



CrossTalk

Issue 62:08 62 Years Of Service To Our Community August 2021

2021 Club Officers

President :	Anthony Starr, K3TS	Trustees - 4 year term	
Vice President :	Jeffrey Welsh, KD2AZI	Charles Lanard, KD2EIB	<i>(2018-2021)</i>
Treasurer :	Alan Arrison, KB2AYU	James Wright, N2GXJ	<i>(2019-2022)</i>
Recording Secretary :	Karl Frank, W2KBF	Mark Gottlieb, KK2L	<i>(2020-2023)</i>
Corresponding Secretary :	Ronald Block, NR2B	Robert Fields, KC6AOH	<i>(2021-2024)</i>

Board of Directors - 3 year term

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

This Month's Calendar

General Membership Meeting

Wednesday, August 4, 2021 @ 1930 Hours

In-Person & ZOOM

Pfeiffer Community Center

Tech Saturday Forum

Saturday, August 7, 2021 @ 0900 Hours

W2MMD Clubhouse

Board of Directors Meeting

Wednesday, August 18, 2021 @ 1900 Hours

W2MMD Clubhouse

Monday Night 2 Meter Digital Training Net

Every Monday @ 1900 Hours

Tuesday Night 10 Meter Rag Chew Net

Every Tuesday @ 2000 Hours - 28.465 MHz

Tuesday Noon Day 2 Meter Rag Chew Net

Every Tuesday @ 1200 Hours

Thursday Night 2 Meter Rag Chew Net

Every Thursday @ 2000 Hours

147.180 MHz & EchoLink : W2MMD-R

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ARRL SNJ Section Convention and Hamfest

Presented By The



**Gloucester
County
Amateur Radio
Club**
W2MMD



Celebrating Our 62nd Year

www.w2mmd.org

Open to the public at 8 AM

43rd Annual Hamfest - September 12, 2021

ADMISSION : \$10.00

Non-Ham Spouses and Kids FREE

Vendors and Tailgaters of new and used radio and electronic equipment

Gates open at 6:00 am for vendors and tailgaters

Tailgating rules (open grassy areas only) :

- ◆ \$10.00 per vehicle space, up to 10 feet
- ◆ No reserving or holding spaces for tailgaters not yet present
- ◆ First come, first serve

Table rules (covered pavilions only) :

- ◆ \$12.00 per table (yours), or table space up to 8 feet
- ◆ Tailgating under pavilions will fall under "Table Rules" rates

**Some pavilion spaces have electric.
Space price does not include admission.**

ARRL VEC License Testing starting at 9:00 am

- ◆ Exam Testing @ W2MMD Clubhouse
- ◆ Exam Fee : \$15.00

Door prize drawings throughout the day

Talk-In Station :

147.180 MHz + PL 131.8 Hz

EchoLink : W2MMD-R



**Food and beverages provided by
Hog Day Afternoon BBQ & Catering**

www.hogdaycatering.com

**Gloucester County 4-H Fairgrounds • www.w2mmd.org
235 Bridgeton Pike (Route 77) • Mullica Hill, NJ 08062
GPS : 39.715572°, -75.211944°**

**Contact : Sheldon Parker, K2MEN at sheldonparker@comcast.net
GCARC, PO Box 370, Pitman, NJ 08071**

Ver: 2021:0226



President's Message



By now you must have heard that Field Day 2021 was an unparalleled success, and that a great time was had by everyone. Participation was great all around, and our score was significantly better than last year. We won't know until December if we won our class (7A), but whether we won it or not, we had more fun this year than last year, and last year was not bad! Thanks to all who came out and pitched in, and congratulations in advance for our excellent score, regardless of where it ranked. If you missed Field Day this year, you missed a lot, so do plan on coming out next year. You will not regret it.

I am happy to report that many significant projects around the Clubhouse are getting checked off the list, thanks to the tireless work of our all-volunteer teams of members who are getting these projects done. The HF station is now in fine shape, with legal limit power, and full remote control, including antenna rotation. This accomplishment was through no small task, but we got it all done and it is ready to go. Other improvements include a new air conditioner in the main room, and a new toilet in the bathroom. Overall, the Clubhouse has never looked better. And as I always say, it is an asset that members of other radio clubs can only dream of. We are fortunate indeed to have the motivated members that we have, who continue to get things done for GCARC.

This month in August, two of my most favorite contests are on the calendar. The North American QSO Party CW will be held on August 7th, and the NAQP SSB contest will follow, two weeks later, on the 21st. These contests are just 12 hours long, and single operators can work no more than 10 hours of that. There is a 100 watt power limit, which evens the playing field, and no spotting assistance may be used, unless you are entering in the multi-op class. These contests, in my opinion, are the very best contests for a beginner who wants to give contesting a try, and they are held twice a year, in August and January. Participation has been growing by leaps and bounds, so there is no shortage of contacts to be had. Why not give it a try? You have nothing to lose but 10 hours of your time, and you might just have a lot of fun.

Our annual hamfest is just around the corner now, so if you have not signed up yet for a volunteer position, please do so at the next general meeting, or by contacting Sheldon Parker, K2MEN. If the weather is good, we are expecting a good turnout again, so we certainly can use all the help we can get. If you were not aware of it, we have one of the largest and longest running hamfests in the region, which is generally held in high regard by many. Lets all pitch in if we can, and try to keep that tradition going. And unlike Field Day, you don't need to devote an entire weekend to it to be a major participant. A few hours on Saturday night or Sunday morning is all it really takes. Mark your calendar now for Sunday, September 12th.

That is about all I have for now.

This month we welcome new member Peter Bircsak, WB2EDJ, from Monroeville NJ. Welcome aboard!

I hope to see everyone come out for the August 4, 2021 General Membership Meeting at the Pfeiffer Community Center in Williamstown. We will try to have a ZOOM link up for those who are unable to attend in person.

**Until then, 73!
de K3TS**

General Membership Meeting

Wednesday, August 4, 2021 @ 1930 Hours

Pfeiffer Community Center

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

Program : John Hill, W2HUV - Remote HF Station Demonstration

John will use his laptop to connect to the HF Station at the W2MMD Clubhouse and show the audience how easy it is to control the HF Station remotely. This will include operation of the radio, amplifier, and rotator. If time permits, he will try to make a few contacts. For more information, please see the help topics on the Remote HF Station web page.

Also, Sheldon Parker, K2MEN, will be asking for more Hamfest Volunteer Sign-Ups

Welcome New Club Member :

Peter Bircsak, WB2EDJ, who has a General Class license and lives in Monroeville, NJ.

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 Tuesday night 10M Rag Chew Net. Also on the Monday night Digital Training Net, the Tuesday Noon Day and Thursday Night 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](mailto:GCARC@MAILMAN.QTH.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
August 7, 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 Noon Day 2M Rag Chew Net @ 1200 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

Tuesday Night 10M Rag Chew Net @ 2000 Hours
Net Control Host : Jim, KA2OSV
28.465 MHz or 28.475 MHz

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 : We still haven't heard from the Franklinville Township Community Center for a testing venue. The FCC hasn't starting collecting the \$35 application fee. These fees will apply to new, modification (upgrade and sequential call sign change), renewal, and vanity call sign applications. All fees will be per application. The FCC has stated that amateurs will have advanced warning of the actual effective date, because it will publish such date in the **Federal Register** (www.federalregister.gov). It is expected that such fees will not be put into effect until sometime in early 2022. Further news and instructions will follow when the FCC releases them. The **ARRL website** (www.arrl.org/FCC-Application-Fee) will have instructions on how to pay the fee when it becomes active.

73

Gary

>>**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 : dbugsy66@comcast.net.

>>Condolences to the South Jersey Radio Association (SJRA) on the loss of club member **Art Arnold, N2CPR**. Art was a very active ham throughout South Jersey especially his volunteer work with MS150 Bike Ride.



Field Day Desserts

By Karen Garth (XYL of WB2ZBN)

Dirt

- (2) 3 ounce packages of instant chocolate pudding
- 3 cups of milk
- 12 ounces of Cool Whip
- 16 ounces of Chocolate Double Stuff Oreo Cookies (crushed)

- Mix pudding and milk for 2 minutes - let sit for 5 minutes
- Add Cool Whip and mix gently with spoon
- Add half of crushed Oreo Cookies - Mix
- Top with remaining crushed Oreo Cookies

Sand

Same instructions as Dirt, but substitute French Vanilla pudding and Vanilla Double Stuff Oreo Cookies.

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

WinLink® Training

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 : 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
Jeff Garth, WB2ZBN : September 9, 2021
Greg Ciraula, W5DO : September 16, 2021
Mary Delemarre, W2TDS : September 23, 2021
Steve Farney, W2SEF : September 30, 2021
Gary Mirkin, WA3SVW : October 7, 2021

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

Regional (Atlantic & Hudson Divisions) Hamfests & Events

August 7, 2021 : Reading Radio Club Hamfest, Heritage Park, 992 Clematis Street, Sinking Springs, PA. www.qsl.net/w3bn

August 14, 2021 : Uniontown Amateur Radio Club, W3PIE 71st Annual Gabfest, Uniontown ARC Clubhouse, 433 Old Pittsburgh Road, Uniontown, PA. www.w3pie.org

August 21, 2021 : Keuka Lake Amateur Radio Association, 13th Annual Hamfest, Howard Community Center, 7481 Hopkins Road, Howard, NY. www.klara.us

August 21, 2021 : East Greenbush Amateur Radio Association, East Greenbush Town Park, Town Park Road, East Greenbush, NY. www.egara.club

August 28, 2021 : ROC City Net, 3rd Annual Hamfest, The Log Cabin Family Restaurant, 2445 West Walworth Road, Macedon, NY. www.facebook.com/groups/roccitynet

August 29, 2021 : Skyview Radio Society Swap N Shop, Skyview Radio Society Clubhouse, 2335 Turkey Ridge Road, New Kensington, PA. www.skyviewradio.net



The Decibel Originated From Methods Used To Measure What?

By Bill Szkromiuk, W4WCS (South Carolina Foreign Correspondent)

Answer : Telegraph Signals

The decibel as we now know it, a logarithmic unit used to measure the intensity of a sound source and/or the power of other energy sources like cellular transmissions, was created by Bell Telephone Laboratories in 1924 when researchers there proposed that telephone signal strength should be measured in Transmission Units (TUs).

One TU was defined such that the number of TUs was ten times the base-10 logarithm of the ratio of measured power to a reference power level. In 1928, they formally changed the name from TUs to decibels, being one tenth of a newly defined unit for the base-10 logarithm of the power ratio. It was named the bel, in honor of Alexander Graham Bell.

The decibel wasn't the first attempt to measure transmission power, however, and what became the decibel and our accepted way of measuring everything from how loud a rock concert is to how strong a cellular signal our phones receive, all started with early attempts to quantify signal loss in telegraph and telephone circuits. Before the TU/decibel, there was the Miles of Standard Cable (MSC) measurement.

One unit of MSC corresponded to the smallest detectable change as caused by a drop in power over a one mile length of standard telephone cable (approximately 19 gauge) at a frequency of 5,000 radians per second (795.8 Hz). The decibel was a significant improvement over the MSC standard because the measurement was relative to the power source and could be applied across all mediums (not just telegraph and telephone wires).



Amateur Radio Demonstrations - August 5 and September 21, 2021 **By Karl Frank, W2KBF, Gloucester County ARES Coordinator**

As **Bob Keogh, KD2NEC**, announced on the Sunday, July 25, 2021 ARES/RACES Net, he is planning a demonstration of Amateur Radio at the East Greenwich CERT Meeting on Tuesday, September 21, 2021 around 1915 Hours. He is looking for contacts via the W2MMD 2 Meter Repeater and Echo-Link W2MMD-R during his demonstration. So pencil in this date.



Mike Harla N2MHO is planning a similar demonstration on Thursday, August 5, 2021. See the message below.

Hello,

Cumberland County ARES/RACES will host a demonstration of Amateur Radio modes & techniques on Thursday, August 5, 2021 at the Port Elizabeth School on Route 47 from about 1700 to 2030 Hours.

It would help if operators could listen during this period for our station call KC2TXB/2, to be available on the other end for contacts we might make.

We plan on doing demonstrations of HF and VHF voice, WSPR and possibly other digital modes.

We will use the repeater on **146.805 MHz/PL 118.8**, with **145.490 MHz/PL 179.9** repeater as backup. We will also monitor the SCERN C4FM network as time allows.

We will try to hold a net on **146.805 MHz** between 1930 to 2030 Hours. Other nets may be scheduled as time allows.

Please join us on August 5th as we work to build awareness of Amateur Radio.

Thanks,

Michael Harla, N2MHO
ARES/RACES Officer
Cumberland County
Vineland, NJ



Tuesday, August 3, 2021

2021 Clubhouse Projects

Shed :

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

Painting :

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

Front Flood Lights :

- Replace Left Flood Light
- Adjust Light Position Direction

Back Steps :

- Spray Mold
- Power Wash
- Paint

Replace Front Door & Screen Door

Power Wash Back Steps

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.

Zero Beat

A recent edition of ARRL The Doctor is In podcast discusses Zero Beat. The Zero Beat term originated from the time when receivers and transmitters were separate and the receiver frequency was brought to the same frequency as the transmitter by listening to carrier signals at the two frequencies simultaneously. As the frequencies become closer and closer together, the difference frequency can be first heard as a tone, but as they become nearly identical, a difference of a few cycles per minute is heard as more of a varying in loudness of one of the signals, eventually a thump, or beat. Hearing no beat indicates that the frequencies are identical. With today's frequency stable transceivers tunable with sub-Hertz accuracy in some cases, zero beat can also be used to indicate the act of tuning exactly to a frequency of another station, perhaps as the result of clicking on a spot in a logger band map. During a contest, you might NOT want to be zero-beat with the spot frequency of a multiplier you need, since others may be calling at the same time. You'd like your signal to stand out.



Come One, Come All!!!

**The Clubhouse has a new
Porcelain Facility!!!**

**A BIG Thank You to Frank Romeo,
N3PUU for the removal and installa-
tion on Saturday, July 17, 2021**



The GCARC Field Day Satellite Station 2021

By Jon Pearce, WB2MNF

Field Day is always an important event for the GCARC Skunkworks team. A single satellite QSO is worth 100 bonus points - more points than some single-band stations get throughout the entire contest - and everyone in the Club knows whether we've succeeded or failed at getting that QSO. And the satellite station needs to be fully-functional - we need the best antennas that we can get along with an azimuth-elevation rotation system that will track satellites as they move across the sky. During Field Day satellite signals are far weaker than at other times because the power budget of the satellite is fixed and gets distributed among all stations. Normally when only a few stations are using a satellite each station gets a significant portion of that budget with a commensurate signal strength level, but on Field Day a dozen stations may be vying for those watts with a resulting decrease in the level of each signal.

In earlier years we used the "Armstrong" method of antenna rotation with volunteers aiming the Arrow portable antennas at the satellite, and although we were always successful at making at least one contact this process was clearly suboptimal. Last year we had obtained the M2 "LEO Pack" of crossed Yagi antennas for 2 meters and 70 cm but using the Portable Rotation rotator (which has since been discontinued) didn't work very well - it had a tendency to wrap the feedlines around the mast if not carefully supervised during a pass, and it also seemed to lose calibration easily.

This year Frank N3PUU decided to build the **V3 az/el rotator** (https://wiki.satnogs.org/SatNOGS_Rotator_v3) developed by the SatNOGS team that also manages the satellite telemetry tracking network. This uses stepper motors as the basic motor and creates antenna rotation through a large set of 3D printed gears. Over the past year Frank printed and assembled the rotator and he, John K2QA and I took it down to the W2MMD Clubhouse for testing a couple of weeks before Field Day.

Those tests were disappointing. While the azimuth rotator was able to rotate the antenna array around the horizontal axis the elevation rotator didn't have enough torque to elevate the antennas. At that point the antennas hadn't been balanced - each was mounted at the recommended mounting point that created more weight on the front of the antenna array than on the back. Additional technical issues occurred at that point so we had to abandon that effort with Frank planning to do additional testing to ascertain the problem with the elevation rotation.

The following Saturday we reconvened, Frank having checked all of the motors and other components and verifying that they worked properly. It appears that the SatNOGS design didn't provide for motors having enough torque to rotate the complete LEO Pack antenna setup. However, we still believed that with proper balancing of antennas we could still get the elevation rotator to work, and we were finally successful after tying the feedlines back up the antenna masts to the boom, remounting both antennas closer to the balance point and adding some small weights by tie-wrapping washers to the end of the antenna. All of this may have affected the RF pattern but it was necessary to make the elevation rotator functional. We did find that the rotator would lock up when rotating at about 80 degrees of elevation (which is strange because higher elevations should require less motor torque) which we solved by locking the maximum elevation in the PST Rotator controller program at 75 degrees. This solved the rotation issue.

GCARC Field Day Satellite Station - Continued on page 12

We also had experienced interference on the 70 cm downlink frequency from the 2 meter uplink signal (satellite operation is cross-band and full-duplex). This was solved with a diplexer that split the 2 meter and 70 cm signals and fed the 2 meter signal into a dummy load while passing the 70 cm signal through to the receiver. We used a SDR Play radio and the SDR Console program for the downlink and an IC-7100 for the uplink.

Other important station components were a multi-port headphone amplifier that allowed multiple operators to listen to the received signal and vary their own volume levels - this was especially critical because of a large noisy event occurring in the field next to the Clubhouse. A secondary display on my Dell laptop allowed viewing the PST Rotator screens showing the satellite and rotator positioning as well as upcoming satellite passes on one screen with the SDR display on the other. My Honda 2200 inverter generator loafed along providing power for the weekend.

Greg W5DO and I made a few test contacts before the 2 PM Field Day start time to be sure that everything was working. Once the event started we had to wait until the next satellite pass and in the second group of passes around 5 PM we made our “bonus” contact on AO-7, the oldest of the ham radio satellites still in operation. After that we tried working several other passes but found that the FT-8 station on 6 meters would clobber our reception at unpredictable times. We also found that signal strength was quite weak - much weaker than we found at the Clubhouse satellite station during the same period. This made us suspect that the RG-58 feedline that we were using was the cause, so a goal for next year is to either replace that feedline or install a preamp near the antenna. These issues combined together caused us to conclude that getting the first bonus contact was worth the effort but getting additional contacts was not, so we shut down the satellite station around 9 PM.

Overall the project was a success - we maintained our record of getting the satellite bonus contact each year that we attempted it, and had no major hardware or operating failures once we got everything working. Our goal for next year will be to improve the receive signal strength to make contacts easier, and to continue our previous successes.

GCARC Field Day Satellite Station - Continued on page 13



Figure 1 : Satellite Station

Figure 2 : Satellite Tent



Figure 3 : Satellite Antenna and Rotator





Figure 4 : Frank N3PUU and John K2QA level the 2 Meter antenna



FT8 4th Anniversary Special Event - August 2 - 15, 2021

Many stations will take to the airwaves August 2 - 15 to celebrate the 4th Anniversary of FT8 (<https://ft8dmc.eu>). All stations will use call signs with "FTDMC" or "FTDM" in the suffix.

The activity also celebrates the 2nd anniversary of the FT8 Digital Mode Club. Logs will be uploaded to LoTW and eQSL. QSL cards will be available.

Stations planning to participate include : 4J8FTDM, OZ8FTDMC, RO3FTDM, 9K8FTDMC, A60FTDMC, DQ8FTDMC, GB0DMC, HZ8FTDMC, and many others.

A certificate will be available with bronze, silver, gold, and platinum levels for working them. - Thanks to **The Daily DX** (<https://www.dailydx.com>)



Article Credit : *The ARRL Letter for July 22, 2021* - www.arrl.org

Gloucester County Amateur Radio Club Field Day 2021 'Unofficial' Results

Call Used :	W2MMD
GOTA Station :	None
ARRL/RAC Section :	SNJ
Class: :	7A
Participants :	40
Club/Group Name :	Gloucester Co ARC
Power Source (s) :	Generator, Battery, Solar
Power Multiplier :	x2

QSO Score Summary				
	CW	Digital	Phone	Total
Total QSOs	2,024	656	729	3,409
Total Points	4,048	1,312	729	6,089
Claimed Score	Power Mult : x2			12,178

Total Score : (QSOs Scores + Bonus Points)	14,268
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Bonus Points	
Description	Points
100% Emergency Power 8 x 100	700
Media Publicity	100
Public Location	100
Public Information Table	100
Formal Message To ARRL SM/SEC	100
W1AW Field Day Message	100
Formal Messages Handled	100
Natural Power QSOs Completed	100
Site Visit Invited Elected Official	100
Site Visit Invited Served Agency	100
Educational Activity	100
Youth Participation	40
Safety Officer	100
Social Media	100
Satellite QSO	100
Entry Submitted Via Website	50
Subtotal Bonus Points Claimed	2,090

Band/Mode QSO Breakdown

	CW QSOs	CW Power	Digital QSOs	Digital Power	Phone QSOs	Phone Power
160 Meters	1	100				
80 Meters	462	100			474	100
40 Meters	743	100	89	80	241	100
20 Meters	658	100	297	80	5	100
15 Meters	119	100	119	80		
10 Meters	41	100				
6 Meters			145	50		
2 Meters			6	50	8	50
Satellite					1	20
Totals	2,024		656		729	



Plans Proceeding For Fall 2021 Willis Island DXpedition

The team from the Hellenic Amateur Radio Association of Australia (**HARAOA** - <http://www.haraoa.com>) that's planning a November 3 - 13 DXpedition to Willis Island (VK9HR) has expanded by one, and the DXpedition planning is on schedule. A vessel to take the team to Willis Island has been chartered to leave Australia on November 3, returning on November 13. Willis ranks #38 on Club Log's **DXCC Most Wanted List** (<https://clublog.org/mostwanted.php>). The group announced earlier that it had put off plans to include a stint from Mellish Reef, last activated in 2017. The ham radio team will be just in time to celebrate the centennial of the island's meteorological facility.

"With time away from jobs a consideration for the operators, Mellish is being put off to 2022," said team leader John Chalkiarakis, VK3YP.



While the call sign VK9HR is expected to be renewed in August, Chalkiarakis is trying to get VK9W. "VK9IR will be an additional call sign to be allocated," he said. VK9IR and VK9HR were used for HARAOA's 2011 DXpedition to Lord Howe Island.

Team members for this fall's DXpedition will hail from Australia and New Zealand. They're in the process of obtaining a permit from Parks Australia, which is "required to 'camp' at these Australian Coral Sea marine parks." Chalkiarakis said the most important document is the landing permit, also from Parks Australia. No permit is required to visit these coral sea islands for non-commercial purposes, but a permit application is needed to set up a campsite and to stay overnight on the island.

The now eight-operator team plans to use verticals on 160, 80, 40, and 30 meters, while VDAs (vertical dipole arrays) will be used on 20, 17, 15, 12, and 10 meters. Operation on 6 meters is under consideration. Activity is expected on SSB, CW, and FT8 on 160 through 10 meters. The equipment complement is expected to be Kenwood TS-590S and Icom IC-7300 transceivers with amplifiers on all.



A DXpedition website and logo are in the works. Home to a meteorological station, Willis Island is in the Coral Sea, off the northeast coast of Australia.

Chalkiarakis also said that he and some friends have been trying to obtain a landing permit for Macquarie Island (VK0M), which is #12 on Club Log's DXCC Most Wanted List, but he conceded that it's nearly impossible to get permission from the Tasmania Parks and Wildlife Service because Macquarie is a protected nature reserve. - Thanks to **The Daily DX** (<https://www.dailydx.com>)

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



Radio Amateur's Vintage Film Footage Sheds Light On Hindenburg Disaster

Vintage film footage provided by New Jersey radio amateur Bob Schenck, N2OO, was the highlight of a PBS documentary about the Hindenburg disaster. The film, shot by his uncle, Harold Schenck, may provide clues as to what initiated the disastrous 1937 fire that destroyed the airship Hindenburg and claimed 35 lives as the German zeppelin was landing at Lakehurst, New Jersey. Harold Schenck tried to interest government investigators in his film, shot from a different angle than newsreel footage that begins only after the fire was well under way, but it was largely overlooked. "Nobody ever asked for it," Bob Schenck explains in the documentary.



The Schenck film is the highlight of a PBS NOVA documentary, **Hindenburg: The New Evidence** (<https://www.pbs.org/wgbh/nova/video/hindenburg-the-new-evidence>), that investigates the issue in considerable depth in an effort to unlock the secrets of the cold case. The program aired on May 19 and remains available for streaming.

"My dad had bought this nifty Kodak camera - a wind-up movie camera, 8 millimeters - and he couldn't come [to the Hindenburg landing] because he worked," Bob Schenck recounted during the documentary. "So, he asked my uncle and my mom if they would take some shots and see the Hindenburg land."

Bob Schenck approached Dan Grossman, an expert on airships, including Hindenburg, in 2012 during a commemoration of the disaster that forever memorialized radio reporter Herbert Morrison's plaintive on-air reaction, "Oh, the humanity!" The NOVA documentary not only shares Schenck's footage, which provided new clues to re-examine the cause of the explosion, it also reviews scientific experiments that helped investigators come to a fresh understanding of what set off the fire.



The original investigation only concluded that the fire resulted from leaking hydrogen ignited by a spark, but it was never determined what caused the spark. Witness accounts suggested the fire started near the airship's tail, but supporting evidence was hard to find until the Schenck footage was examined.

"The Hindenburg remains vivid in our collective memories all these years later because of the searing images and film of the explosion," said NOVA co-executive producer Chris Schmidt in a **Manchester Patch article** (<https://patch.com/new-jersey/manchester-nj/pbs-hindenburg-shares-overlooked-footage-explosion>). "We feel honored to share this new footage with the world and to bring the NOVA audience behind the scenes of this pivotal new investigation into the crash." - Some information from Manchester Patch; thanks to Pete Varounis, NL7XM

Article Credit : The ARRL Letter for May 27, 2021 - www.arrl.org



Drone Training

Drones are increasingly used as tools for getting antenna wires into trees, surveying site lines, and so on. To **legally fly a drone in the US** (https://www.faa.gov/uas/recreational_fliers/knowledge_test_updates) for non-commercial purposes, one must have passed TRUST - The Recreational UAS Safety Test. **Free training** (<https://www.dpreview.com/news/4668719994/faa-releases-trust-free-online-training-required-for-recreational-pilots-to-fly-legally>) for this is now available, after which someone can take the test from one of the (currently) 16 organizations that can administer the test. (DPreview)



Article Credit : The ARRL Contest Update for July 7, 2021 - www.arrl.org

OPERATING TIP

Operate in the Days Before the Contest

Try to be active on the bands in the days before a contest to better understand band conditions, noise and signal levels, and equipment operation. Remember that you can utilize resources like the Reverse Beacon Network (<http://reversebeacon.net>) to verify band status if you don't hear any signals.



June 2021 Volunteer Monitor Program Report Released

The June 2021 activity report of the Volunteer Monitoring (VM) Program has been released. The VM Program is a joint initiative between ARRL and the FCC to enhance compliance in the Amateur Radio Service.

- The FCC was requested to review a vanity call sign application filed by a Georgia licensee because of an apparently false answer to the question regarding a felony conviction.
- A licensee in Massachusetts received an Advisory Notice concerning obscenity and harassment on 160 meters. The FCC will hold for review any renewal application filed by this licensee.
- A General-class licensee in San Antonio, Texas, received an Advisory Notice for operation in the Amateur Extra-class portion of the 20-meter band.
- Licensees in Pennsylvania, North Carolina, Georgia, and Virginia received Advisory Notices concerning failure to identify and other possible violations as part of a general audit of complaints about licensee conduct on 1.938, 3.860, 3.895, and 3.927 MHz.
- In May, Volunteer Monitors logged 1,514 hours on HF frequencies and 2,072 hours on VHF frequencies and above.



The Volunteer Monitor Program Administrator had one meeting with the FCC, and two cases were referred to the FCC for further action. One case involves a taxi company in Alaska operating on 2 meters. - Thanks to Volunteer Monitor Program Administrator Riley Hollingsworth, K4ZDH

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



First X-Class Major Solar Flare of Solar Cycle 25 Blacks Out HF on July 3

For a brief time on July 3, a lot of radio amateurs were wondering, "Where did the bands go?" as the first X-class solar flare in 4 years blacked out HF propagation for a time.

"I was on 20-meter FT8, and my waterfall display went from solid red signals to solid nothing in the blink of an eye," Scott Craig, WA4TTK, told "K7RA Solar Update" Editor Tad Cook, K7RA. "It lasted about 10 minutes." Craig was not alone.

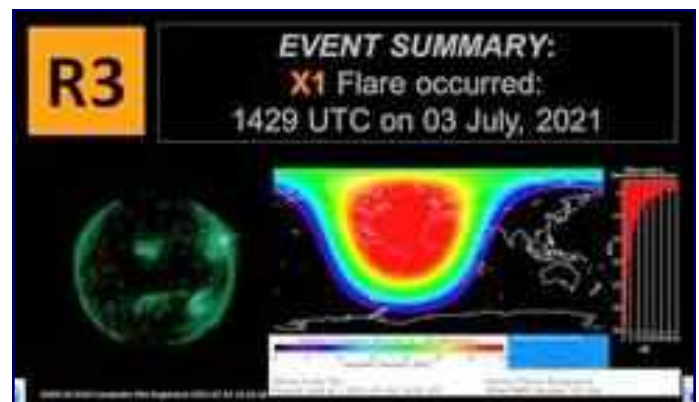
"Many American radio amateurs reported sudden HF propagation blackouts on Saturday morning, July 3, when solar active region 12838 produced an X1.5 major solar flare that reached maximum intensity at 1429 UTC, the first X-class solar flare of Solar Cycle 25 and the first since 2017," said Frank Donovan, W3LPL. "HF propagation blackouts are caused when x-ray and extreme ultraviolet radiation from X-class solar flares strongly ionizes the absorbing D-region in the Earth's sun-facing dense lower atmosphere," he explained. The top layer of the atmosphere is not involved.

In this instance, it caused what NOAA's **Space Weather Prediction Center (SWPC - <https://www.swpc.noaa.gov>)** calls an R3-level or "strong" radio blackout (**on a scale of R1 - R5 - https://www.swpc.noaa.gov/sites/default/files/images/NOAA_scales.pdf**). An R3 incident can cause a "wide-area blackout of HF radio communication [and] loss of radio contact for about an hour on [the] sunlit side of Earth. Low-frequency navigation signals degraded for about an hour."

Donovan said that X-class major solar flares are necessary consequences of steadily increasing Solar Cycle 25 activity. "95% of all X-class solar flares occur when the solar flux index is 90 or greater. The remaining 5% can occur any time during the solar cycle," he points out. "X1-class major solar flares typically degrade HF propagation for only an hour or two at mid and high latitudes, only on Earth's sunlit side."

X-class major flares are measured on an open-ended scale. The strongest one ever recorded was an X28 flare in 2003, hundreds of times more powerful than the July 3 X1.5 solar flare. X10-class and stronger solar flares typically have effects that last for most of a day and affect the entire sunlit side of the Earth. Fortunately, X10-class solar flares occur only about once every 20 years or more.

"Much more severe and long-lasting HF propagation degradations are often caused by the coronal mass ejections (CMEs) often associated with - but not caused by - major solar flares," Donovan explained. "HF propagation degradation caused by CMEs typically begins about 2 days after the effects of the associated solar flare, the duration of the delay depending on interactions between the CME and the solar wind."



First X-Class Major Solar Flare - Continued on page 20

First X-Class Major Solar Flare - Continued from page 19

The CME associated with the July 3 X1.5 solar flare is likely to have little to no effect on HF propagation going forward, because the active region was very close to the western edge of the visible solar disk when the CME erupted. Region 12838 rotated off the visible disk on Sunday, July 4.

Solar flares have no significant effect on VHF ionospheric propagation, but can degrade satellite communications passing through the ionosphere. More frequent, less powerful M-class medium solar flares produce short-duration degradation at high latitudes. Very frequent, much weaker A-, B-, and C-class solar flares do not degrade HF propagation. - Thanks to Frank Donovan, W3LPL

Article Credit : The ARRL Letter of July 8, 2021 - www.arrl.org



John Hill, W2HUV, testing out the new Clubhouse HF Amplifier



Board Creates Emergency Communications And Field Services Committee

At its just-concluded July 2021 meeting, the ARRL Board of Directors approved By-Law changes creating a third Standing Committee that joins the existing Administration and Finance Committee and Programs and Services Committee. The charter of the new Emergency Communications and Field Services Committee (EC-FSC) is to develop and recommend new or modified Board policy and programs for emergency communications through the Amateur Radio Emergency Service® (ARES®) and National Traffic System™ (NTS™) entities.

The committee also will offer enhanced support for its Field Organization leadership volunteers, including Section Managers, and an increased focus on ARRL-Affiliated Clubs.

Further, the EC-FSC will provide guidance to the CEO in translating Board policy into prioritized tasking, funding, and staffing of programs, services, and training in support of amateur radio emergency communications, Field Organization volunteers, and recruitment and retention of new and existing members through assistance to Affiliated and Special Service Clubs.

The EC-FSC will have the additional responsibility of monitoring and assessing trends in emergency communications technology and participant skills worldwide, and for identifying "best practices" for voluntary emergency communications provided by ARES and NTS, coordinating and cooperating with other amateur radio national societies as appropriate. - Thanks to The ARES Letter

Article Credit : The ARRL Letter for July 22, 2021 - www.arrl.org



Registrations Strong for 24th Annual International Lighthouse Lightship Weekend

Set for August 21 - 22, the 24th Annual International Lighthouse Lightship Weekend (ILLW - <https://illw.net>) will be back, despite the disruption of the global COVID-19 pandemic.

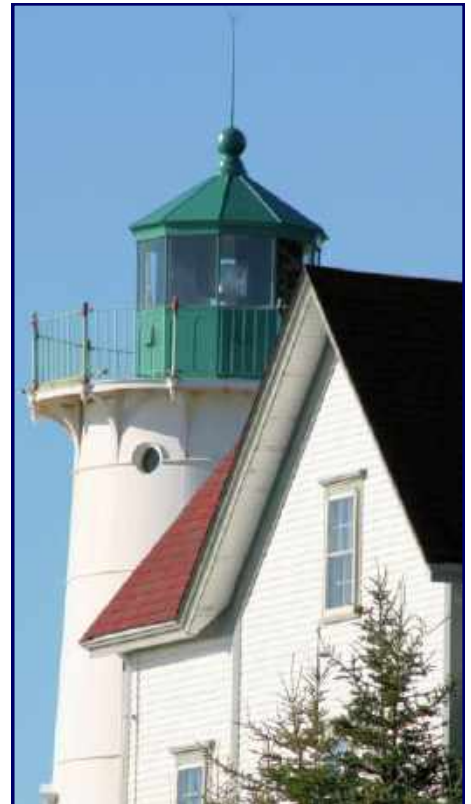
Each year, typically on the third weekend of August, **participants** (<https://illw.net/index.php/entrants-list-2020>) set up portable stations at or near lighthouses and lightships around the world. Last year, prospects for the event were looking dim, but "regular supporters wanted the event to be a beacon of hope," the event's sponsor said. More than 360 registrations from 43 countries backed up their belief. As of July 8, this year's **registration tally** (<https://illw.net/index.php/entrants-list-2021>) had already topped 200, with 25 participants signed up to activate lighthouses or lightships in the US. The ILLW typically attracts entries for some 500 lighthouses in more than 40 countries. The event has few rules and is not a typical contest-type event. The ILLW will begin at 0001 UTC on August 21 and continue through 2400 UTC on August 22.

Each station's operators decide how they will operate their station with respect to modes and bands. There are no power restrictions or entry classes and no scores.

"We wish operators to enjoy themselves and have fun while making contact with as many amateur radio stations as possible," ILLW said in the event announcement. "We request that stations take time to work other lighthouses or lightships, as well as the slow operators or newly licensed or QRP stations." Participants contact the relevant authorities to obtain permission to operate. It is within the guidelines of the event to move operations from a lighthouse to a museum for historic reasons. In any case, the lighthouse should be visible to, and visited by, the public wherever possible.

Visit the [ILLW website](https://illw.net) for more detailed information.

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





Next QSO Today Virtual Ham Expo to Offer Nearly 100 Speakers, 18 Topic Tracks

The third **QSO Today Virtual Ham Expo** (<https://www.qsotodayhamexpo.com>) is a month away. The live event takes place over the August 14 - 15 weekend, and presentations will remain available on demand for 30 days. Sponsors predict that the event will be "a great experience" for those wanting to improve their knowledge of amateur radio as well as of cutting-edge ham radio technology and practical techniques. ARRL is a QSO Today Virtual Ham Expo partner.



"At the Expo, you can listen and engage with almost 100 internationally recognized ham radio luminaries on approximately 18 different topic areas - there is something for everyone," the sponsors say. "Topics include antennas and transmission lines; build-a-thons; contesting/DX; controllers; digital voice mode; emergency communications; filters and tuned circuits; the future of amateur radio; ham history; HF digital modes; new licenses; power amplifiers; propagation; radio astronomy; software and services; space and satellites; test and measurement, and youth in amateur radio."

A **complete list of speakers** (<https://www.qsotodayhamexpo.com/spkrlist.html>) at the QSO Today Virtual Ham Expo is posted on the event's website. These are some examples :

- In the "Antennas and Transmission Lines" presentation, August Hansen, KB0YH, will focus on such topics as small transmitting loop design and STLcalc, an open-source design aid for STL and magnetic loop antennas that can respond to user's changing needs and design goals.
- Geoffrey Mendenhall, W8GNM, will address the topic, "Compromise Beverage Antennas Hear Better Than You Think." The presentation focuses on overcoming non-ideal terrain and space limitations.
- "Fun with HF QRP Pedestrian Mobile," with Peter Parker, VK3YE, will offer a look at two antennas for HF pedestrian mobile, and the results possible with such an operation.
- Ham radio author Don Keith, N4KC, will present "Top 5 Get-On-The-Air-Quick Antennas," which offers recommendations for the simplest, most effective antennas to consider.
- Within the "New License -- Now What" track, the presentation "HF Noise Mitigation" will describe various noise sources and how to mitigate noise using a variety of techniques.
- Anthony Luscre, K8ZT, will discuss "Technician Licensees, Life Beyond Local Repeaters." Participants will explore the world of activities, modes, and bands available outside of repeater operation.

There's no limit on the number of topics and tracks that QSO Today Virtual Ham Expo visitors may view. Return any time within 30 days to view any presentation, as well as to explore exhibitor offerings.

"Early bird" tickets are \$10 (\$12.50 "at the door"). Access to only the exhibitor area is free.

Article Credit : The ARRL Letter for July 15, 2021 - www.arrl.org



A Different Slant On WinLink Wednesday

The **ARRL Southern New Jersey Section** has been running its WinLink Wednesday (WW) Net for just over six months now. The net emphasizes real world, practical training. It offers operators a chance to work with as many WinLink form templates as possible and keeps things fun and interesting in the process.

Operators are free to send a standard check-in, using the message body of a regular WinLink email, but if they want more of a challenge we post an exercise each week using different WinLink form templates.

Some differences from the standard WW : Telnet is encouraged, if RF is not available. This has opened the net up to operators that are new to WinLink, or digital modes in general. It has given them a chance to get familiar with the WinLink software before taking the plunge into digital interfaces, sound card modems, etc. Over 95% of those operators switch to RF in short order once they've learned the software.

Stats are secondary. Net Control posts the number of check-ins and where they were from (by County or State), but that's it. The focus is on each week's practical exercise.

We pass real world traffic, using a wide array of WinLink templates. Each week's exercise information is posted online on Tuesday evening. Pre-filled PDF forms are usually converted to PNG images. That way the information cannot be "cut and pasted" into the WinLink template and must be typed in manually - just like if a served agency handed you a paper form.

Each week is different or builds on a previously posted exercise. An example of a typical net : During Week #28, Net Control posted a one minute video of an actual earthquake, and requested the net to send in USGS DYFI reports based on what they saw to SNJNWS. This is preferable to having operators "just make up" a report.

Net Control uses applicable tactical call signs: SNJOEM for EOC oriented traffic; SNJNWS for weather related forms; SNJARC for simulated Red Cross traffic; and SNJWW for regular check-ins and after-action reports. All net messages are sent to those tactical call signs as directed by the net control station. This keeps operators on their toes from week to week.

We discuss what worked and what didn't. The Net's operators remain anonymous to each other most of the time. This makes discussing errors and corrections much easier and productive, as no call sign is attached to a mistake. We've had very positive reactions to our net, with regular check-ins from Alabama all the way up to Maine. Please feel free to go through our archive for ideas. You can also use our postings for your own WinLink Wednesday Net.

Our postings from Week #7 through the current net can be found here : **Southern New Jersey Section Em-Comm » WinLink Wednesday** (<https://arrlsouthernnewjerseysection.boardhost.com>). For additional information or questions, send an email : **Tim Tonnesen, NJ2N** (NJ2N@arrl.net), **SNJWW NCS**

Article Credit : The ARES Letter for July 21, 2021 - www.arrl.org



Bike MS : City To Shore Ride 2021

September 25 - 26, 2021

<https://bit.ly/3ezT7m4>

HELLO ALL COMMUNICATORS

Monday, July 26, 2021

Don't Worry - The Begging Doesn't Start Until Next Week

I wanted to give everyone an update on how things are going.

1. We are currently working on our Frequency Plan for the Event this year. While we are hoping that most of our systems and frequencies will be up and ready to go, there may be some changes and/or additions.
2. We unfortunately received some bad news last week that we will not be able to advertise on the back of the t-shirts this year (Neither Logos nor Call Signs). We are working with the Society to hopefully bring this back next year. If anyone has already sent in a check, we will void it out, scan it, and send an email with the attached VOID. If you would rather have us mail the voided check back, we will happily do so.
3. When folks volunteer, we are sending a confirmation with the 2019 Comms Package attached. Once again, when you receive it, we ask that you go through it and send us any questions that you may have on anything.
4. Our last mailing only fruited 39 volunteers. We thought we would have had a much better return. We are hoping that this email will do better.

With the number of volunteers on our mailing list going down, we ask that you all forward this message to any HAMS you may know, and ask them to help. Please remember that whether you have volunteered or not, we keep you on our recruitment mailings so that you are able to continue to forward our correspondence, and assist us in our recruiting effort.

You can sign-up by using this online Communicator Registration Form : <https://bit.ly/3zjFe3z>

Whether you sign up on-line, e-mail or snail mail the form back, we don't care.

JUST PLEASE SIGN UP.

That's all for now, you will hear from us once again next week.

With Much Appreciation

73

EvComm (609.795.0909)

Editor's Note :

To download the Communicator Registration Form and e-mail or snail it back, please go to : <https://gloucestercountync.weebly.com/bike-ms--walk-ms-events.html>

2019-2023 Element 3 General Class License Question Quiz

This month we start **Subelement G7 : Practical Circuits** (Answers on 'Last Page Calendar')

G7A01

What useful feature does a power supply bleeder resistor provide?

- A. It acts as a fuse for excess voltage
- B. It ensures that the filter capacitors are discharged when power is removed
- C. It removes shock hazards from the induction coils
- D. It eliminates ground loop current

G7A02

Which of the following components are used in a power supply filter network?

- A. Diodes
- B. Transformers and transducers
- C. Quartz crystals
- D. Capacitors and inductors

G7A03

Which type of rectifier circuit uses two diodes and a center-tapped transformer?

- A. Full-wave
- B. Full-wave bridge
- C. Half-wave
- D. Synchronous

G7A04

What is an advantage of a half-wave rectifier in a power supply?

- A. Only one diode is required
- B. The ripple frequency is twice that of a full-wave rectifier
- C. More current can be drawn from the half-wave rectifier
- D. The output voltage is two times the peak output voltage of the transformer

G7A05

What portion of the AC cycle is converted to DC by a half-wave rectifier?

- A. 90 degrees
- B. 180 degrees
- C. 270 degrees
- D. 360 degrees

G7A06

What portion of the AC cycle is converted to DC by a full-wave rectifier?

- A. 90 degrees
- B. 180 degrees
- C. 270 degrees
- D. 360 degrees

General Class Quiz - Continued on page 26

G7A07

What is the output waveform of an unfiltered full-wave rectifier connected to a resistive load?

- A. A series of DC pulses at twice the frequency of the AC input
- B. A series of DC pulses at the same frequency as the AC input
- C. A sine wave at half the frequency of the AC input
- D. A steady DC voltage

G7A08

Which of the following is an advantage of a switchmode power supply as compared to a linear power supply?

- A. Faster switching time makes higher output voltage possible
- B. Fewer circuit components are required
- C. High-frequency operation allows the use of smaller components
- D. All these choices are correct

For the next 5 questions. please refer to Figure G7-1 on page 27

G7A09

Which symbol in figure G7-1 represents a field effect transistor?

- A. Symbol 2
- B. Symbol 5
- C. Symbol 1
- D. Symbol 4

G7A10

Which symbol in figure G7-1 represents a Zener diode?

- A. Symbol 4
- B. Symbol 1
- C. Symbol 11
- D. Symbol 5

G7A11

Which symbol in figure G7-1 represents an NPN junction transistor?

- A. Symbol 1
- B. Symbol 2
- C. Symbol 7
- D. Symbol 11

G7A12

Which symbol in Figure G7-1 represents a solid core transformer?

- A. Symbol 4
- B. Symbol 7
- C. Symbol 6
- D. Symbol 1

G7A13

Which symbol in Figure G7-1 represents a tapped inductor?

- A. Symbol 7
- B. Symbol 11
- C. Symbol 6
- D. Symbol 1

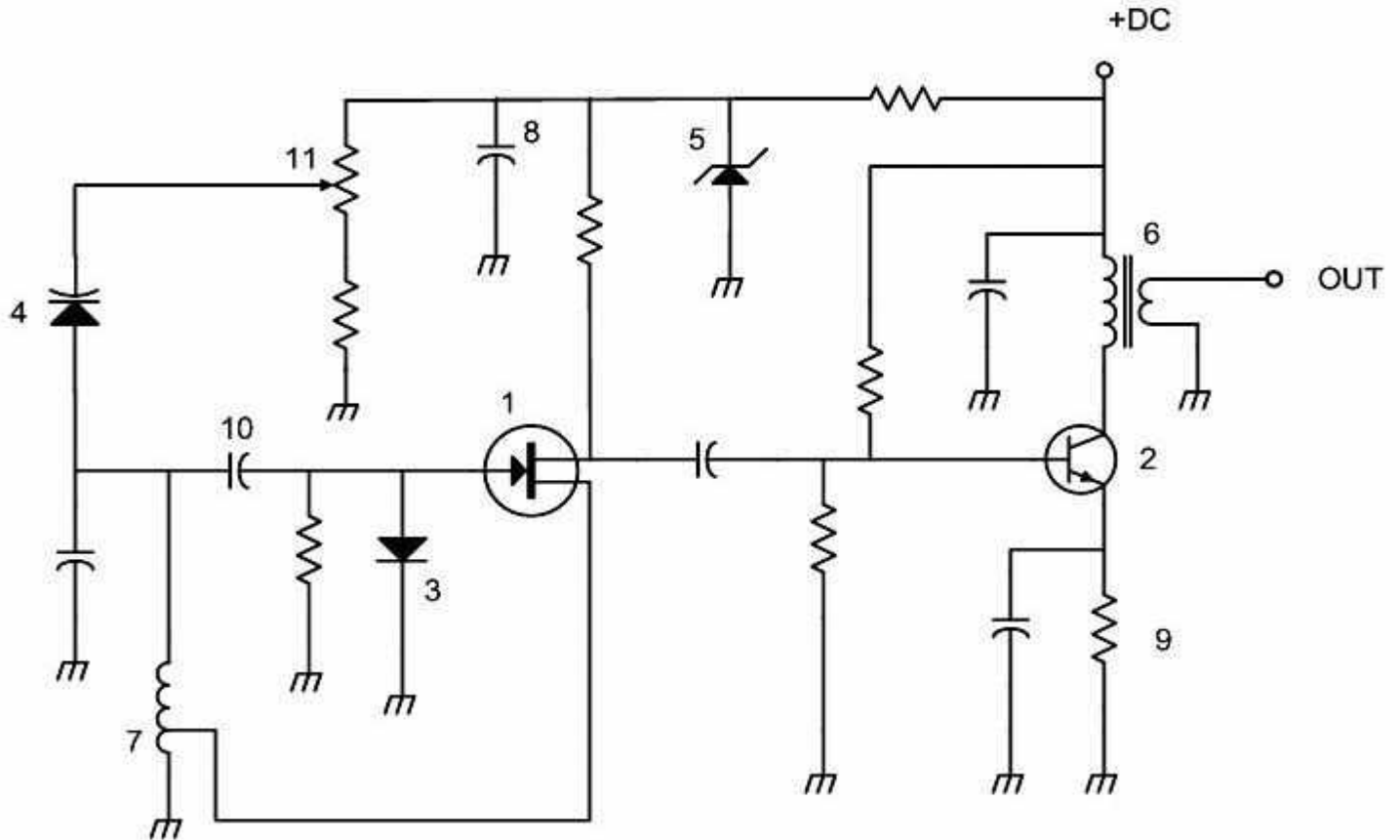


Figure G7-1

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, July 7, 2021



Meeting opened @ 1933 Hours by President Tony Starr, K3TS with the Pledge of Allegiance

Attendance :

- Members : 27 plus 12 ZOOM attendees
- Visitors : 0

Minutes from the June General Membership Meeting were published previously in the CrossTalk and were approved without modification.

Treasurer : Al Arrison KB2AYU reported YTD Income of \$3,995 and Budgeted Expenses of \$2,439 for a net gain of \$1,556. Approximately \$4,000 is allocated for projects. Receipts for Field Day and Grounding Project Phase I are due. The Treasurer's report was accepted.

Clubhouse : Al Arrison KB2AYU reported that things are in good shape. The new air conditioner is working. The old rotator has been replaced with a loaner from Al; this remains to be tightened up but may be in service following Tech Saturday this weekend. Al noted that the old rotator was full of water, which drained out when it was removed.

Field Day : Vinnie Sallustio N4NYY called this "the best Field Day in years" even though there were a few minor issues with the wine festival and grass cutting. In addition to the great effort by the radio operators we had great support from those who prepared and provided food, Bonus Point volunteers, and the Setup/Takedown crews. **Tony Starr K3TS** noted the good planning and execution, which gave him time to circulate between stations.

Technical Committee : Jon Pearce WB2MNF reminded everyone of Tech Saturday this weekend. There will be several things to see and do including : the new Linear Amp, courtesy of **John Hill W2HUV**, a few satellite passes will occur between 10 AM and noon and images can be viewed from the GOES receiver. A solar panel that is under test has been producing enough power to run the Skunkworks Pi cabinet and will be hooked up to the cabinet at a later time. The VHF Room Lightning Protection Project is on hold until after Summer vacations. On a side note, Jon worked with **Lenny Rust W2LJR** on a setup that allowed Len to pick up ship locations using AIS when he visited the shore. See Len or Jon if you are interested in trying this.

The Generator : Anthony Cerami KD2RPI reported that restoration of the Kohler generator is basically complete and has turned receipts over to the Club. It fired right up when given fresh fuel and runs much more quietly with the new muffler. Some fine tuning still is required, e.g. voltage regulation.

WinLink : Karl Frank W2KBF said the VARA FM RMS W2KBF-10, that performed well via 2 Meter simplex during Field Day weekend, is not supporting connections over the W2MMD 2 Meter repeater, so this remains "a work in progress".

DX and Contests : Tony Starr K3TS noted that the IARU Radio Championship event will take place this weekend and NAQP is next month. The Bouvet Island DXpedition had been cancelled, but may be back on.

July 2021 General Membership Meeting Minutes - Continued on page 29

Hamfest : Sheldon Parker K2MEN has solicited volunteers to help with the hamfest, arranged for announcement of the hamfest in QST, and has been in touch with **Section Manager Tom Preiser N2XW** to coordinate with ARRL. **Ron Block NR2B** is working on the Forums and said they are in good shape.

Club Nets : Greg Ciraula W5DO said the Tuesday Morning Net is still going and **Mary Delemarre W2TDS** said the Thursday Evening Rag Chew Net still takes place.

Old Business : None

New Business :

Club Picnic : Jim Clark KA2OSV asked about the annual Club picnic, which often takes place on the 2nd Sunday in August. This will be discussed at the next BOD meeting.

Vinnie Sallustio N4NYY noted that we have 17 years (2038) left on our lease from the 4H and that perhaps the Club should start to think about purchasing land. **Chuck Colabrese WA2TML** pointed out that the lease does not specify which 2 acres are leased to us and that the 4H has attempted to relocate us before. After much discussion **Tony Starr K3TS** said this will be discussed at the next BOD Meeting.

Clubhouse Toilet Replacement Project : Jeff Garth WB2ZBN brought forth a proposal to upgrade the toilet in the Clubhouse with himself as designated leader, with a cost estimate of \$226.50 and a time frame for completion by the end of July. A budget of \$250 was approved by the membership for this project.

Tony Starr K3TS closed the business part of the meeting @ 2006 Hours.

Post Meeting Notes :

Greg Ciraula W5DO won the 50/50 and **Mary Delemarre W2TDS** won the Field Day shirt that had been donated by **Tom Preiser N2XW**.

Jim Wright N2GXJ concluded with a "Field Day Score Reveal". In 2020, W2MMD operated as 8A and submitted a score of 9,984. For 2021, W2MMD operated as 7A and the submitted Field Day score was 14,268. This included over 2000 bonus points. All US Sections and all 50 states were worked plus all but two sections in Canada. Field Day stickers were awarded to the Band Captains with the five highest scores.

In order :

1. **Sheldon Parker K2MEN (40M CW) - also a packet of Hot Sauce for his Hot Score ??**
2. **Tony Starr K3TS (20M CW)**
3. **Jim Clark KA2OSV (80M PH)**
4. **Darryl Neron AB2E (80M CW)**
5. **Vinnie Sallustio N4NYY (40M PH)**

Respectfully submitted,
Karl Frank, W2KBF
Recording Secretary

Gloucester County Amateur Radio Club

Board of Directors Meeting Minutes

Wednesday, July 21, 2021



Meeting opened @ 1904 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
- Director Jeff Garth WB2ZBN
- Director Jim Clark KA2OSV
- Director Chuck Colabrese WA2TML
- Director Herb Dyer, KT2Y
- Member Frank Romeo, N3PUU
- Member Jon Pearce WB2MNF
- Member John Hill, W2HUV

Treasurer's Report : Alan Arrison KB2AYU reported the following budgeted YTD Totals :

- Income : \$4073
- Expenses : \$2760 for a net gain of approximately \$1312

Receipts for repair of the generator have not yet been submitted.

Clubhouse : Alan Arrison KB2AYU reported that the HF station is fully operational with a rotator that Alan loaned and installed. There is no urgent need to purchase a new rotator. Also, the new toilet was installed by Frank Romeo N3PUU. The last electric bill was more than \$200. This included extra use during Field Day but we need to find ways to reduce electrical use. Alan will look into the possibility of solar panels.

Technical Committee :

Solar Power : Jonathan Pearce WB2MNF reported that the solar panel sitting outside on a table outside has been running for a month and providing enough power to charge a battery and run a test load. Enough power is being generated to run the equipment cabinet without drawing from commercial power.

WinLink : In order to extend the range of the W2KBF-10 WinLink RMS in Swedesboro, Jonathan Pearce WB2MNF proposed to establish a 440 MHz VARA RM repeater at the Clubhouse. As a first step, the VARA FM digipeater W2MMD-10 was set on 441.050 MHz up using the existing discone antenna at a height of 20 ft. Later, when time permits, the plan is to replace the tower-mounted VHF antenna that is used for APRS with a dual band antenna, and install a diplexer, which will permit simultaneous use of both 2 meters and 440 MHz from the same antenna. Jon purchased a license copy of VARA FM (\$70) for W2MMD in order to facilitate this work. He may wish to establish a WinLink RMS on 40 meters at the Club site at a later date. Other notes : the weather station is reporting internal Clubhouse temperature on APRS.FI, however the outside temperature monitor is not working. Jonathan will replace the outside temperature probe.

July 2021 Board of Directors Meeting Minutes - Continued on page 31

Karl Frank W2KBF noted that several stations that are not in simplex range of W2KBF-10 have been able to access this WinLink RMS station when it was tuned to operate over the W2MMD 2-meter repeater. Use of the repeater is temporary and will facilitate training of ARES/RACES operators and general Club members in the use of WinLink until a better solution is implemented, i.e. a better antenna for the W2MMD-10 VARA FM digipeater.

DX and Contests : **Tony Starr K3TS** said NAQP is coming up on August 7 and 21. **Bill Grim W0MHK** has not submitted a DX Committee report for some time and nobody else has volunteered to do this. The Club has not heard from **Vice President Jeffrey Welsh KD2AZI** for some time so Tony will give him a call to find out if he has been making plans for the Hamfest.

Club Nets :

Jim Clark KA2OSV is getting 8 to 10 check-ins on the 10 meter net.

Jeff Garth WB2ZBN said the 8 pm rag chew net on Thursday is going well and that the 11 AM Tuesday Morning Net will change to Noon as of August 3, 2021.

Old Business :

John Hill W2HUV discussed the need to instruct Club members who are interested in learning to use the Club's HF station, either in person or by remote. John is updating written instructions to include use of the KPA-1500 linear amplifier with the IC-7300. He has instructed two members in 1:1 sessions but thinks the most efficient way to do this would be to train small groups. It was decided that John will demonstrate remote operation of the HF station during the August 4, 2021 General Membership Meeting. Those who are interested in learning more can sign up for in-person training. This can be done in small groups at Tech Saturdays or at other times by appointment.

Picnic : There will be no Club picnic on August 8. This will be revisited at a later meeting.

Ron Block NR2B said his recently submitted article has been accepted for publication in QST and is scheduled to appear in early 2022.

New Business :

Tony Starr K3TS is concerned that the wine festival, which has been running lately at the same time as Field Day, may take up even more space next year. This puts pressure on us, because we need extra space for Field Day antennas. We may approach the 4H about this and point out GCARC does not have the option of running Field Day on dates other than the last full weekend of June (as set by ARRL) and ask if perhaps the wine festival could be scheduled on a different weekend. If so, we could allow them to expand into our space. But any action on this item was tabled for future consideration.

Membership Applications : We received an application from **Peter Bircsak WB2EDJ** from Monroeville, NJ. This application was approved. **Jeff Garth WB2ZBN** noted that Robert Bagienski (no call) from Pitman (who was previously approved as a member) has withdrawn his application and his dues were refunded.

Several people who have not renewed their membership will be dropped from the roster and **John Hill W2HUV** said they will lose access to the remote station.

Tony Starr K3TS broached the topic of what to do about our lease, which runs out in 17 years. But discussion was tabled until next month.

Certificate of Appreciation : **Jim Clark KA2OSV** nominated **Bob Demola KD2GFL** for mowing the grass prior to Field Day. This motion passed and **Tony Starr K3TS** will arrange for the certificate.

The meeting was adjourned @ 2029 Hours.

Respectfully Submitted,
Karl Frank W2KBF
Recording Secretary

WORD TO THE WISE

Snubber - a circuit that is used to suppress voltage spikes. On older equipment, especially amplifiers, mechanical relays are sometimes used for the transmit/receive (TR) switch. When mechanical relays are de-energized the collapsing magnetic field of their coils generate a reverse voltage. This reverse voltage can be much greater than the relay voltage and may be harmful to lower-voltage solid state electronics. Snubber circuits are used to reduce the reverse voltage. Snubbers are also used in modern electronics to reduce transients where reactive loads are subject to rapidly changing current. Rudy Severns, N6LF, whom you may recognize from his work with antennas, has written a book on this topic which is available on his website (www.antennasbyn6lf.com) for free download.



Maximilian Kolbe, SP3RN
Patron Saint of Amateur Radio Operators

Saint Maximilian Maria Kolbe : (January 8, 1894 - August 14, 1941) was a Polish Conventual Franciscan friar who volunteered to die in place of a stranger in the German death camp of Auschwitz, located in German-occupied Poland during World War II. He was active in promoting the veneration of the Immaculate Virgin Mary, founding and supervising the monastery of Niepokalanów near Warsaw, *operating an amateur radio station (SP3RN)*, and founding or running several other organizations and publications. Kolbe was canonized on October 10, 1982 by Pope John Paul II, and declared a Martyr of charity. He is the *patron saint of amateur radio operators*, drug addicts, political prisoners, families, journalists, prisoners, and the pro-life movement. John Paul II declared him "The Patron Saint of Our Difficult Century".

IARU HF World Championship
July 10, 2021

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

Class : SOAB (A) CW HP
QTH : SNJ
Operating Time (hrs) : 2
Location : USA

Summary :

Band	CW Qs	Ph Qs	Zones	HQ Mults
------	-------	-------	-------	----------

80 :	30	0	5	4
40 :	130	0	14	24
20 :	17	0	5	9

Total :	177	0	24	37
Total Score :	26,657			

Club : Frankford Radio Club 54

Comments :

Rig : FTDX-9000D/Acom 2000A

Antennas :

80m dipole @ 95ft

40m dipole @ 85ft

20m delta loop @ 65ft

All wires.

Fun contest, lots of family stuff so only had 2 hours late evening to get on. Had a great run on 40m, and initially picked up some HQ stations on 20m, still open to EU. 40m was most active, and I had great run being a new station.

73 Darrell AB2E



Name/Callsign	DXCC
Bill Grim, W0MHK	352
Dave Strout, W2YC	349
Darrell Neron, AB2E	328
Ray Martin, W2RM	270
John Hill, W2HUV	252
Ken Denson, WB2P	248
Vinnie Sallustio, N4NYY	221
Tony Starr, K3TS	208
Dennis Sandole, K2SE	204
Jim Wright, N2GXJ	179
Sheldon Parker, K2MEN	162
Christopher Wawak, KC2IEB	128
Eric Morris, N2BRJ	127
Howard Marder, WA2IBZ	122
Phil Nunzio, WA3RGY	116
Chuck Capasso, WB2PGE	103
Harry Strahlendorf Jr W3DNQ	87
Curt Myers, K2CWM	73
Jim Clark, KA2OSV	68
Lee Marino, N2LAM	35
Updated As Of 07/10/2021	



Happy Birthday - August 4, 1790

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

August Birthdays

Congratulations to our members who are celebrating their birthday this month

Dave Christian, KB3VEO
Mat Eickmeyer, AD2BL
Brian Haines, KD2VDQ
Harry Jackson, WB2GSF (President 1982)
Gary Kinney, KD2ULS
Dan McCormick III, KD2TUS
Curt Myers, K2CWM
Jon Pearce, WB2MNF
Adam Sigmund
Harry Strahlendorf Jr, W3DNQ
Leonid Surnin, W2/UT5ZF
Brett Waller, K2BKW
Jay White III, KD2RPX



In Memoriam August Birthdays

Silent Keys :

Paul Bergstrom, N2GIB
James Bray Sr, N2AKI
Edward Bubelis, N2LCN
Vernon Byrd, N2DRD
Edward Egolf, WA2ZMS
Charles Emmel Sr, KT2ZZ
Steven Fidler III, N2GVR
Richard Fitch, WA2YLC
Thomas Gordon Sr, KB2GI
Seth Horen, K1LOM
John Koch Jr, K2CR
John Lachenmayer, KB2RGX
James Mollica Sr, K2OWE
Bruce Painter, N2ASN
Charles Pennington, K3NMF
Salvatore Scibilia, WA2LKF
Donald Smith, WB2ZJF
Rev. James Thompson III, N2EDK
Harry Wolf, KC2THV



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 September 2021 issue : Friday, August 20, 2021

Club Website www.w2mmd.org

Club E-Mail Reflector: GCARC <at> Mailman <dot> QTH <dot> Net

August 2021 Contest Calendar

WA7BNM Contest Calendar : www.contestcalendar.com

+ SARL HF Phone Contest	1400Z-1700Z, Aug 1
+ K1USN Slow Speed Test	0000Z-0100Z, Aug 2
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Aug 3
+ ARS Spartan Sprint	0100Z-0300Z, Aug 3
+ RTTYOPS Weeksprint	1700Z-1900Z, Aug 3
+ Phone Weekly Test - Fray	0230Z-0300Z, Aug 4
+ CWops Mini-CWT Test	1300Z-1400Z, Aug 4
+ VHF-UHF FT8 Activity Contest	1700Z-2000Z, Aug 4
+ CWops Mini-CWT Test	1900Z-2000Z, Aug 4
+ CWops Mini-CWT Test	0300Z-0400Z, Aug 5
+ CWops Mini-CWT Test	0700Z-0800Z, Aug 5
+ RTTYOPS Weeksprint	1700Z-1900Z, Aug 5
+ NRAU 10m Activity Contest	1700Z-1800Z, Aug 5 (CW) and 1800Z-1900Z, Aug 5 (SSB) and 1900Z-2000Z, Aug 5 (FM) and 2000Z-2100Z, Aug 5 (Dig)
+ EACW Meeting	1900Z-2000Z, Aug 5
+ SKCC Sprint Europe	1900Z-2100Z, Aug 5
+ QRP Fox Hunt	0100Z-0230Z, Aug 6
+ NCCC RTTY Sprint	0145Z-0215Z, Aug 6
+ NCCC Sprint	0230Z-0300Z, Aug 6
+ K1USN Slow Speed Test	2000Z-2100Z, Aug 6
+ Batavia FT8 Contest	0000Z, Aug 7 to 2359Z, Aug 8
+ 10-10 Int. Summer Contest, SSB	0001Z, Aug 7 to 2359Z, Aug 8
+ European HF Championship	1200Z-2359Z, Aug 7
+ SKCC Weekend Sprintathon	1200Z, Aug 7 to 2400Z, Aug 8
+ Two-Meter Classic Sprint	1300Z-1330Z, Aug 7
+ FISTS Saturday Sprint	1600Z-1800Z, Aug 7
+ ARRL 222 MHz and Up Distance Contest	1800Z, Aug 7 to 1800Z, Aug 8
+ North American QSO Party, CW	1800Z, Aug 7 to 0559Z, Aug 8
+ K1USN Slow Speed Test	0000Z-0100Z, Aug 9
+ 4 States QRP Group Second Sunday Sprint	0000Z-0200Z, Aug 9
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Aug 10
+ RTTYOPS Weeksprint	1700Z-1900Z, Aug 10
+ NAQCC CW Sprint	0030Z-0230Z, Aug 11
+ Phone Weekly Test - Fray	0230Z-0300Z, Aug 11
+ CWops Mini-CWT Test	1300Z-1400Z, Aug 11
+ MMonVHF/DUBUS 144 MHz Meteorscatter Sprint Contest	1500Z, Aug 11 to 1459Z, Aug 13
+ VHF-UHF FT8 Activity Contest	1700Z-2000Z, Aug 11
+ CWops Mini-CWT Test	1900Z-2000Z, Aug 11
+ CWops Mini-CWT Test	0300Z-0400Z, Aug 12
+ CWops Mini-CWT Test	0700Z-0800Z, Aug 12
+ RTTYOPS Weeksprint	1700Z-1900Z, Aug 12
+ EACW Meeting	1900Z-2000Z, Aug 12
+ QRP Fox Hunt	0100Z-0230Z, Aug 13
+ NCCC RTTY Sprint	0145Z-0215Z, Aug 13
+ NCCC Sprint	0230Z-0300Z, Aug 13
+ K1USN Slow Speed Test	2000Z-2100Z, Aug 13
+ WAE DX Contest, CW	0000Z, Aug 14 to 2359Z, Aug 15
+ QRP ARCI European Sprint	0800Z-1100Z, Aug 14
+ SARL Youth Sprint	1200Z-1300Z, Aug 14
+ Kentucky State Parks on the Air	1400Z-2200Z, Aug 14
+ Maryland-DC QSO Party	1400Z, Aug 14 to 0400Z, Aug 15
+ 50 MHz Fall Sprint	2300Z, Aug 14 to 0300Z, Aug 15
+ SARL HF Digital Contest	1400Z-1700Z, Aug 15
+ NJQRP Skeeter Hunt	1700Z-2100Z, Aug 15
+ FISTS Sunday Sprint	2100Z-2300Z, Aug 15
+ Run for the Bacon QRP Contest	2300Z, Aug 15 to 0100Z, Aug 16

August 2021 Contest Calendar - Continued on page 36

August 2021 Contest Calendar

WA7BNM Contest Calendar : www.contestcalendar.com

August 2021 Contest Calendar - Continued from page 35

+ K1USN Slow Speed Test	0000Z-0100Z, Aug 16
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Aug 17
+ RTTYOPS Weeksprint	1700Z-1900Z, Aug 17
+ Phone Weekly Test - Fray	0230Z-0300Z, Aug 18
+ CWops Mini-CWT Test	1300Z-1400Z, Aug 18
+ CWops Mini-CWT Test	1900Z-2000Z, Aug 18
+ CWops Mini-CWT Test	0300Z-0400Z, Aug 19
+ CWops Mini-CWT Test	0700Z-0800Z, Aug 19
+ RTTYOPS Weeksprint	1700Z-1900Z, Aug 19
+ EACW Meeting	1900Z-2000Z, Aug 19
+ QRP Fox Hunt	0100Z-0230Z, Aug 20
+ NCCC RTTY Sprint	0145Z-0215Z, Aug 20
+ NCCC Sprint	0230Z-0300Z, Aug 20
+ K1USN Slow Speed Test	2000Z-2100Z, Aug 20
+ SARTG WW RTTY Contest	0000Z-0800Z, Aug 21 and 1600Z-2400Z, Aug 21 and 0800Z-1600Z, Aug 22
+ ARRL 10 GHz and Up Contest	0600 local, Aug 21 to 2400 local, Aug 22
+ Russian District Award Contest	0800Z, Aug 21 to 0800Z, Aug 22
+ Keyman's Club of Japan Contest	1200Z, Aug 21 to 1200Z, Aug 22
+ Feld Hell Sprint	1600Z-1759Z, Aug 21
+ North American QSO Party, SSB	1800Z, Aug 21 to 0559Z, Aug 22
+ CVA DX Contest, CW	2100Z, Aug 21 to 2100Z, Aug 22
+ ARRL Rookie Roundup, RTTY	1800Z-2359Z, Aug 22
+ K1USN Slow Speed Test	0000Z-0100Z, Aug 23
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Aug 24
+ RTTYOPS Weeksprint	1700Z-1900Z, Aug 24
+ SKCC Sprint	0000Z-0200Z, Aug 25
+ Phone Weekly Test - Fray	0230Z-0300Z, Aug 25
+ CWops Mini-CWT Test	1300Z-1400Z, Aug 25
+ CWops Mini-CWT Test	1900Z-2000Z, Aug 25
+ CWops Mini-CWT Test	0300Z-0400Z, Aug 26
+ CWops Mini-CWT Test	0700Z-0800Z, Aug 26
+ RTTYOPS Weeksprint	1700Z-1900Z, Aug 26
+ EACW Meeting	1900Z-2000Z, Aug 26
+ QRP Fox Hunt	0100Z-0230Z, Aug 27
+ NCCC RTTY Sprint	0145Z-0215Z, Aug 27
+ NCCC Sprint	0230Z-0300Z, Aug 27
+ K1USN Slow Speed Test	2000Z-2100Z, Aug 27
+ RTTYops WW DX RTTY Contest	2200Z, Aug 27 to 1200Z, Aug 28 and
+ Hawaii QSO Party	0400Z, Aug 28 to 0400Z, Aug 30
+ ALARA Contest	0600Z Aug 28 to 0559Z, Aug 29
+ YO DX HF Contest	1200Z, Aug 28 to 1200Z, Aug 29
+ World Wide Digi DX Contest	1200Z, Aug 28 to 1200Z, Aug 29
+ W/VE Islands QSO Party	1200Z, Aug 28 to 0300Z, Aug 29
+ Kansas QSO Party	1400Z, Aug 28 to 0200Z, Aug 29 and 1400Z-2000Z, Aug 29
+ Ohio QSO Party	1600Z, Aug 28 to 0400Z, Aug 29
+ CVA DX Contest, SSB	2100Z, Aug 28 to 2100Z, Aug 29
+ SARL HF CW Contest	1400Z-1700Z, Aug 29
+ K1USN Slow Speed Test	0000Z-0100Z, Aug 30
+ QCX Challenge	1300Z-1400Z, Aug 30
+ QCX Challenge	1900Z-2000Z, Aug 30
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Aug 31
+ QCX Challenge	0300Z-0400Z, Aug 31
+ RTTYOPS Weeksprint	1700Z-1900Z, Aug 31

2021 Club Committees

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

Activity Committees	Committee Chairs
Awards & Certificates Club Publications & Historian Contests <i>DX</i> GCARC Family Picnic GCARC Foxhunts GC-ARES Emergency Coordinator Holiday Dinner Party License Testing/VEC Liaison Membership Roster Database Programs : Meetings & Tech Saturdays Radio Nets Technical W2MMD License Trustee W2MMD Special Event Station	Robin Herrmann, KD2LSH Jeff Garth, WB2ZBN Tony Starr, K3TS <i>Open Chair</i> Laurie Love, KD2EYW Jim Wright, N2GXJ Karl Frank, W2KBF Jennifer Robinson, KD2EYR Gary Reed, N2QEE Jeff Garth, WB2ZBN Jeff Welsh, KD2AZI Jim Clark, KA2OSV Jon Pearce, WB2MNF Darrell Neron, AB2E 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 Noon Day 2M Rag Chew Net

Every Tuesday @ 1200 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, August 4, 2021

1930 Hours

Live & In-Person

Pfeiffer Community Center

Also Live on ZOOM

Board of Directors Meeting

Wednesday, August 18, 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 : G7A01:B; G7A02:D; G7A03:A; G7A04:A; G7A05:B; G7A06:D; G7A07:A;
G7A08:C; G7A09:C; G7A10:D; G7A11:B; G7A12:C; G7A13:A