will collect images of the Republic of Mauritius and its Exclusive Economic Zone (EEZ) using an onboard camera.

The 1U nanosatellite was designed by a team of Mauritian engineers and radio amateurs and built by the Mauritius Research and Innovation Council (MRIC). MIR-SAT1 will be available to the amateur community when the satellite is not in use for other purposes.

Ground Gain : The increase in signal level possible at elevation angles where the direct radiation and the ground image of an antenna are additive in phase. For horizontally polarized antennas, this can be as much as 6 dB.

"Radio in a Box" Concept Could Ease DXpedition Access

Leaving a small footprint on sensitive natural areas can be a challenge for DXpeditions. George Wallner, AA7JV, who will be operating as C6AGU from Deep Water Cay in the Bahamas until March 30, including during the CQ World Wide WPX SSB weekend, will be testing a DXpedition setup that may be more amenable to the concerns of environmental protection agencies that oppose camping on protected land.

Radio gear in a weatherproof box is installed on land, along with antennas

In some places, landing permits (rather than the cost of a DXpedition) are the biggest obstacle. Often, overnight stays are not allowed, especially hindering 160-meter operation.

The approach is **"Radio in a Box" (RIB - https://www.qrz.com/db/C6AGU)** - a complete station in a weatherproof Pelican case containing a FLEX-6700 transceiver and an amplifier, along with cooling and control systems. The box, antennas, and generators would be on land and operated remotely from a nearby vessel. The RIB is seen as addressing that issue, and Wallner believes this lower-profile approach will become the standard for future DXpeditions to sensitive areas. The Northern California DX Foundation and FlexRadio have provided financial support. C6AGU operators this month will include W6IZT, W8HC, KN4EEI, and AA7JV. **Emailed (aa7jv@atlanticbb.net)** signal reports are invited.

Operators contest from the vessel's fly bridge

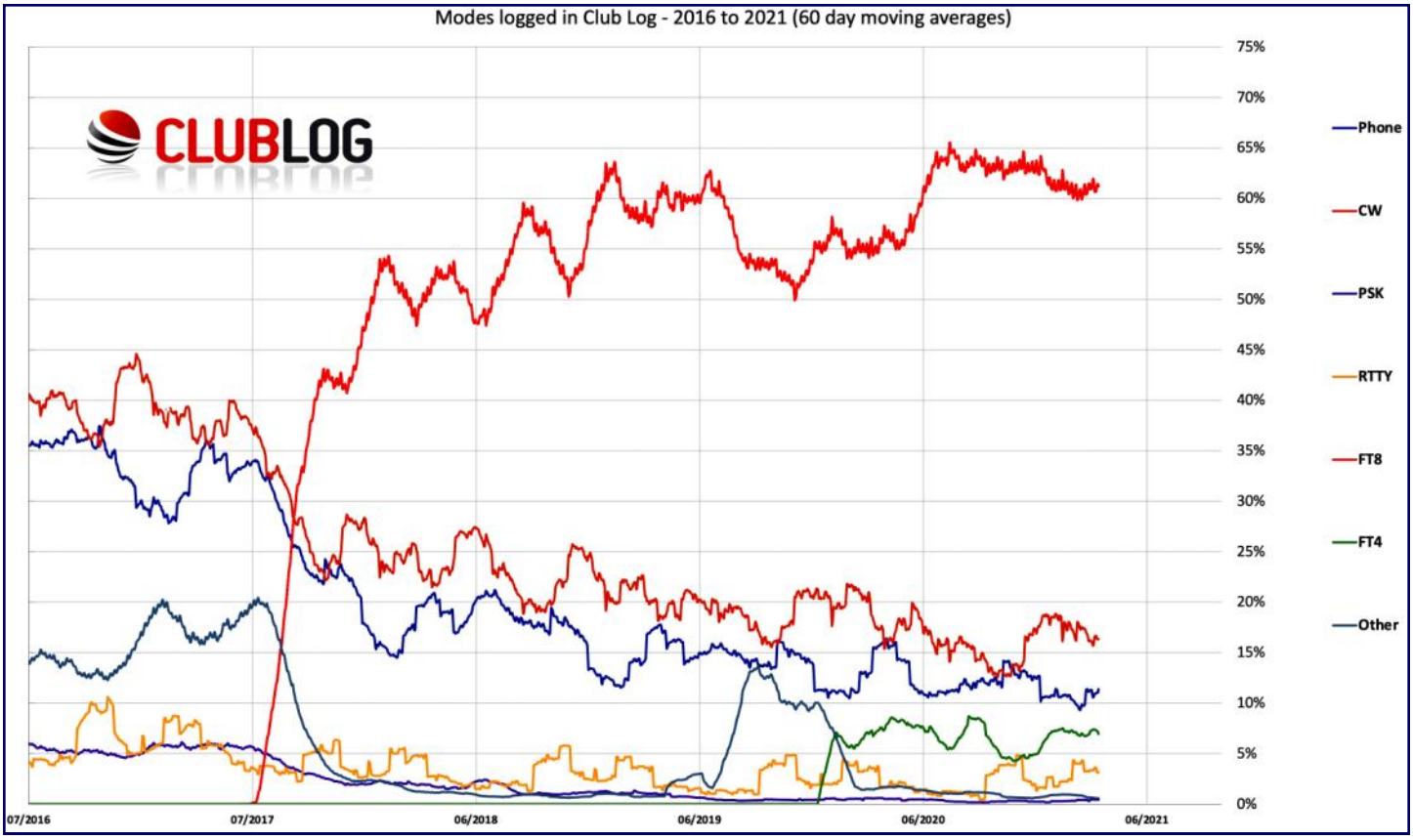
This team has been testing the RIB concept for a year now. The November 2020 operation involved operation from a small, privately owned island in the Bahamas, with the gear on shore and the operators on board, running stations during the CQ World Wide DX Contest from the comfort of the vessel's fly bridge. This particular operation deployed four individual RIBs, connected to a common network. The ship-to-shore link was carried out on 900 MHz with a Ubiquiti data bridge. The test was considered very successful.

Hal Turley, W8HC, has produced a PowerPoint of the November 2020 test operation. He presented it at the **February 6 virtual meeting (https://bit.ly/3dixXsp)** of the West Virginia DX Association (WVDXA), telling his audience that operation with six RIBs on shore is considered possible. The passcode is **ZycM!+s1**.

Article Credit : The ARRL Letter for March 25, 2021 - www.arrl.org

FT8 Accounts for Nearly Two-Thirds of HF Activity

Since zooming to prominence after its debut in mid-2017, the popular FT8 digital protocol has become the mode of choice for some 60% of HF operators, according to Club Log's latest activity report **(https://g7vjr.org/2021/03/club-log-activity-report-2021-update)** compiled by Michael Wells, G7VJR. FT8 is one of the protocols in the **WSJT-X (https://physics.princeton.edu/pulsar/k1jt/wsjtx.html)** suite of free programs. Wells says FT8 activity level sits at nearly 85% on 6 meters. The dramatic FT8 upswing has come at the expense of phone, CW, RTTY, PSK, and other modes. Over the same period, the number of FT8 contacts logged each year per active call sign has continued to climb to about 60% between 2015 and 2021, with the most dramatic increase being nearly 29% in the past year. The use of all other modes has continued to flutter downward since the advent of FT8, which occupies vastly less spectrum than the more traditional ham radio operating modes.



Between 2015 and 2020, the number of contacts logged per day by Club Log users has trended steadily upward, regardless of mode. The report draws on data of more than 84,000 logs uploaded to the Club Log site - some 730 million contacts in all.

Wells reported that in 2015, the "typical call sign" logged 620 CW contacts, 558 SSB contacts, and 372 data (digital) contacts. Five years later, the statistics were 500, 300, and 1,700, respectively.

FT8 HF Activity - Continued on page 19

FT8 HF Activity - Continued from page 18

ARRL's Logbook of The World (LoTW) does not typically report this level of detail as far as mode usage is concerned, but the statistics available certainly confirm FT8's increasing popularity. The rocketing usage of FT8 over the past few years may be demonstrated most dramatically by a comparison in contacts-by-mode statistics between March 2017 and March 2018, when FT8 contact numbers in the hundreds shot to some 2.6 million contacts by the following year - an increase of nearly 1 million percent.

From mid-2019 to mid-2020, FT8 usage appears to have slumped slightly to 50% before climbing back to 60%. FT8 usage peaked at just over 65% in late 2020 and has held steady at 60 - 65% since.

The same period saw SSB usage dip by 15%, CW activity by 10%, and RTTY by 29%. Introduced later, FT4, the contest mode of FT8, also showed an initial fast upward trajectory, before steadying at 5 - 8%.

Named after its developers, Steven Franke, K9AN, and Joe Taylor, K1JT, FT8 indicates the mode's eight-frequency shift-keying format. Tones are spaced at 6.25 Hz, and an FT8 signal occupies just 50 Hz.

Article Credit : The ARRL Letter for April 1, 2021 - www.arrl.org

May 2021 Volunteer Monitor Program Report

The **Volunteer Monitor (VM) Program (http://www.arrl.org/volunteer-monitor-program)** is a joint initiative between ARRL and the FCC to enhance compliance in the Amateur Radio Service. This is the May 2021 Volunteer Monitor Program Report.

- Technician-class operators in Palm Bay and Hollywood, Florida, received Advisory Notices after making more than a dozen FT8 contacts on 40 and 20 meters. Technicians are not permitted to operate on 20 meters and have no data privileges on 40 meters.
- A licensee in El Cerrito, California, received an Advisory Notice concerning use of his 444.700 MHz repeater for deliberate interference and unidentified transmissions.
- A General-class licensee in Guanica, Puerto Rico, received an Advisory Notice after operating on 14.187 MHz during a DX contest in May. General-class licensees have no privileges below 14.225 MHz on 20 meters.
- A General-class licensee in Texas received a warning concerning deliberate interference, broadcasting, and failure to identify on 3.919 MHz and 3.922 MHz. The operator was informed that if such operation continued, the FCC would be requested to remove voice privileges from his license.
- A General-class licensee in Slippery Rock, Pennsylvania, received an Advisory Notice for operation on 7.163 MHz. General-class licensees are not permitted to operate below 7.175 MHz.
- A repeater station in Mission Viejo, California, was shut down after the operator received a Notice that the repeater was being used for deliberate interference.
- A warning was issued to a licensee in Erie, Pennsylvania, for operation on 146.61 MHz and 146.682 MHz after the repeater licensee had requested in writing that the individual refrain from using the repeaters.
- VM monitoring totals in April were 1,784 hours on HF frequencies and 2,214 hours on VHF frequencies and above.

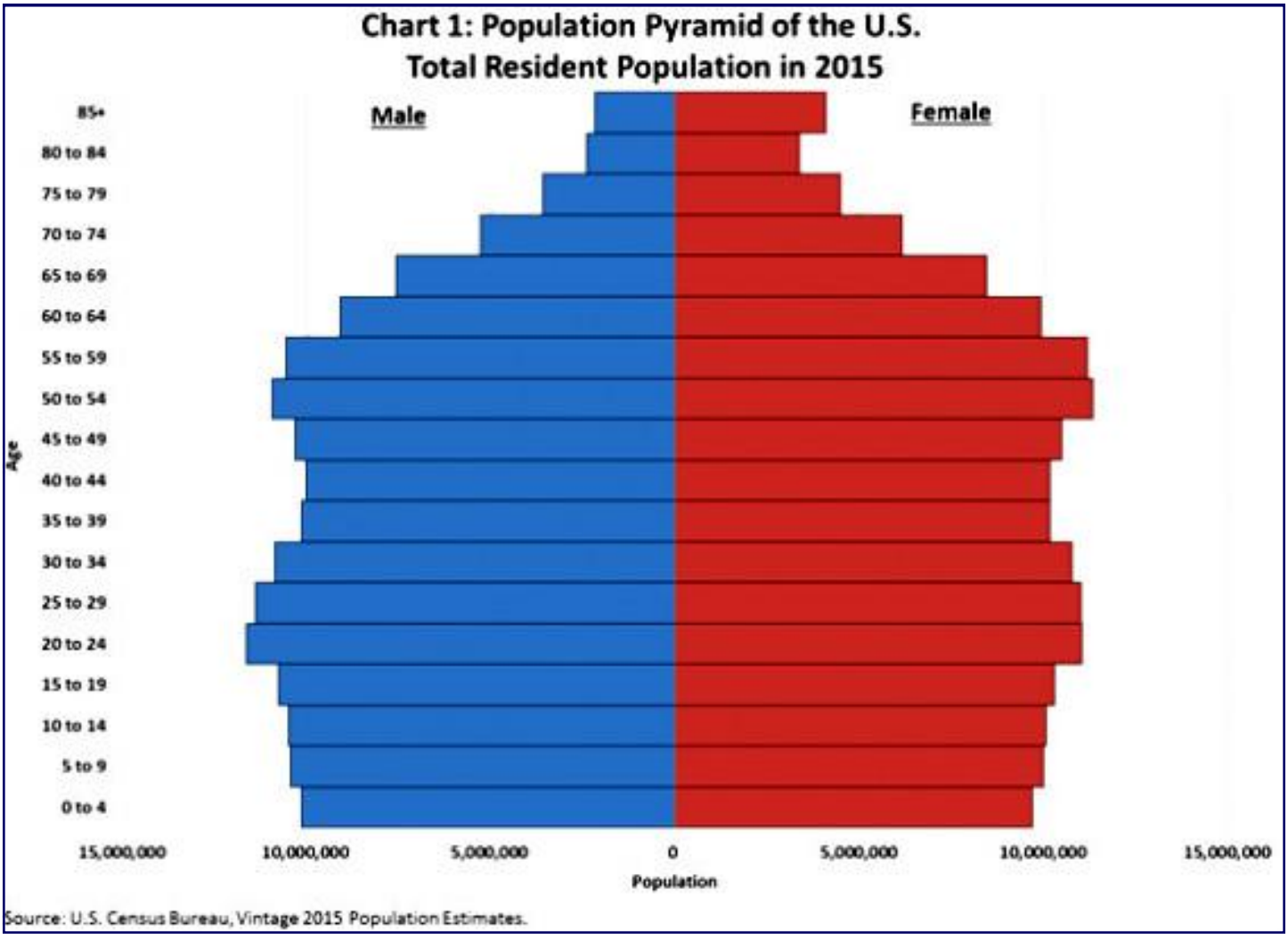
The Volunteer Monitor Coordinator had one meeting with the FCC, and one case was referred to the FCC for further action. - Thanks to Riley Hollingsworth, K4ZDH, Volunteer Monitor Program Coordinator

Article Credit : The ARRL Letter for June 17, 2021 - www.arrl.org

Traditional Amateur Radio Contesting Faces a Demographic Cliff

Frank Howell, K4FMH, followed up his two-part **National Contest Journal (NCJ - https://ncjweb.com)** series, "The Demographics of Contesting," with a post **(https://www.amateurradio.com/lemmings-over-a-demographic-cliff)** to his "Social Circuits" blog, called "Lemmings over a Demographic Cliff?" (His original articles appeared in the July/August and September/October 2020 issues of NCJ.) Howell points to data showing that radio contesters are older than the average ARRL member. Taking into account information **(https://www.bls.gov/tus)** from the Bureau of Labor and Statistics on Leisure Time Use, Howell opines that this should be expected.

"Leisure pursuits are highest during youth and young adulthood but dramatically taper off about ages 25 - 34 until age 55 and over," Howell said. "This hollowing out of leisure and sport time is a predictable outcome of competing and more important activities." According to Howell, the main competitor to radio amateurs engaging in on-the-air or workshop activities is television (now more broadly referred to as "screen time").



The US population pyramid. [Graphic courtesy of the US Census]

Amateur Radio Demographic Cliff - Continued on page 21

Amateur Radio Demographic Cliff - Continued from page 20

A **Brookings Institution (https://www.brookings.edu/blog/social-mobility-memos/2016/09/13/how-free-time-became-screen-time)** study on the topic using the 2005 - 2015 Time Use Survey documents how "free time became screen time." Around 2007, screen time (not just TV) surpassed other active leisure activities in the average time spent category. By 2015, the gap favoring screen time was more than 1 hour, reflecting an average of some 11 hours per week of activity. Howell argues that formats of major radio contests may serve the leisure interests of established contesters -- those on the far end of the demographic spectrum - but may not offer the best experience for contesting newcomers.

"Traditional radiosport is facing a demographic cliff of aging ham contesters," Howell asserts. "Those highly invested in the status quo won't be around to experience the diminishing [number of] participants, [but] they now have the political clout to direct strategic actions."

The ability for single operators to compete at a high level in a major contest requires time, equipment, and skill that are probably beyond many in the "caterpillar" stage, **ARRL Contest Update (http://www.arrl.org/the-arrl-contest-update)** Editor Brian Moran, N9ADG, recently observed **(http://www.arrl.org/contest-update-issues?issue=2021-03-03#_476487909588445-Conversation)**. He suggests that most school-aged operators don't have the time to stay in the chair all weekend.

"Those fortunate to be able to join seasoned teams of multioperators at well-equipped stations have a different contesting experience than those plugging away solo," Moran said. "With the opportunity for mentorship, camaraderie of a group effort, and a chance to be part of something bigger, they'll be more likely to emerge from their expected dormancy period as a contest butterfly."

Howell argues that demography does not have to be destiny. "It does require taking the blinders off tradition and evaluating it for what it is today and what it means for the future," he concluded. - Thanks to The ARRL Contest Update

Article Credit : The ARRL Letter for April 1, 2021 - www.arrl.org

Florida Emergency Communications Exercise Combines Hams, Agencies, State, and NGOs

A 2-hour emergency communications exercise on March 19 in Florida was deemed "wildly successful," while resulting in 21 specific suggestions for improvement of issues recognized. Sponsored by Florida Baptist Disaster Relief, a non-governmental (NGO) "served organization," the exercise simulated a combined disaster of multiple tornadoes crossing north-central Florida closely followed by a terrorist attack on telecommunications, which took down large chunks of internet and telephone service.

Pop-up situations, called "injects" by event planners, simulated multiple dire situations and hinted at even larger attacks, designed to create possible rumor issues. Multiple counties arranged for volunteers to help with the simulation, working in shelters and transmitting status reports of individualized disaster scenarios to county emergency operations centers (EOCs). Volunteers directed by actual or simulated EOC officials aggregated situational awareness and formulated status and resource request messages, sent by voice or digital mode to a volunteer from the actual Florida agency that handles disaster communications. Appropriate responses were sent back by radio.

The exercise picked up additional support from multiple out-of-state volunteers, who relayed traffic from voice to email and vice versa. Amateur radio also conveyed simulated outbound welfare messages from survivors in stricken cities and counties.

Lee County, Texas, Emergency Coordinator Marida Favia del Core Borromeo, KD5BJ, took part in the exercise

All told, 431 messages zipped through the airwaves within the 2-hour simulation, including 53 to the state and 31 replies. Messages were passed using digital email or radiogram.

Two of the seven exercise goals addressed interoperability between agencies and volunteers. Agency emergency management and communications groups participating included Florida Division of Emergency Management, Florida Baptist Disaster Relief, the federal SHARES Southeast Regional Net, Alachua, Columbia, Flagler, Madison, and Taylor Counties, as well as Homestead City.

Volunteer communications groups included the Northern Florida ARES Net, Northern Florida Phone Net, North Florida Phone Traffic Net, and ARES® groups from Alachua, Columbia, Flagler, Madison, Marion, Santa Rosa, Suwanee, and Volusia Counties. Madison corralled volunteers from several surrounding counties to expand situational awareness.

Multiple county emergency managers injected their own specific plans and overlay exercises, as provided by the open-exercise design. Ross Merlin, WA2WDT, director of the federal SHARES program, arranged for a 60-meter interoperability channel to be made available, and leaders from the SHARES Southeast Regional Net provided coverage that resulted in formal message transfer. Florida net trainer Dave Davis, WA4WES, rounded up volunteers to staff multiple voice nets, and he supervised a PSK31 net.

Florida Emergency Communications Exercise - Continued on page 23

Florida Emergency Communications Exercise - Continued from page 22

Northern Florida Section Emergency Coordinator Karl Martin, K4HBN, also took part.

Exercise planning was carried out as much as possible in accordance with DHS Homeland Security Exercise Evaluation Program (HSEEP) protocols.

Post-exercise feedback - both through a 1-hour Zoom "hotwash" session and an anonymous feedback form - were very positive and also suggested possible improvements.

All are included in the detailed and candid **After-Action Report/Improvement Plan (https://qsl.net/nf4rc/FBDR/2021/WhirlwindBoomAARIP.pdf).**

Article Credit : The ARRL Letter for April 8, 2021 - www.arrl.org

Radio Amateurs Of Canada Invites Participation In The RAC Canada Day Contest

Help Canada celebrate its birthday on the air during the **RAC Canada Day Contest (https://www.rac.ca)** on Thursday, July 1 - just a few days ahead of Independence Day in the US. Canada Day is the anniversary of Canada's confederation, when the three colonies of Canada, Nova Scotia, and New Brunswick united into the Dominion of Canada on July 1, 1867. The RAC Contest Committee is asking all participants in the 2021 Canada Day Contest to follow guidelines provided by the government and by health officials in their respective areas for any multi-operator categories.

The Canada Day Contest begins on July 1, 0000 UTC (the evening of Wednesday, June 30, in North American time zones) and continues through 2359 UTC. Bands include 160, 80, 40, 20, 15, 10, 6, and 2 meters, CW and phone (SSB, FM, AM, etc.).

Stations in Canada send signal report plus province or territory. VE0s and stations outside Canada send a signal report and a serial number.

Stations may be worked once on each mode on each of the available bands. Canada's 10 provinces and three territories serve as multipliers for the event.

Article Credit : The ARRL Letter for June 3, 2021 - www.arrl.org

OPERATING TIP
Search and Pounce to Run : On busy, crowded bands, finding a clear frequency to run may take a while. Earn some points while you're looking by searching and pouncing until you find a good spot. Don't forget, the object is to find an empty frequency to run, so only work stations that are calling CQ. Tune past contacts in progress, and don't get involved in pile-ups.

Wooden Satellite to Launch by Year's End

The WISA Woodsat project, being sponsored by plywood supplier WISA in an unconventional PR initiative, is poised to place a wooden satellite into orbit by the end of the year. The idea is to test the suitability of treated wood as a low-cost and widely available material for space applications. The **IARU posting (http://www.amsatuk.me.uk/iaru/formal_detail.php?serialnum=805)** for Woodsat indicates that several amateur radio experiments will be on board as well as photo downlinking, including selfies.

The wooden satellite is based on a basic, versatile CubeSat format, Kitsat, which is designed with educational use in mind. It retails for just $1,500. Based in Finland, the Woodsat project began with students across the country contributing parts to a CubeSat launched by balloon. The satellite will be a 10-centimeter cube weighing 1 kilogram, covered on all sides by coated birch plywood from WISA Plywood. Nine small solar cells will power the satellite, which will orbit at an altitude of 500 - 550 kilometers.

As the sponsor explained, "WISA Woodsat will go where no wood has gone before. With a mission to gather data on the behavior and durability of plywood over an extended period in the harsh temperatures, vacuum, and radiation of space in order to assess the use of wood materials in space structures."

Once in orbit, Woodsat will be able to extend a selfie stick to capture photographs of the wooden box as it hurtles through space at 40,000 kilometers (24,800 miles) per hour. This will allow the mission leaders to monitor the impact of the environment on the plywood.

The satellite would downlink its telemetry and images from two cameras using amateur radio frequencies."The wooden satellite with a selfie stick will surely bring laughter and goodwill," added mission manager Jari Mäkinen of Arctic Astronautics. "Essentially, this is a serious science and technology endeavor. In addition to testing plywood, the satellite will demonstrate accessible radio amateur satellite communication; host several secondary technology experiments; validate the Kitsat platform in orbit, and popularize space technology."

An April 23 **Engineering and Technology article (https://eandt.theiet.org/content/articles/2021/04/selfie-stick-wielding-wooden-satellite-to-launch-by-end-of-2021)** has more information. - Thanks to AMSAT News Service via JoAnne Maenpaa, K9JKM; E&T, and the IARU

Article Credit : The ARRL Letter for May 13, 2021 - www.arrl.org

Soldering is a basic skill, made more difficult by the decreasing size of modern components. Adafruit has published the "Adafruit Guide to Excellent Soldering" which details what good solder joints look like, as well as how to detect, diagnose, and remedy bad solder joints.

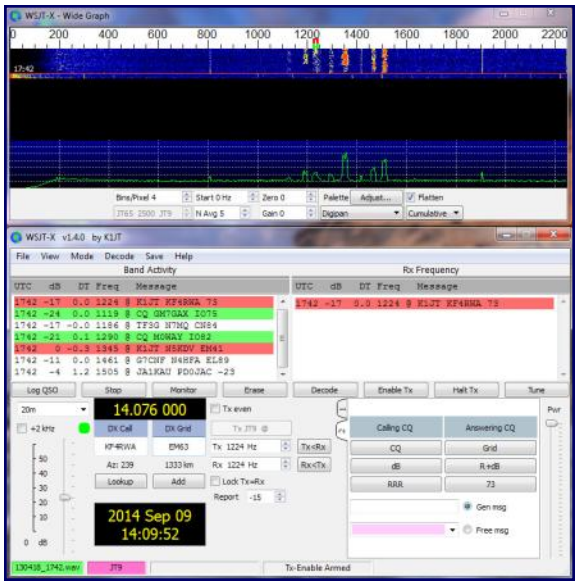
(Bob, N6TV) https://learn.adafruit.com/adafruit-guide-excellent-soldering/common-problems

WSJT-X version 2.4.0 Now Generally Available, Version 2.5.0 on the Horizon

WSJT-X version 2.4.0 now is available in general release. According to co-developer Joe Taylor, K1JT, WSJT-X version 2.4.0 includes a new digital mode, Q65. This protocol is designed for two-way contacts over especially difficult propagation paths, including ionospheric scatter, troposcatter, rain scatter, TEP, EME, and other types of fast-fading signals.

"On paths with Doppler spread more than a few Hertz, the weak-signal performance of Q65 is the best among all WSJT-X modes," the **Quick Start Guide (https://physics.princeton.edu/pulsar/k1jt/Q65_Quick_Start.pdf)** asserts.

WSJT-X version 2.5.0-rc1 (beta) version has been released. According to the **Release Notes (https://physics.princeton.edu/pulsar/k1jt/Release_Notes.txt)**, in version 2.5.0 "the Q65 decoder has been enhanced to measure and compensate for linear frequency drift in Q65 signals."



Q65 uses 65-tone frequency-shift keying and builds on the demonstrated weak-signal strengths of QRA64, a mode introduced to WSJT-X in 2016. Q65 offers user message and sequencing identical to that in FST4, FT4, FT8, and MSK144. It includes a unique tone for time and frequency synchronization. As with JT65, this "sync tone" is readily visible on the waterfall spectral display. In addition, Q65 provides a sensitive "sync curve" near the bottom of the waterfall window.

Testing showed that Q65 will enable stations with a modest Yagi and 100 W or more and to work one another on 6 meters at distances up to ~2000 kilometers on most days of the year, in dead band conditions.

"An excellent example of targeted uses of Q65 is ionospheric scatter on the 6-meter band," the documentation states. "Extensive tests on the 1,150-kilometer path between K1JT and K9AN have shown that with 300 W power output, nearly every Q65-30A transmission is copied correctly by the other station." The 30A refers to the transmit-receive period and spacing width.

For the complete announcement and to download the latest version, visit the **WSJT-X (https://physics.princeton.edu/pulsar/k1jt/wsjtx.html) website.**

Article Credit : The ARRL Letter for June 11, 2021 - www.arrl.org

OPERATING TIP
Always include a Space at the end of your RTTY messages. It's accepted practice to put a space at the beginning of RTTY messages to separate valid characters from any spurious decodes preceding them, and to take advantage of the Unshift on Space (USOS) feature of many modern RTTY decoders. It's also wise to put a space AFTER each message, so that any subsequent spurious decodes are separated from the messages. This improves readability and makes copying message text by mouse movement or clicking easier for the receiving operator. Bonus : Don't use too many LINEFEEDs which can cause the other operator to chase the text around the screen.

3Y0J DXpedition To Bouvet Island Cancelled

The Intrepid-DX Group announced over the weekend that it has cancelled its long-anticipated **3Y0J (https://3y0j.com) DXpedition** to Bouvet Island. The DXpedition team had planned to travel to Bouvet via the RV Braveheart, owned by Nigel Jolly, K6NRJ. Jolly has told the DXpedition that Braveheart is being sold and he's cancelled its contract for the 3Y0J voyage.

"The global pandemic has impacted the expedition charter vessel business very hard; this includes the venerable RV Braveheart, which has provided outstanding safety and service to many DXpeditions," DXpedition co-leaders Paul Ewing, N6PSE, and Kenneth Opskar LA7GIA, said in announcing the news on June 13. "Today, we were informed that Braveheart will be sold. As a result, Nigel Jolly will no longer be associated with the ship, our contract with the ship has been cancelled, and our deposit will be refunded. This is a very disappointing development to all involved."

The DXpedition said that it has stopped accepting donations and will refund 100% of the donations using the same method they were received. "This process will take several weeks to sort out, so please be patient," the announcement said. "We wish to thank our team for putting their trust in us. We wish to thank all of the donors and sponsors that gave generously to this project. We will continue to research other ships and possibly find another suitable vessel for a future project."

ARRL announced in April that it had awarded a $5,000 Colvin Grant to the Intrepid-DX Group to help in funding the DXpedition to Bouvet Island, scheduled for January to February 2023. A dependency of Norway, Bouvet is a sub-Antarctic island in the South Atlantic. It is the second-most-wanted DXCC entity, behind North Korea.

Article Credit : The ARRL Letter for June 17, 2021 - www.arrl.org

Vision-Impaired ARRL Member Takes Advantage Of New Technology

ARRL member Ben Murray, KD8JBS, of Bryan, Ohio -- the vision-impaired subject of a recent **TV news (https://bit.ly/3xPZEAw)** piece - says new technology he's now using has permitted him to enjoy ham radio more fully. The **eSight (https://esighteyewear.com)** device resembles virtual reality goggles. Murray has nothing but enthusiastic praise for the technology.

"It has helped immensely with reading my radio displays and logs and being able to socialize in public with hamfests and other social events," he told ARRL. "And I'm able to see my computer screen too."

Murray works as a board operator for WBNO/Q.96.5. In his spare time, he's an ARRL VEC Volunteer Examiner (VE).

"Ben is one of our most dedicated VEs," says Assistant ARRL VEC Manager Amanda O'Brien, N1NHL.

As Murray explains, "The technology uses a camera to process an image in real time. The image is then re-processed through some algorithms in the glasses and then presented back to the user on two OLED screens in front of my eyes, and I can zoom up to 24x and adjust contrast."

Murray, 32, who was born legally blind with optic nerve atrophy, wears a pair of conventional eyeglasses behind his eSight device. For the first 26 years of his life, Murray says, he "was passed from doctor to doctor, ophthalmologist to ophthalmologist." In 2015, he learned about eSight's "smart" eyeglasses that fit over the user's head.

At first he was skeptical, but once he experienced it for himself, he was sold. A community fundraiser helped Ben raise the $15,000 needed for his first pair of eSight glasses; he now wears the latest update. The adaptive technology is not widely covered by health insurance, and he's on a campaign to change that.

The smart glasses have provided him with essentially 20/20 vision.

As for ham radio, Murray's favorite activities incorporate a public service bent. "I enjoy hamfests and VE testing sessions. I'm the VE liaison for Williams County, Ohio, and I'm the Emergency Coordinator," he told ARRL. "I also enjoy public service activities such as festivals and parades where they include amateur radio [for] communications."

Murray has been a ham since 2008. He upgraded to Amateur Extra class in 2012. - With thanks to WNWO NBC24News, Toledo, Ohio

Article Credit : The ARRL Letter for June 17, 2021 - www.arrl.org

Klick : Shorthand, or even slang, for kilometer. There are 620 miles for every 1000 klicks.

Stiction : Static friction that must be overcome to allow touching materials to move relative to one another. Aluminum parts, such as antenna elements, can exhibit stiction.

Bike MS : City To Shore Ride 2021

September 25 - 26, 2021

https://bit.ly/3dwEyiR

GREETINGS ONE AND ALL

FIRST AND FOREMOST

This past year has been very hard on a lot of folks. Not only did we have to deal with the Pandemic, but many of our brethren have endured great losses in their lives, and we hope that everyone realizes that though you may not have heard from us, you have all been in our thoughts, prayers, and hearts.

We are reaching out today to let you all know that this year's 2021 MS Ride - City to Shore, more affectionately know to us as "The MS 150 - City to Shore", has been given the go ahead for a full and complete event. The event will be held September 25 - 26, 2021. Of course, we will once again, as always, be riding from Woodcrest Station in Cherry Hill to Ocean City.

You will remember a few years back, our event was cancelled due to the hurricane. When this happened, not only did the Society lose a lot of riders for the following year, we lost a lot of Radio Volunteers for the route. Although this is a late start, we are hoping that the cancellation of the 2020 event will not cause a major set back in our stepping up to support the event as only the HAM COMMUNITY can do.

Due to ALL the CIRCUMSTANCES of the past year, we are looking at a great many changing needs to our operations. We have lost some key positions that have been held by our tried and true for many years. We will definitely be looking to fill positions like SAG and Support Vehicles. We are hoping that some of our long term volunteers will consider moving into these positions, but we will expand on that in our next communication.

For right now, all we ask, is that everyone receiving this correspondence, please pass it on and help us to promote the event and our call to COMMUNITY SERVICE.

THANK YOU ALL AGAIN,
The Comms Opps Team
n3mssevcomm@gmail.com

From Gary, ZL2IRB : "This is cool, especially for those of us participating in the ARRL International Grid Chase : Gridmapper (http://wg7j.reinalda.net/gridmapper/gridmapper.php), a Google Earth mapper, courtesy of Johan, WG7J, that slurps up an ADIF log file and spits out the grid squares we have worked and confirmed. It's easy enough to just use but if the options puzzle you, click the question-mark-diamond at the top of the web page."

CQWW WPX Contest, CW
May 29, 2021

Call : AB2E
Operator (s) : AB2E
Station : AB2E

Class : SOAB HP
Class Overlay : TB-Wires
QTH : SNJ
Operating Time (hrs) : 29
Location : USA

Summary :

Band	QSOs
160 :	1
80 :	111
40 :	589
20 :	670
15 :	160
10 :	14

Total : 1,545 Prefixes : 710
Total Score : 2,722,850

Club : Frankford Radio Club **52**

Comments :
TB-Wires category
Rig: FTDX-9000D/Acom 2000A
Antennas : All wires.
160m - Inverted L over 100ft tree
80m - half-wave dipole @ 90ft
40m - half-wave dipole @ 80ft
20m - delta loop @ 65ft
15m/10m - homebrew fan dipole @ 65ft

Condx better this year! Managed to operate 30hours but not the allowed 36. Had about 50 more mults than last year, and more 6 point QSOs on 40m, but 150Qs less than last year. Beat last year's score by about 120K. I'm leaving the band breakdown in, as you can see, the 6 point Q's on 40 are crucial to a good score. Great to see so many friends, and have so many DX multipliers call in. Sunday morning I had several JA stations call in on 20m, no flutter.

Band	*QSOs*	*Pts*	*WPX*	*Pt/Q*
1.8	*1*	*1*	*1*	*1.0*
3.5	*111*	*253*	*44*	*2.3*
7	*589*	*2,007*	*318*	*3.4*
14	*670*	*1,320*	*303*	*2.0*
21	*160*	*236*	*40*	*1.5*
28	*14*	*18*	*4*	*1.3*
Total	*1,545*	*3,835*	*710*	*2.5*

Score : 2,722,850
1 Mult = 2.2 Q's

73 to all, CU in IARU in July,
Darrell AB2E

CQWW WPX Contest, CW
May 29, 2021

Call : K3TS
Operator (s) : K3TS
Station : K3TS

Class : SOAB HP
QTH : SNJ
Operating Time (hrs) :
Location : USA

Summary :

Band	QSOs
80 :	25
40 :	178
20 :	247
15 :	15

Total : 465 Prefixes : 368
Total Score : 556,416

Club : Frankford Radio Club **53**

Comments : *Had a house full of company all weekend (XYL's family), but the chilly and rainy weather kept everyone in-doors. Fortunately, I was able to escape to the shack a number of times and make some CW contacts, which was good practice for Field Day in a few weeks. A full time contest effort is never an option for me on Memorial Day weekend, so this was about as good as I could expect to do. 73*

de K3TS

2019-2023 Element 3 General Class License Question Quiz

This month we finish up **Subelement G6 : Circuit Components** (Answers on 'Last Page Calendar')

G6B03
Which of the following is an advantage of CMOS integrated circuits compared to TTL integrated circuits?
A. Low power consumption
B. High power handling capability
C. Better suited for RF amplification
D. Better suited for power supply regulation

G6B04
What is meant by the term ROM?
A. Resistor Operated Memory
B. Read Only Memory
C. Random Operational Memory
D. Resistant to Overload Memory

G6B05
What is meant when memory is characterized as non-volatile?
A. It is resistant to radiation damage
B. It is resistant to high temperatures
C. The stored information is maintained even if power is removed
D. The stored information cannot be changed once written

G6B06
What kind of device is an integrated circuit operational amplifier?
A. Digital
B. MMIC
C. Programmable Logic
D. Analog

G6B07
Which of the following describes a type N connector?
A. A moisture-resistant RF connector useful to 10 GHz
B. A small bayonet connector used for data circuits
C. A threaded connector used for hydraulic systems
D. An audio connector used in surround-sound installations

G6B08
How is an LED biased when emitting light?
A. Beyond cutoff
B. At the Zener voltage
C. Reverse biased
D. Forward biased

General Class Quiz - Continued on page 31

General Class Quiz - Continued from page 30

G6B09
Which of the following is a characteristic of a liquid crystal display?
A. It utilizes ambient or back lighting
B. It offers a wide dynamic range
C. It consumes relatively high power
D. It has relatively short lifetime

G6B10
How does a ferrite bead or core reduce common-mode RF current on the shield of a coaxial cable?
A. By creating an impedance in the current's path
B. It converts common-mode current to differential mode
C. By creating an out-of-phase current to cancel the common-mode current
D. Ferrites expel magnetic fields

G6B11
What is a type SMA connector?
A. A large bayonet connector usable at power levels more than 1 KW
B. A small threaded connector suitable for signals up to several GHz
C. A connector designed for serial multiple access signals
D. A type of push-on connector intended for high-voltage applications

G6B12
Which of these connector types is commonly used for audio signals in Amateur Radio stations?
A. PL-259
B. BNC
C. RCA Phono
D. Type N

G6B13
Which of these connector types is commonly used for RF connections at frequencies up to 150 MHz?
A. Octal
B. RJ-11
C. PL-259
D. DB-25

ARRL Ham Radio License Exam Practice Website
www.arrlexamreview.appspot.com

The W1UL Ham Cram Website
www.ham-cram.com

Gloucester County Amateur Radio Club
General Membership Meeting Minutes
Wednesday, June 2, 2021

Meeting opened @ 1936 Hours by President Tony Starr, K3TS with the Pledge of Allegiance. As previously announced, this will be our annual "Pizza Party".

Attendance :

- Members : 32 Plus 5 ZOOM attendees
- Visitors : 0

Welcome to New Member : **Gary Kinney KC2ULS** of Medford, NJ.

Minutes from the May General Membership Meeting were approved by vote.

Treasurer : Al Arrison KB2AYU reported YTD income of $3850 and expenses of $2040 for a net gain of $1810. These amounts will change as projects are approved, in keeping with recent changes to the Bylaws. $700 was spent for a new air conditioner that was installed at the Clubhouse, which includes a 3-year extended warranty. **Jim Clark KA2OSV** moved to accept, **Jon Pearce WB2MNF** seconded and the Treasurer's Report was approved by vote.

Clubhouse : Al Arrison KB2AYU reminded that much remains to be done. The shed has been cleaned out and Al hauled a truck load of junk to the dump. A bag of military style fiberglass masts belonging to AB2E must be picked up or they may be disposed of. Next projects will involve getting the HF rotator and coax repaired or replaced. Troubleshooting of the 4H bucket truck suggests a fuel pump problem. **Bill Price NJ2S** may be able to arrange loan of a bucket truck.

Committee Reports :

Field Day : Vinnie Sallustio N4NYY is looking for volunteers to assist with scoring bonus points and will email a request to the membership. Currently we need volunteers to handle :

- Media/Publicity
- Public Information Table
- Message to Section Manager
- General Message Handling
- Copying W1AW Bulletin
- Educational Activity
- Arranging visit of Official from Served Agency
- GOTA Station
- Field Day Youth
- Etc.

A Field Day meeting will be held after the next Board of Directors Meeting on Wednesday, June 16, 2021.

June 2021 General Membership Meeting Minutes - Continued on page 33

June 2021 General Membership Meeting Minutes - Continued from page 32

Hamfest : Sheldon Parker K2MEN reports that all is on track. ARRL has sanctioned this event and advertisement in QST has been approved. Other details, such as tickets and door prizes, will be addressed after Field Day.

Contests : Tony Starr K3TS said he was able to work the WPX Contest over Memorial Day Weekend after all due to being trapped inside by the bad weather. There was a 20 meter opening to Japan on Sunday morning and each prefix counted as a multiplier.

Nets : Jim Clark KA2OSV said that 10 Meter Net check-ins have dropped off. This is now on Tuesday nights at 8 PM on 28.465 MHz with 28.475 MHz as alternate frequency if band openings should require a shift. Several nets continue to run on the 2 Meter W2MMD repeater : the SKYWARN Net is now at 7:30 PM on Sundays (formerly at 7:45 PM), followed by the GC-ARES/RACES Training Net at 8 PM. **Greg Ciraula W5DO** reminded everyone of the Digital Training Net run by **Gary Mirkin WA3SVW** on Mondays at 8 PM; currently, they are doing FT-8. **Steve Farney W2SEF** continues to run a net on Tuesdays at11 AM and there is a Thursday evening RagChew net at 8 PM.

Raffle : A MFJ DSP unit was donated to the Club by **Wayne Wilson WA2LET**. Raffle tickets for this unit and the 50/50 will be sold during the Pizza break.

Old Business :

Anthony Cerami KD2RPI has become the project leader for repair of the Club's large, old emergency generator. So far, he has refurbished the carburetor and fuel pump. A radiator is available for salvage from an identical unit with a seized engine and several other parts necessary to get it running must be purchased. Total cost for parts is estimated to be $447.24. In addition, we will need a new oil filter, antifreeze etc. and the Club may wish to purchase a more effective (quieter) muffler. There was some discussion as to whether the old radiator could be repaired as backup. **Jim Clark KA2OSV** moved to spend $500 for purchase of parts, which was seconded by **Tom Litle AB2YG** and approve by vote.

New Business :

Herb Dyer KT2Y announced that the **City to Shore MS Bike Ride** will take place September 26 and 27, 2021. Hundreds of radio amateurs are requested to provide communications along the 150 mile (round trip) route. More information can be obtained by sending an email request to Herb.

Skunkworks : Jon Pearce WB2MNF showed slides to review the progress and upgrades to the W2MMD Clubhouse that have occurred since our last in-person general membership meeting more than a year ago. In brief : HEPA filters are installed, a new work project area has replaced a former junk area, major overhaul of HF room with copper grounding strips as part of the Lightning Protection Project under the leadership of **Ron Block NR2B**, Networking Cabinet relocated, Pi rack and wire rat nest relocated from underfoot to a neat cabinet, upgrades to WX and Satellite station, etc.

Karl Frank W2KBF announced that he is setting up a WinLink RMS (Radio Message Server) at his QTH and that he is planning to provide a WinLink Educational Activity during Field Day in order to score Bonus Points. Club members will be invited to send messages via WinLink in order to score additional bonus points for the Club.

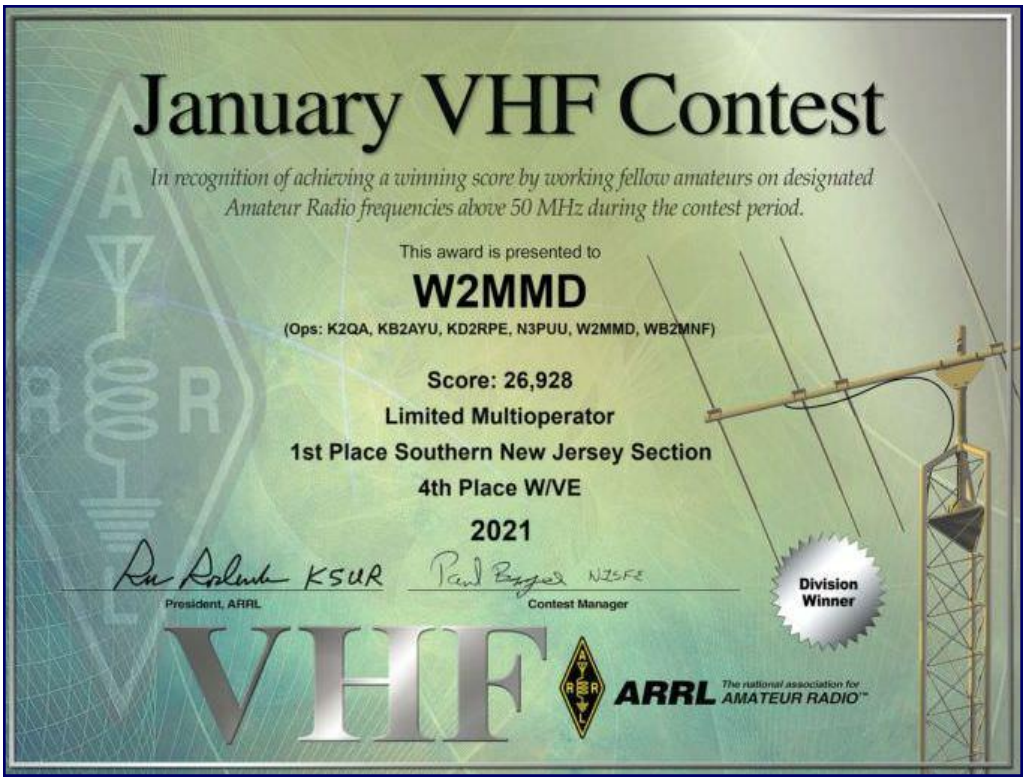
June 2021 General Membership Meeting Minutes - Continued on page 34

June 2021 General Membership Meeting Minutes - Continued from page 33

Herb Dyer KT2Y won the 50/50 drawing and **Tom Litle AB2YG** won the MFJ DSP filter.

Meeting adjourned @ 2120 Hours.

Respectfully submitted,
Karl Frank, W2KBF
Recording Secretary



The Amateur's Code By Paul M Segal, W9EEA (1928)	
The Radio Amateur is :	
Considerate	**Never knowingly operating in such a way as to lessen the pleasure of others.**
Loyal	**Offering loyalty, encouragement and support to other amateurs, local clubs and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.**
Progressive	**With knowledge abreast of science, a well built and efficient station, and operation beyond reproach.**
Friendly	**With slow and patient operation when requested, friendly advice and counsel to the beginner, kindly assistance, co-operation and consideration for the interests of others. These are the hallmarks of the amateur spirit.**
Balanced	**Radio is an avocation, never interfering with duties owed to family, job, school or community.**
Patriotic	**With station and skill always ready for service to country and community.**

Gloucester County Amateur Radio Club
Board of Directors Meeting Minutes
Wednesday, June 16, 2021

Meeting opened @ 1905 Hours by President Tony Starr, K3TS.

Attendance :

- President Tony Starr K3TS
- Treasurer Al Arrison KB2AYU
- Recording Secretary Karl Frank W2KBF
- Corresponding Secretary Ron Block NR2B
- Trustee Jim Wright N2GXJ
- Director Jeff Garth WB2ZBN
- Director Jim Clark KA2OSV
- Director Chuck Colabrese WA2TML
- Member Anthony Cerami KD2RPI
- Member Eric Morris N2BRJ
- Member John O'Connell K2QA
- Member Jon Pearce WB2MNF

President Tony Starr K3TS was pleased with the turnout at the recent General Membership/Pizza Night meeting at the **Pfeiffer Community Center** on June 2nd. Minutes of the May 19th BoD Meeting were summarized by **Karl Frank W2KBF** and approved by the BoD.

Treasurer's Report : Al Arrison KB2AYU reported YTD : Income of $3937, expenses of $2195, net gain of $1742. This includes budgeted expenses but not expenses from old projects prior to this year. The treasurer's report was approved by vote.

Clubhouse : Al Arrison KB2AYU inspected the HF tower (with broken rotator) and reports that the coaxial cables are twisted but DO NOT appear to be damaged. **Eric Morris N2BRJ** said he can come up with a replacement rotator for the Club, so Al will not need to swap in a spare rotator of his for temporary use. Rotator replacement can be done without a bucket truck and cables can be replaced later when a bucket truck is available.

Al Arrison KB2AYU, Frank Romero N3PUU, and **Anthony Cerami KD2RPI,** checked the 4H bucket truck and found that the electric fuel pump is not providing sufficient pressure. A replacement pump is estimated to cost $250 and some discussion followed as to whether the Club should bear some of the repair expense, with the possibility of borrowing the 4H equipment in the future as needed vs simply renting a bucket truck, which could cost a few hundred dollars/day. (No decision taken).

Technical Committee : Jon Pearce WB2MNF reports that the Clubhouse Lightning Protection Project in the HF room is done for now and work in the VHF room will not start until Summer is over. **Frank Romero N3PUU** is preparing an itemized list of expenses, which may be lower than expected. The Solar Power Project has been providing all power necessary for the Skunkworks equipment recently - no draw from the commercial mains.

June 2021 Board of Directors Meeting Minutes - Continued on page 36

The Generator : **Anthony Cerami KD2RPI** ordered mounts for the replacement radiator. The cost to repair the original radiator is high, around $1000, so it is not worth pursuing. The Club does not have a transfer switch, which should be part of a future plan.

Hamfest : No update.

Contests : **Tony Starr K3TS** asked if anyone participated in the VHF contest. **Al Arrison KB2AYU** was in the Poconos with the Pack Rats and said conditions were not that good.

10 Meter Net : **Jim Clark KA2OSV** said it is still ongoing on Tuesday evenings.

Old Business :

Toilet Replacement Project : **Jeff Garth WB2ZBN** checked Home Depot and Lowes. Suitable brand-name replacements from Kohler and American Standard are available for $199. Jeff was asked to submit a budget request for $250 at the next General Membership Meeting.

New Business :

Jeff Garth WB2ZBN noted the umbrellas for the tables outside need to be replaced and will put together a proposal.

Al KB2AYU received two membership applications :

- Former member **Eugene Schoeberlein AA2YO** from West Deptford, NJ
- **Robert Bagienski** (no call) from Pitman, NJ.

Both applications were approved.

ZOOM Meetings : Periscope has been "retired", so it was decided to continue use of ZOOM for General Membership Meetings and **John O'Connell K2QA** volunteered to bring the necessary equipment.

Ron Block NR2B requested feedback and approval for the article that he is preparing for submission to QST. Feedback and approval were positive.

Jim Clark KA2OSV noted that **SJRA** has sent out postcards to solicit membership and suggested that the Club might do the same. He will bring this up at the next General Membership Meeting.

Tony Starr K3TS closed the BoD meeting @ 2004 Hours. We went outside for a tour of the generator, led by **Anthony Cerami KD2RPI** and a Field Day discussion, led by **Vinnie Sallustio N4NYY**.

Respectfully Submitted,
Karl Frank W2KBF
Recording Secretary

QSO Today Virtual Ham Expo

August 14 - 15, 2021

https://www.qsotodayhamexpo.com

The Jersey String Band will be marching in the following July 4th weekend parades :

- **July 3 @ 1000 : Paulsboro**
- **July 3 @ 1800 : Magnolia**
- **July 4 : Audubon**
- **July 4 : Mt. Ephraim**
- **July 4 : Runnemede**

Information courtesy of Glenn N2YIO

Club Member DXCC Standing

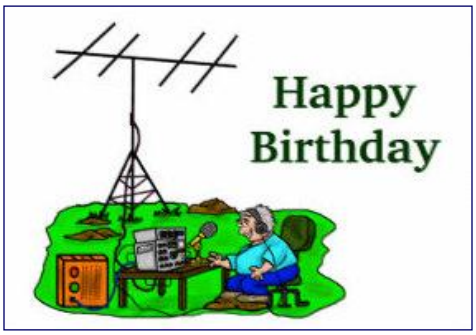
Name/Callsign	DXCC
Bill Grim, W0MHK	352
Dave Strout, W2YC	349
Darrell Neron, AB2E	328
John Hill, W2HUV	252
Ken Denson, WB2P	248
Vinnie Sallustio, N4NYY	220
Tony Starr, K3TS	208
Dennis Sandole, K2SE	204
Jim Wright, N2GXJ	179
Sheldon Parker, K2MEN	161
Eric Morris, N2BRJ	127
Howard Marder, WA2IBZ	122
Christopher Wawak, KC2IEB	120
Phil Nunzio, WA3RGY	116
Chuck Capasso, WB2PGE	103
Curt Myers, K2CWM	71
Jim Clark, KA2OSV	68
Lee Marino, N2LAM	35
Updated As Of 06/27/2021	

Contact Vinnie N4NYY if you would like to be added to the DXCC HONOR ROLL

July Birthdays

Congratulations to our members who are celebrating their birthday this month

Alex Calabrese, WA2ADS
Chris Chamberlain, N2IVN
Herb Dyer, KT2Y
Gary Hewitt, N2WHV
Jerry Jacobus, WB2QEF
Chris Kelly, KC2PC
Lee Marino, N2LAM
Phyllis Martin, W2PDB
Frank Messick Jr, W2FJM
Linda Murphy, KD2RVH
Charlie Olinda, N2SRQ (President 1994)
Mike Pecorini, K2MRP
Charlie Wahl Jr, KC2STO
Jeff Welsh, KD2AZI
John Wright, AC3FE
Rolf Wurmbach, KD2VQG



In Memoriam
July Birthdays

Silent Keys :
Francis Applegate Jr, N3DOM
William Bachman, WA2VEE (President 1969)
Alfred Bestwick, N2BTN
Paul Carr, KB2TKV
Mary Kate Coursey, WA2VRR
Richard Deane Sr, KA2BNJ
Ralph Ditore, K2KIT
Paul Fredricks, K2FI
Wesley Gosbin Jr, KB2IRK
Leon Jones, KC2AAA
John Kull, WB2GKH
John Logan Jr, KB2VSE
Harold Lowther, N2EJN
Alfred Marcy, W4ID
Albert Miller, KB2YDX
Tadeusz Niziol, N2BDC
Haywood Pelley, WA2EVK
Conrad Salati, N2HTS
Edward Sumek, W2GSN (President 1989)
James Swyler, WB2ELG
Alan Trueblood, N2FJQ
Wallace Utley, W2CB

Crosstalk Submissions

This is your Club Newsletter. Make use of it.

If you have stories or photos of your hobby that you would like to share with the Club, please do so!

We will keep covering all of the GCARC events, but it is also nice to get those personal perspectives to include in every issue. Connecting through experiences is what makes the Gloucester County Amateur Radio Club a *REAL* Club.

All submissions, queries, comments and editorials should be addressed to Jeffrey Garth, WB2ZBN at jeff <*dot*> garth <*at*> comcast <*dot*> net.

Submission deadline for the August 2021 issue : Tuesday, July 20, 2021

Club Website www.w2mmd.org
Club E-Mail Reflector: GCARC <*at*> Mailman <*dot*> QTH <*dot*> Net

July 2021 Contest Calendar

WA7BNM Contest Calendar : www.contestcalendar.com

July 2021	
RAC Canada Day Contest	0000Z-2359Z, Jul 1
CWops Mini-CWT Test	0300Z-0400Z, Jul 1
CWops Mini-CWT Test	0700Z-0800Z, Jul 1
NRAU 10m Activity Contest	1700Z-1800Z, Jul 1 (CW) and 1800Z-1900Z, Jul 1 (SSB) and 1900Z-2000Z, Jul 1 (FM) and 2000Z-2100Z, Jul 1 (Dig)
RTTYOPS Weeksprint	1700Z-1900Z, Jul 1
EACW Meeting	1900Z-2000Z, Jul 1
SKCC Sprint Europe	1900Z-2100Z, Jul 1
QRP Fox Hunt	0100Z-0230Z, Jul 2
NCCC RTTY Sprint	0145Z-0215Z, Jul 2
NCCC Sprint	0230Z-0300Z, Jul 2
K1USN Slow Speed Test	2000Z-2100Z, Jul 2
DL-DX RTTY Contest	1100Z, Jul 3 to 1059Z, Jul 4
Two-Meter Classic Sprint	1300Z-1330Z, Jul 3
Marconi Memorial HF Contest	1400Z, Jul 3 to 1400Z, Jul 4
TA VHF/UHF Contest	1500Z, Jul 3 to 1500Z, Jul 4
Original QRP Contest	1500Z, Jul 3 to 1500Z, Jul 4
PODXS 070 Club 40m Firecracker Sprint	2000Z, Jul 3 to 2000Z, Jul 4
K1USN Slow Speed Test	0000Z-0100Z, Jul 5
RSGB 80m Club Championship, CW	1900Z-2030Z, Jul 5
Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 6
ARS Spartan Sprint	0100Z-0300Z, Jul 6
RTTYOPS Weeksprint	1700Z-1900Z, Jul 6
Phone Weekly Test - Fray	0230Z-0300Z, Jul 7
CWops Mini-CWT Test	1300Z-1400Z, Jul 7
VHF-UHF FT8 Activity Contest	1700Z-2000Z, Jul 7
CWops Mini-CWT Test	1900Z-2000Z, Jul 7
Walk for the Bacon QRP Contest	0000Z-0100Z, Jul 8 and 0200Z-0300Z, Jul 9
CWops Mini-CWT Test	0300Z-0400Z, Jul 8
CWops Mini-CWT Test	0700Z-0800Z, Jul 8
RTTYOPS Weeksprint	1700Z-1900Z, Jul 8
EACW Meeting	1900Z-2000Z, Jul 8
QRP Fox Hunt	0100Z-0230Z, Jul 9
NCCC RTTY Sprint	0145Z-0215Z, Jul 9
NCCC Sprint	0230Z-0300Z, Jul 9
K1USN Slow Speed Test	2000Z-2100Z, Jul 9
IARU HF World Championship	1200Z, Jul 10 to 1200Z, Jul 11
SKCC Weekend Sprintathon	1200Z, Jul 10 to 2400Z, Jul 11
QRP ARCI Summer Homebrew Sprint	2000Z-2300Z, Jul 11
K1USN Slow Speed Test	0000Z-0100Z, Jul 12
4 States QRP Group Second Sunday Sprint	0000Z-0200Z, Jul 12
Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 13
RTTYOPS Weeksprint	1700Z-1900Z, Jul 13
Phone Weekly Test - Fray	0230Z-0300Z, Jul 14
CWops Mini-CWT Test	1300Z-1400Z, Jul 14
VHF-UHF FT8 Activity Contest	1700Z-2000Z, Jul 14
CWops Mini-CWT Test	1900Z-2000Z, Jul 14
RSGB 80m Club Championship, SSB	1900Z-2030Z, Jul 14
NAQCC CW Sprint	0030Z-0230Z, Jul 15
CWops Mini-CWT Test	0300Z-0400Z, Jul 15
CWops Mini-CWT Test	0700Z-0800Z, Jul 15
RTTYOPS Weeksprint	1700Z-1900Z, Jul 15
EACW Meeting	1900Z-2000Z, Jul 15

July 2021 Contest Calendar - Continued on page 40

July 2021 Contest Calendar

WA7BNM Contest Calendar : www.contestcalendar.com

July 2021 Contest Calendar - Continued from page 39

QRP Fox Hunt	0100Z-0230Z, Jul 16
NCCC RTTY Sprint	0145Z-0215Z, Jul 16
NCCC Sprint	0230Z-0300Z, Jul 16
K1USN Slow Speed Test	2000Z-2100Z, Jul 16
Russian Radio Team Championship	0700Z-1459Z, Jul 17
Trans-Tasman Low-Bands Challenge	0800Z-1400Z, Jul 17
Feld Hell Sprint	1200Z-1359Z, Jul 17
IARU Region 1 70 MHz Contest	1400Z, Jul 17 to 1400Z, Jul 18
North American QSO Party, RTTY	1800Z, Jul 17 to 0559Z, Jul 18
CQ Worldwide VHF Contest	1800Z, Jul 17 to 2100Z, Jul 18
RSGB International Low Power Contest	0900Z-1200Z and 1300Z-1600Z, Jul 18
YOTA Contest	1000Z-2159Z, Jul 18
CQC Great Colorado Gold Rush	2000Z-2159Z, Jul 18
Run for the Bacon QRP Contest	2300Z, Jul 18 to 0100Z, Jul 19
K1USN Slow Speed Test	0000Z-0100Z, Jul 19
Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 20
RTTYOPS Weeksprint	1700Z-1900Z, Jul 20
Phone Weekly Test - Fray	0230Z-0300Z, Jul 21
CWops Mini-CWT Test	1300Z-1400Z, Jul 21
CWops Mini-CWT Test	1900Z-2000Z, Jul 21
CWops Mini-CWT Test	0300Z-0400Z, Jul 22
CWops Mini-CWT Test	0700Z-0800Z, Jul 22
RTTYOPS Weeksprint	1700Z-1900Z, Jul 22
EACW Meeting	1900Z-2000Z, Jul 22
RSGB 80m Club Championship, Data	1900Z-2030Z, Jul 22
QRP Fox Hunt	0100Z-0230Z, Jul 23
NCCC RTTY Sprint	0145Z-0215Z, Jul 23
NCCC Sprint	0230Z-0300Z, Jul 23
K1USN Slow Speed Test	2000Z-2100Z, Jul 23
RSGB IOTA Contest	1200Z, Jul 24 to 1200Z, Jul 25
ARS Flight of the Bumblebees	1700Z-2100Z, Jul 25
K1USN Slow Speed Test	0000Z-0100Z, Jul 26
QCX Challenge	1300Z-1400Z, Jul 26
RSGB FT4 Contest Series	1900Z-2030Z, Jul 26
QCX Challenge	1900Z-2000Z, Jul 26
Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 27
QCX Challenge	0300Z-0400Z, Jul 27
RTTYOPS Weeksprint	1700Z-1900Z, Jul 27
SKCC Sprint	0000Z-0200Z, Jul 28
Phone Weekly Test - Fray	0230Z-0300Z, Jul 28
CWops Mini-CWT Test	1300Z-1400Z, Jul 28
CWops Mini-CWT Test	1900Z-2000Z, Jul 28
CWops Mini-CWT Test	0300Z-0400Z, Jul 29
CWops Mini-CWT Test	0700Z-0800Z, Jul 29
RTTYOPS Weeksprint	1700Z-1900Z, Jul 29
EACW Meeting	1900Z-2000Z, Jul 29
QRP Fox Hunt	0100Z-0230Z, Jul 30
NCCC RTTY Sprint	0145Z-0215Z, Jul 30
NCCC Sprint	0230Z-0300Z, Jul 30
K1USN Slow Speed Test	2000Z-2100Z, Jul 30
Feld Hell Sprint	0000Z-2359Z, Jul 31
Russian WW MultiMode Contest	1200Z, Jul 31 to 1159Z, Aug 1
Missouri QSO Party	1400Z, Jul 31 to 0400Z, Aug 1 and 1400Z-2000Z, Aug 1
WAB 144 MHz Low Power Phone	1400Z-1800Z, Jul 31

2021 Club Committees

Standing Committees	Committee Chairs
Budget	**Al Arrison, KB2AYU**
Constitution & By-Laws	**Ron Block, NR2B**
Field Day	**Vinnie Sallustio, N4NYY**
Hamfest	**Sheldon Parker, K2MEN and Bill Price, NJ2S**
Health, Welfare, & Silent Keys	**Bill Price, NJ2S**
Hospitality	**Jeff Garth, WB2ZBN**
Membership	**Bob Fields, KC6AOH**
Membership Badges	**Chuck Colabrese, WA2TML**
Nominations	**Tony Starr, K3TS**
Publicity	**Bob Fields, KC6AOH**
Repeaters	**Herb Dyer, KT2Y**
W2MMD Clubhouse Site	**Al Arrison, KB2AYU**

Activity Committees	Committee Chairs
Awards & Certificates	**Robin Herrmann, KD2LSH**
Club Publications & Historian	**Jeff Garth, WB2ZBN**
Contests	**Tony Starr, K3TS**
DX	***Open Chair***
GCARC Family Picnic	**Laurie Love, KD2EYW**
GCARC Foxhunts	**Jim Wright, N2GXJ**
GC-ARES Emergency Coordinator	**Karl Frank, W2KBF**
Holiday Dinner Party	**Jennifer Robinson, KD2EYR**
License Testing/VEC Liaison	**Gary Reed, N2QEE**
Membership Roster Database	**Jeff Garth, WB2ZBN**
Programs : Meetings & Tech Saturdays	**Jeff Welsh, KD2AZI**
Radio Nets	**Jim Clark, KA2OSV**
Technical	**Jon Pearce, WB2MNF**
W2MMD License Trustee	**Darrell Neron, AB2E**
W2MMD Special Event Station	**Mark Gottlieb, KK2L**

GCARC <*at*> Mailman <*dot*> QTH <*dot*> Net e-mail reflector guidelines

1.**No attachments** (e.g. pictures, files) are allowed on the reflector.

2.If you have Club-related pictures that you would like to share, you can send them to the webmaster, he will put them on the website and will send out a general e-mail to all the members.

3.Otherwise, the pictures will have to be sent to the members' addresses.

4.URLs/Hyperlinks are acceptable on the reflector.

5.Do not send any messages with e-mail addresses in the **BCC** (**Blind Carbon Copy**) field. The message will be rejected. Use only the **To:** or **CC:** fields.

6.Members are subscribed to the reflector using the member's e-mail address from the roster database. You must use that address when sending an e-mail via the reflector.

7.If you use another address on the reflector, the message will get rejected or "*bounced*", because the reflector does not recognize that address.

8.Whenever a message sent to reflector is rejected or *"bounced"* for various reasons, the administrator has to log-in to the Mailman.QTH website and approve the message. If the admin recognizes the address as belonging to a Club member, the message is accepted and passed on to the reflector.

For more information about the e-mail reflector, goto : **www.mailman.qth.net**

The W2MMD Repeaters

2 Meter Repeater
Output : 147.180 MHz
Input : 147.780 MHz
Offset : +600 kHz - PL : 131.8 Hz
(Conventional FM plus C4FM Capability)
EchoLink : W2MMD-R

70 cm Repeater
Output : 442.100 MHz
Input : 447.100 MHz
Offset : +5 MHz - PL : 131.8 Hz
(Conventional FM plus C4FM Capability)

The above 2 repeaters are all
located in Pitman, NJ
GPS : 39.728481°, -75.131088°

1.25 Meter Repeater
Output : 224.660 MHz
Input : 223.060 MHz
Offset : -1.6 MHz - PL : 131.8 Hz
Location : Sewell, NJ
GPS : 39.746738°, -75.077094°

SKYWARN™ Net
Sunday @ 1930 : 147.180 MHz Repeater

Gloucester County ARES/RACES Net
Sunday @ 2000 : 147.180 MHz Repeater

Monday Night 2 Meter Digital Training Net
Restarting on Monday, July 12 @ 1900 Hours

Tuesday Morning 2M Rag Chew Net
Every Tuesday @ 1100 Hours

Tuesday Night 10M Rag Chew Net
Every Tuesday @ 2000 Hours
Tune in on 28.465 MHz or 28.475 MHz

Thursday Night 2M Rag Chew Net
Every Thursday @ 2000 Hours

Meeting Calendar

General Membership Meeting
Wednesday, July 7, 2021
1930 Hours
Live & In-Person
Pfeiffer Community Center
Also Live on ZOOM

Board of Directors Meeting
Wednesday, July 21, 2021
1900 Hours
W2MMD Clubhouse

"Ask not what your Club can do for you, Ask what you can do for your Club"
- KA2OSV

"The big thing about being in a club and being a "Ham" is to help each other when there is a need "
- W2SEF

*** Badges ***

Need a new or replacement badge
Contact "The BadgeMan"

Chuck Colabrese, WA2TML
colabrese <*at*> comcast <*dot*> net

Question Pool Answers : G6B03:A; G6B04:B; G6B05:C; G6B06:D; G6B07:A; G6B08:D; G6B09:A; G6B10:A; G6B11:B; G6B12:C; G6B13:C

73 **Gloucester County Amateur Radio Club - P. O. Box 370 - Pitman, NJ 08071** **Ω**