



# CrossTalk

Issue 61:07

61 Years Of Service To Our Community

July 2020

## 2020 Club Officers

**President :** James Clark Sr, KA2OSV  
**Vice President :** Anthony Starr, K3TS  
**Treasurer :** Alan Arrison, KB2AYU  
**Recording Secretary :** John Zaruba Jr, K2ZA  
**Corresponding Secretary :** Ronald Block, NR2B

**Trustees - 4 year term**  
Robert Fields, KC6AOH (2017-2020)  
Charles Lanard, KD2EIB (2018-2021)  
James Wright, N2GXJ (2019-2022)  
Mark Gottlieb, KK2L (2020-2023)

### Board of Directors - 3 year term

Charles Colabrese, WA2TML (2018-2020)  
William Price, NJ2S (2018-2020)  
Jeffrey Garth, WB2ZBN (2019-2021)

Jeffrey Welsh, KD2AZI (2019-2021)  
Robert Durham, W2RAD (2020-2022)  
Herb Dyer, KT2Y (2020-2022)

### *This Month's Calendar*

**General Membership ZOOM Meeting**  
Wednesday, July 1, 2020 @ 1930 Hours  
VP Tony K3TS will be hosting

**VE License Testing Session**  
Thursday, July 9, 2020 @ 1900 Hours  
\*\*\* CANCELLED \*\*\*

**Tech Saturday Forum**  
Saturday, July 11, 2020 @ 0900 Hours  
\*\*\* CANCELLED \*\*\*

**10 Meter Swap Meet**  
Saturday, July 11, 2020 @ 2000 Hours  
Tune-In on 28.465 MHz or 28.475 MHz

**Board of Directors Meeting**  
Wednesday, July 15, 2020 @ 1900 Hours  
\*\*\* In-Person or On-Line via ZOOM \*\*\*

**10 Meter Rag Chew Net**  
Every Monday @ 2000 Hours  
Tune-In on 28.465 MHz or 28.475 MHz

**2 Meter Rag Chew Net**  
Every Thursday @ 2000 Hours  
Tune-In on the 147.180 MHz Repeater

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## *President's Message*



### **Dear Fellow Members;**

I hope that everyone is healthy, staying strong, and being safe. We will get through this together. However, I am of the opinion that things will never return to the norm that we knew prior to COVID 19.

At the writing of this Message, Field Day 2020 has not yet arrived and by the time some of you read this, Field Day will most likely be history. On June 10<sup>th</sup>, we held a meeting of the Field Day Committee and everyone was in agreement that we should hold FD at the Club Site. On June 17<sup>th</sup>, the Board of Directors gave their Approval to Go Ahead with Field Day at the Club Site. Of course several restrictions were put into place. Those restrictions were spelled out in a separate e-mail which was sent to All Hands.

Our July 1<sup>st</sup> General Membership Meeting will be live via **ZOOM**. **VP Tony K3TS** will be hosting it. He will send out the log-in instructions.

Our Annual Club Picnic is scheduled for August 16<sup>th</sup> at our Clubhouse and right now things look pretty good for holding that event. However, I will be asking the Board of Directors to make the final decision as to whether or not the picnic is a GO, at the July 15<sup>th</sup> BoD Meeting.

GCARC's Annual Hamfest is scheduled for September 13<sup>th</sup>. It is a little too soon to tell if things will be OPEN enough for us to hold that event, but I am keeping my fingers crossed.

I am not sure now that things are opening up, as to when we will be able to hold our monthly meetings at the Pfeiffer Community Center. Till then we will continue to have our monthly meetings via **ZOOM**. TECH Saturdays are cancelled until further notice.

We would like to welcome two new Club members :

- **David Christian, KB3VEO**, a Technician Class licensee who lives in Swedesboro.
- **Steven Farney, WB2VFJ**, a General Class licensee who lives in Erial. Steve is a returning member from 1978.

**That's it for now. I hope to see you all in the pile-ups.**

**73, God Bless es Above All Be Healthy, Be Strong, Be Safe**

**Old Salty Veteran**

**JIM CLARK, USN (Ret.),  
KA2OSV, President GCARC**

*“Ask not what your Club can  
do for you, Ask what you can  
do for your Club”  
- KA2OSV*

**Wednesday, July 1, 2020 General Membership **ZOOM** Meeting**

**1930 Hours**

**VP Tony Starr, K3TS will be the host**

**He will send out log-in instructions**

**Welcome New Club Members :**

**David Christian, KB3VEO**, who has a Technician Class license and lives in Swedesboro, NJ.

**Steven Farney, WB2VFJ**, (returning member from 1978) who has a General Class license and lives in Erial, NJ.

We are glad to have you as members of the Club and hope to see you regularly at Club meetings, events, and activities. We also hope to hear you 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**



## Best Down Jersey DX Picks

July 2020

By Bill Grim, W0MHK

CALL	DATES	HIGHLIGHTS	DIFFICULTY (5=MOST RARE)	ENTITY
EA6	07/01 - 07/11	40-6M/CW, RTTY, FT4, FT8	1	Balearic Islands
YJ40IND	07/01 - 07/31	40, 20, 15M/CW, SSB, FT8	3	Vanuatu
HB0	07/24 - 07/26	80-6M/CW, SSB, FT8	1	Liechtenstein
5X1RI	07/29 - 08/15	HF/CW, SSB, FT8	3	Uganda

**Down Jersey DX Extra! : Six Meters has some life at this writing in late June for stateside and some DX QSOs. Sporadic-E propagation is appearing on 10 Meters as well as 6 Meters. Take advantage of those openings, too, if you can. Modest stations on 6 Meters are not doing as well as the “Big Guns” so far this season. Seven sunspots this year have been attributed to new solar cycle 25. Where there is ionization, there is DX Hope!!!!**

**Credits : NG3K Announce DX Operations : [www.ng3k.com/Misc/adxo.html](http://www.ng3k.com/Misc/adxo.html)**

### Entity Of The Month : Balearic Islands

The Balearic Islands are an archipelago of Spain in the western Mediterranean Sea, near the eastern coast of the Iberian Peninsula. The four largest islands are Mallorca, Menorca, Ibiza, and Formentera. Many minor islands and islets are close to the larger islands, including Cabrera, Dragonera, and S'Espalmador. The islands have a Mediterranean climate, and the four major islands are all popular tourist destinations. Ibiza, in particular, is known as an international party destination, attracting many of the world's most popular DJs to its nightclubs. The islands' culture and cuisine are similar to those of the rest of Spain but have their own distinctive features. The archipelago forms an autonomous community and a province of Spain, with Palma de Mallorca as the capital. The 2007 Statute of Autonomy declares the Balearic Islands as one nationality of Spain. The co-official languages in the



Balearic Islands are Catalan and Spanish. Little is recorded on the earliest inhabitants of the islands, though many legends exist. The story, preserved by Lycophron, that certain shipwrecked Greek Boeotians were cast nude on the islands, was evidently invented to account for the name Gymnesiae. In addition, Diodorus Siculus writes that the Greeks called the islands Gymnesiae because the inhabitants were naked during the summer time. Also, a tradition holds that the islands were colonised by Rhodes after the Trojan War. The islands had a very mixed population, of whose habits several strange stories are told. In some stories, the people were said to go naked or were clad only in sheepskins - whence the name of the islands until the Phoenicians clothed them with broad-bordered tunics. In other stories, they were naked only in the heat of summer. Other legends allow that the inhabitants lived in hollow rocks and artificial caves, that they were remarkable for their love of women and would give three or four men as the ransom for one woman, that they had no gold or silver coin, and forbade the importation of the precious metals, so that those of them who served as mercenaries took their pay in wine and women instead of money.

[www.wikipedia.org/wiki/Balearic Islands](http://www.wikipedia.org/wiki/Balearic_Islands)

## DA's and DIT's

**Gary Reed, N2QEE**, reports that there was no VE session in June. The group has also cancelled the July 9<sup>th</sup> session because the Franklin Township Library is still on lock down. There has not been any date suggested for the library to reopen. The league has suggested testing methods, but no details.

Congratulations are in order for two Club members who got new vanity call signs :

- **VP Tony Starr, K3TS (ex. WA2FZB)**
- **Curt Myers, K2CWM (ex. WA2JSG)**

**Jeff, WB2ZBN**, reports that he has talked to the manager of the Pfeiffer Community Center and will be contacted when the Center is scheduled to be reopened.



## Tech Saturday Forum July 11, 2020 @ 0900 Hours \*\*\* CANCELLED \*\*\*

### *Open Discussion Of All Amateur Radio Related Topics*

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.

As always, refreshments and snacks will be served at every Tech Saturday.

The Tech Saturday Forum is held on the Saturday after the General Membership meeting.



## GC-ARES/American Red Cross Drill - May 30, 2020

By Karl Frank W2KBF

GC-ARES Emergency Coordinator

On Saturday, May 30, 2020, four members of Gloucester County Amateur Radio Emergency Service (GC-ARES) participated in a joint drill exercise between ARES and the American Red Cross (ARC).

**The Drill Scenario :** A series of cyberattacks had been taking place for several days with the result that large regions across the United States were without power. People were running out of food. Phone service and Internet had become overloaded and sporadic. In response, the ARC set up Family Assistance Centers and Points of Distribution to provide mass care in affected areas. Through its Memorandum of Understanding with the ARRL, the ARC requested Amateur Radio support from ARES.

**The Response :** On Saturday, May 30, 2020, local ARES organizations were activated in the affected areas to establish communications coordination with the ARC. Because of current social distancing requirements we simulated attendance at a fictitious shelter in Pitman; nobody had to leave their home station. In Gloucester County there were four volunteers who registered for this drill :

- **Bob KD2NEC** was assigned to use FLDIGI/FLMSG to send a shelter request message using an ARC-6409 form.
- **Glenn N2YIO** was assigned to send a message using an ARC-213 form.
- **Mark W2OCY** sent a Shelter Report using the appropriate American Red Cross form.
- **Karl W2KBF** acted as the Net Control and was the receiving station.

At 9 AM, Karl W2KBF activated the Drill Exercise using the W2MMD 2 Meter repeater. All three messages were sent successfully to W2KBF over the repeater and, as required by the drill protocol, forwarded these messages by RF using Winlink to our Section Emergency Coordinator Tom WB2ALJ (we were simulating a communications emergency so Internet email was not permitted). Tom then routed the messages to the appropriate ARC personnel. This required some prior homework on the part of participants because we had not trained previously on use of ARC forms and had little experience in porting messages from FLDIGI/FLMSG into Winlink.

**Post Drill Notes :** It took approximately 20 minutes to pass the three drill messages within the county and it took about an hour after that to upload the messages via an 80 meter Winlink RMS station. However GC-ARES completed its tasks by 11 AM. Participants commented that it was an enjoyable exercise and a really good learning experience, although we could have used more time to prepare. The next ARES drill is planned for October when GC-ARES will participate in the annual Simulated Emergency Test (SET).



## Regional (Atlantic & Hudson Divisions) Hamfests & Events

**July 4, 2020** : Harrisburg Radio Amateurs Club, Firecracker Hamfest & ARRL Pennsylvania State Convention, Shumaker Public Safety Building, North Hall Drive (Industrial Road), Harrisburg, PA.

[www.w3uu.org](http://www.w3uu.org) \*\*\* CANCELLED \*\*\*

**July 5, 2020** : Murgas Amateur Radio Club Hamfest & Computerfest, Polish American Veterans Club, 2 South Oak Street, Wilkes-Barre, PA. [www.murgasarc.org/hamfest.htm](http://www.murgasarc.org/hamfest.htm) \*\*\* CANCELLED \*\*\*

**July 11, 2020** : Radio Amateurs of Greater Syracuse, RAGS Hamfest, Lakeside Fire Station, 1002 State Fair Boulevard, Syracuse, NY. [www.ragsclub.org/ham-fest](http://www.ragsclub.org/ham-fest) \*\*\* CANCELLED \*\*\*

**July 11, 2020** : Mid-Atlantic Amateur Radio Club, Valley Forge Hamfest, Kimberton Fire Company Grounds, 762 Pike Spring Road, Kimberton, PA. [www.marc-radio.org](http://www.marc-radio.org) \*\*\* CANCELLED \*\*\*

**July 12, 2020** : Sussex County Amateur Radio Club, Sussex Hamfest, Sussex County Fair Grounds, 37 Plains Road, Augusta, NJ. [www.scarcnj.org](http://www.scarcnj.org) \*\*\* CANCELLED \*\*\*

**July 18, 2020** : Lancaster Amateur Radio Club, Batavia Hamfest, Alexander Firemen Grounds, 10708 Alexander Road, Alexander, NY. [www.w2so.org](http://www.w2so.org) \*\*\* CANCELLED \*\*\*

**July 19, 2020** : Somerset County Amateur Radio Club, Somerset County Pennsylvania Hamfest, Somerset County Technology Center, 281 Technology Drive, Somerset, PA. [www.k3smt.org](http://www.k3smt.org) \*\* CANCELLED \*\*

**July 25, 2020** : Cumberland Valley Amateur Radio Club, CVARC Hamfest, Cumberland Valley Engine & Machinery Association Show Grounds, 1501 Criders Church Road, Chambersburg, PA. [www.w3ach.org](http://www.w3ach.org)

**July 25, 2020** : New Jersey Antique Radio Club Tailgate Hamfest, InFoAge Science & Learning Center, 2201 Marconi Road, Wall Township, NJ. [www.njarc.org](http://www.njarc.org)

**July 26, 2020** : Utica Amateur Radio Club, RadioCom 2020, Deerfield Fire Department Grounds, 5476 Trenton Road, Deerfield, NY. [www.uticaarc.com](http://www.uticaarc.com)





## Securing PowerPole connectors

By Dan Romanchik, KB6NU

In preparation for this year's Field Day, I made a bunch of cables with PowerPole connectors to connect the solar panel, charge controller and batteries that I used. If you're not familiar with PowerPoles, you might want to check out this **YouTube video** (<https://www.youtube.com/watch?v=o31iuOcQ-jo>). They're really great connectors, and have become the DC connector of choice for many hams.



When I make up PowerPole cables, I normally don't bother trying to secure the two halves together, especially if you're using some decently heavy gauge wire. They fit together pretty tightly, and don't come apart easily. Even so, I think securing them together is a good idea. You can buy a little roll pin to insert between the red and black housings that is supposed to prevent them from coming apart, but many folks complain that the pin has a tendency to fall out. This not only defeats the purpose, but could also damage your equipment.

Securing them is the right thing to do, though, and I recently came across some great suggestions on how to do this in the daily digest that I receive from the **Elecraft-KX mailing list** (<https://groups.io/g/Elecraft-KX>) Here are the best tips from the thread, **Securing Anderson Power Poles** (<https://groups.io/g/Elecraft-KX/topic/75060413>) :

- **Rudy K8SWD** : You can thermally bond the red and black housings with a soldering iron like you are making little welds on both sides. Permanent (mostly) but it works better than the roll pins. Just clean the tip really good before soldering!
- **Dave K0CDA** : [Anderson] also make connectors that are thermally bonded together in pairs. They do NOT come apart.
- **Don W3FPR** : I use a drop of Super Glue on the junction of the plastic pieces. Warning - that glue grabs quickly, so slide the 2 pieces only enough to start the assembly, then apply the drop of glue and quickly finish sliding them together. I have never had ones prepared like that come apart, and I don't use roll pins. I will say one more thing - use only the genuine APPs. I have seen some knockoffs that do not mate well.
- **Greg KC9NRO** : Take a hot soldering iron. Wipe the tip with sponge. Run the tip down both side of APP bonding the black and red sides together. Clean soldering iron tip and apply some solder to tip. That's how I roll. Never comes apart
- **Mike AI4NS** : PVC cement will soften the plastic enough to bond them together. You can also get plastic welding rods, such as **Daindy Plastic Welding Rods** ([https://www.amazon.com/dp/B086HNQXM3/ref=cm\\_sw\\_r\\_cp\\_api\\_i\\_poR8Eb88N54P4](https://www.amazon.com/dp/B086HNQXM3/ref=cm_sw_r_cp_api_i_poR8Eb88N54P4)). Chuck a rod in a Dremel and weld them together. I have made plastic boxes and panels using this method.
- **Jack WD4E** : Snip the cotton end off a Q-tip, cutting at an angle. Insert into hole made for roll pin, cut off excess, save remainder of Q-tip for next requirement.
- **Troy K4JDA** : 2.5mm screws work well, stay in, and are easily removable.

*KB6NU's Ham Radio Blog - Continued on page 9*

I posted these suggestions to **my blog** (<https://kb6nu.com>) and got a few more great suggestions :

- **Tom KB8UUZ** : Fat tooth picks also work great. Jam it in, break it off.
- **Bruce N0NHP** : I use MEK (Methyl Ethyl Ketone) replacement to clean my circuit boards after soldering. A single drop of MEK on the junction between the two halves of the PowerPole shell will fuse them. It can be broken with a sharp tap but not accidentally. It will set and dry in seconds and should be applied after the shell pieces are put together.

I think these are all great suggestions. I think that I'm going to try the cotton swab method. While reading them, another thought occurred to me. I haven't tried this yet, but I'm thinking a little drop of hot glue on the roll-pin hole might work, too.

Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog ([KB6NU.Com](http://KB6NU.Com)), the "No Nonsense" amateur radio license study guides ([KB6NU.Com/study-guides](http://KB6NU.Com/study-guides)), and often appears on the ICQPodcast ([icqpodcast.com](http://icqpodcast.com)). When he's not thinking up new ways to keep his PowerPoles together, he likes to teach ham radio classes and operate CW on the HF bands.

**12th Annual 13 Colonies Special Event**  
July 1st - July 7th, 2020

*Independence Week Celebration*

**1776** **2020**

**K2A-New York**  
**K2B-Virginia**  
**K2C-Rhode Island**  
**K2D-Connecticut**  
**K2E-Delaware**  
**K2F-Maryland**  
**K2G-Georgia**

**K2H-Massachusetts**  
**K2I-New Jersey**  
**K2J-N. Carolina**  
**K2K-N.Hampshire**  
**K2L-S. Carolina**  
**K2M-Pennsylvania**

**GB13COL**  
**Gr. Britain**

**WM3PEN**  
**PHILADELPHIA**

**73'**

**CONTACTS**

**13**

**ALL 13 COLONY STATES**  
**CLEAN SWEEP**

**GOD BLESS AMERICA**

**JULY 2020**

**Ken Villone**  
KEN VILLONE-KU2US/EVENT MANAGER

**An On-Air**  
**Amateur Radio Event**



## Social Distancing Exam Sessions Demonstrate Pent-Up Demand for Testing

A recent in-person "social-distancing" amateur radio exam session in Indiana and a "drive-in" session in California are representative of those that are relieving some of the pent-up demand for testing. As the COVID-19 pandemic continues, in-person exam sessions have begun to resume across the US and elsewhere in the world.

"With in-person sessions starting up again around the country, we are hearing the same story from volunteer examiner (VE) teams everywhere," said ARRL Volunteer Examiner Coordinator (VEC) Maria Somma, AB1FM. "Large numbers of candidates who have been waiting to test are contacting teams and are thankful for the opportunity to sit for an exam. So far, we've heard mostly positive results. Candidates are very prepared, as they've had extra time to study. VE teams and candidates are following CDC and state guidelines for social distancing."



### Anderson (IN) Repeater Club

(<https://andersonrepeaterclub.org>) VE Team Liaison Steve Riley, WA9CWE, told ARRL earlier this month that his club has been conducting test sessions every month since 2011, typically serving four or five candidates each session, but the May 19 session attracted 14 individuals.

"We were unable to test in April, but were able to get back in for the May session," Riley said. "Several candidates were from Central Indiana, and we had a fellow drive down from Chicago, a couple from the Dayton, Ohio, area, and also from Fort Wayne, Indiana." The

team limited participation until it could conduct the trial run.

VEs and examinees alike wore face masks, and the test room was configured to accommodate the necessary spacing between individuals. "We questioned everyone entering with the usual health questions," he added.

"Our VE paperwork became a serial flow for grading instead of our prior 'huddle' of the three VEs over the answer sheet," Riley recounted. "As a result, things were a bit slower than in the past. The tables, pencils, and pens were disinfected."

The result for the session was 11 new radio amateurs and three upgrades. "All went well, although we identified a couple improvements in paperwork flow for next month's test," Riley added.

"There is quite a pent-up demand for new amateur licenses and upgrades as a result of the number of test sessions that have been canceled," he continued. "I hope that as sessions resume, they have the success that we had." Riley said he's already been contacted by six people who plan to sit for the exam in June.



*Social Distancing Exam Sessions - Continued on page 11*

In California, VE Larry Loomer, KI6LNB, told the ARRL VEC that his team conducted a successful drive-in license testing session on May 16 at the Concord Bay Area Rapid Transit Station.

Loomer explained that candidates fill out their paperwork in their cars. "I have circled in pencil all of the boxes on [Form] 605, the answer sheet, and the CSCE (Certificate of Successful Completion of Exam) that the candidates need to fill in, to minimize the face-to-face time." Once paperwork is completed, candidates take a test booklet and answer sheet on a clipboard and sit in a chair in front of their cars, taking the test in front of the VEs.

Completed tests go into a box on the VE table, and candidates back their cars into a holding area, to let other cars park by the testing chairs. Once a test is scored and signed, the CSCE goes to the waiting candidate, who may then drive away.

"I'm seeing videos of remote test-taking sessions, and they still look labor intensive to me," Loomer said. "We are sticking with the drive-in format for the present time."

Somma said, "Our VE teams are doing a great job! I'm impressed with their attention to safety, their professionalism, and their innovative tactics."

*Article Credit : The ARRL Letter for May 28, 2020 - [www.arrl.org](http://www.arrl.org)*

<b>The Amateur's Code By Paul M Segal, W9EEA (1928)</b>	
<b>The Radio Amateur is :</b>	
<b>Considerate</b>	<b>Never knowingly operating in such a way as to lessen the pleasure of others.</b>
<b>Loyal</b>	<b>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.</b>
<b>Progressive</b>	<b>With knowledge abreast of science, a well built and efficient station, and operation beyond reproach.</b>
<b>Friendly</b>	<b>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.</b>
<b>Balanced</b>	<b>Radio is an avocation, never interfering with duties owed to family, job, school or community.</b>
<b>Patriotic</b>	<b>With station and skill always ready for service to country and community.</b>



## WSJT-X Version 2.2.0 Is Now In General Release



WSJT-X version 2.2.0 is now in general availability release, after a short period in beta (or release candidate) status. WSJT-X version 2.2 offers 10 different protocols or modes - FT4, FT8, JT4, JT9, JT65, QRA64, ISCAT, MSK144, WSPR, and Echo. The first six are designed for reliable contacts under weak-signal conditions, and they use nearly identical message structure and source encoding. JT65 and QRA64 were designed for EME ("moonbounce") on VHF/UHF bands, but have also proven very effective for worldwide very low-power communication on HF bands.

"FT8 is operationally similar but four times faster (15-second T/R [transmit-receive] sequences) and less sensitive by a few decibels," developer Joe Taylor, K1JT, explains in the version **2.2.0 User Guide** ([https://physics.princeton.edu/pulsar/K1JT/wsjsx-doc/wsjsx-main-2.2.0\\_en.html#NEW\\_FEATURES](https://physics.princeton.edu/pulsar/K1JT/wsjsx-doc/wsjsx-main-2.2.0_en.html#NEW_FEATURES)). "FT4 is faster still (7.5-second T/R sequences) and especially well suited for contesting."

Taylor noted that even with their shorter transmit-receive sequences, FT4 and FT8 are considered "slow modes," because their message frames are sent only once per transmission. "All fast modes in WSJT-X send their message frames repeatedly, as many times as will fit into the [transmit] sequence length," he explained.

Compared with FT8, FT4 is 3.5 dB less sensitive and requires 1.6 times the bandwidth, but it offers the potential for twice the contact rate.

New in WSJT-X version 2.2.0 : FT8 decoding is now spread over three intervals, the first starting at 11.8 seconds into a receive sequence and typically yielding around 85% of the possible decodes. This means users see most decodes much sooner than with previous versions. A second processing step starts at 13.5 seconds, and a third at 14.7 seconds.

"Overall decoding yield on crowded bands is improved by 10% or more," Taylor said.

Other changes: Signal-to-noise (SNR) estimates no longer saturate at +20 dB, and large signals in the pass-band no longer cause the SNR of weaker signals to be biased low. Times written to the ALL.TXT cumulative journal file are now correct, even when decoding occurs after the T/R sequence boundary.

*Article Credit : The ARRL Letter for June 4, 2020 - [www.arrl.org](http://www.arrl.org)*

*Update from The ARRL Letter for June 25, 2020 :*

**The digital modes suite WSJT-X version 2.2.2 has been released.** The update is a bug-fix release. The primary change is to incorporate the new Radio Amateurs of Canada (RAC) Prince Edward Island (PE) Section PE into the FT8/FT4/MSK144 contest mode for ARRL Field Day. Operators planning to be on the air for Field Day should upgrade to this version to enable accurate logging. Another change : the FT8 decoder has been sped up in "normal" and "fast" modes. This offers a decoding speed closer to that of version 2.1.2 without compromising the number of decodes. It is particularly targeted for slower, single-board computers, such as the Raspberry Pi Model 3 or similar. Also, the DX grid field now clears automatically whenever the DX call field is changed.



## More Amateur Radio Exam Sessions Engineering In-Person, Remote Solutions

As some states further relax restrictions imposed to minimize the spread of the COVID-19 virus, additional teams of ARRL Volunteer Examiner Coordinator (VEC) volunteer examiners (VEs) have conducted successful sessions. On June 13 at the Clark Township Municipal Building, the Electronic Technology Society of New Jersey (ETSNJ) held its first exam session since February, with help from several other clubs. With COVID-19 precautions in place, the June session was held outdoors.

"We had to have two sessions, because we had 20 candidates on our waiting list," said Larry Makoski, W2LJ, a member of the Piscataway Amateur Radio Club. Drew Moore, W2OU, was the ARRL VEC liaison. "We had the candidates line up their vehicles on one side of the parking lot. Directly across from them were the vehicles of the VEs. They were given the option of taking the exam inside their vehicle, or if they wanted, they could bring a chair and clipboard and take the exam in front of their vehicle. Each vehicle was checked for compliance as we collected exam fees and checked photo IDs."



Makoski said social distancing was maintained, and face coverings and gloves or hand sanitizer were the order of the day. "We communicated with the candidates via a low-power FM transmitter tuned to 88.7 MHz or thereabouts, and they could hear us on their FM broadcast receivers inside their vehicles," he explained.

All went smoothly, and the weather cooperated. "Everyone who came walked away - or should I say, drove away - with either a new Technician-class license or an upgrade," Makoski said. A vacant seat was left for VE Bobby Cure, W2REC (SK), who had succumbed to COVID-19. "We tried to honor his memory by making him present in spirit," Makoski said.

VE teams from the Tri-County Radio Club, the Raritan Valley Radio Club, the South Plainfield Amateur Radio Club, the New Providence Amateur Radio Club, and the Fair Lawn Amateur Radio Club pitched in to help.

On the same Saturday in Florida, Doug Wiles, WF4B, reports that the St. Augustine Amateur Radio Society (SAARS) VE team held its first exam session in 6 months. The session took place in an outdoor pavilion, and test areas were disinfected prior to the candidates' arrival. Face masks were distributed and social distancing was practiced during the session, Wiles said. All three candidates passed.

On June 14 in Georgetown, Kentucky, VE Ron Malinowski, WX4GPS, with the Scott County Amateur Radio Club said 14 candidates passed their tests during an indoor session held there. "We took temperatures at the door, gave masks to anyone who came without, and we wiped down all seating areas after the attendee left," he said.



*More Amateur Radio Exam Sessions - Continued on page 14*

*More Amateur Radio Exam Sessions - Continued from page 13*

ARRL VE Team Liaison Janet Crenshaw, WB9ZPH, in Garland, Texas, told ARRL that a trucker signed up for a recent remote exam session.

"He had a Wi-Fi hotspot in the cab of his truck, so he found a parking space, pulled out his iPad and iPhone, and we had our Zoom test right there," she told ARRL VEC. "The world certainly has changed, and I've been encouraging people to realize that the world of ham radio has to change with it."

*Article Credit : The ARRL Letter for June 17, 2020 - [www.arrl.org](http://www.arrl.org)*



## **ARRL Section News**

**Delaware Section** - On Monday, May 18, Kent County Amateur Radio Club member Ken Dix, KB2KBD, picked up an emergency call on the 146.91 MHz repeater : Richard Tashner, N2EO, of Massapequa, New York, was suffering a medical emergency and could not reach his phone to call for help. He was close enough to grab the microphone to his DMR radio. Tashner called for help and Maxis Johnston, GM0MRJ, answered his call. Johnston then called for "anyone in the states" and was heard by Dix on the 91 machine, which was linked to the North American talk group. Dix called a police department in New York near Tashner, and help was sent.

Dix said the dispatcher in New York was able to hear part of the call and was amazed at how an amateur radio communication had gone from New York to Scotland to Delaware and then back to New York. The dispatcher was also surprised at how quickly the information had been relayed across the Atlantic.

The 146.91 MHz repeater near Woodside, Delaware, is set on C4FM Fusion and is linked to DMR on "America's Net." The repeater is located at the Delaware State Communications complex.

Kudos to the operators for their alertness and willingness to take the emergency call and get the information relayed to the proper personnel. Amateur Radio at its finest! - *Jerry Palmer, N3KRX, Sussex County AUX-COMM Training Officer; ARRL Emergency Communications Course Mentor; and Assistant Emergency Coordinator, Kent County, Delaware*

*Article Credit : The ARES E-Letter for June 17, 2020 - [www.arrl.org](http://www.arrl.org)*



**QST de W1AW**  
**ARRL Bulletin 12 ARLB012**  
**From ARRL Headquarters**  
**Newington CT May 15, 2020**  
**To all radio amateurs**

### **ARLB012 ARRL Seeks Clarification of Amended Amateur Service RF Safety Rules**

ARRL has filed a Petition for Clarification addressing two issues arising from amended FCC RF safety rules that go into effect on June 1 for the Amateur Service and other FCC-regulated services. Licensees will have 2 years to determine if an RF safety evaluation is now required under the new rules and to perform an evaluation and implement any needed mitigation measures. Current rules already require amateur stations to meet RF exposure limits, but more radio amateurs will have to evaluate their stations under the new rules. The revised final rules, adopted last November, appeared in the April 1 edition of The Federal Register.

"For applicants and licensees in the Amateur Radio Service, we substitute our general exemption criteria for the specific exemption from routine evaluation based on power alone in Part 97.13(c)(1) and specify the use of occupational/controlled limits for amateurs where appropriate," the FCC said. While radio amateurs have always had to comply with RF exposure limits, certain stations have been exempted from having to conduct evaluations based upon power and frequency.

On May 8, ARRL asked the FCC to clarify that using maximum permissible exposure (MPE) limits be permitted in the Amateur Service for required RF safety evaluations of 2200-meter operations, just as they are elsewhere in the amateur spectrum. Removal of the exemption for amateurs resulted in a requirement to use specific absorption rate (SAR) limits for amateur frequencies between 100 and 300 kHz.

"SAR evaluations are very complex to directly measure and, we believe, generally exceed the capability of most individual amateur operators," ARRL argued in its petition, asserting that MPE limits correspond to conservative estimates of SAR.

"Near-field calculation of a uniform field applied to a transmitter and antenna operating at 1 W EIRP on 2200 meters would result in a very conservative estimate of specific absorption rate (SAR) and is a valid measurement for determining safety of operation," ARRL told the FCC. "We request clarification that the rules do not intend to preclude the use of MPE as a surrogate for SAR to evaluate amateur operations in the 2200-meter band."

ARRL also wants the FCC to clarify that its amended rules permit the use of near-field regression rates, using the MPE table to compare against the maximum field strength that may occur from a handheld portable device, instead of using the SAR. In its filing, ARRL maintained that SAR data is not available for amateur equipment as it is for equipment used in other services. Before the rules were amended, mobile and portable transmitters generally were exempt from the requirement to perform routine environmental evaluations.

Under Part 97.13(c)(1) as amended, effective on June 1, amateur licensees must ensure compliance with FCC RF exposure requirements spelled out in sections 1.1307(b), 2.1091, and 2.1093 of the FCC rules, where applicable. "In lieu of evaluation with the general population/uncontrolled exposure limits, amateur licensees may evaluate their operation with respect to members of his or her immediate household using the occupational/controlled exposure limits in Part 1.1310, provided appropriate training and information has been accessed by the amateur licensee and members of his/her household."

*ARLB012 Bulletin - Continued on page 16*

"RF exposure of other nearby persons who are not members of the amateur licensee's household must be evaluated with respect to the general population/uncontrolled exposure limits." The rule directs radio amateurs to OET Bulletin 65, Supplement B for methodologies and guidance to evaluate amateur radio operation.

OET Bulletin 65 can be found online in PDF format at :

[https://transition.fcc.gov/Bureaus/Engineering\\_Technology/Documents/bulletins/oet65/oet65.pdf](https://transition.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet65/oet65.pdf).

The FCC has provided 2 years - until May 31, 2022 - for licensees to determine if evaluations are now required, to perform such evaluations where necessary, and to implement any needed mitigation measures.

"The amended rules are intended to provide more efficient, practical, and consistent RF exposure evaluation procedures and mitigation measures to help ensure compliance with the existing RF exposure limits," the FCC said. "The amended rules replace the various inconsistent service-specific criteria for exempting parties from performing an evaluation to demonstrate compliance with the RF exposure limits with new, streamlined criteria." The amended rules also allow the use of any valid computational method to determine potential RF exposure levels. The FCC did not amend the actual RF exposure limits that were adopted in 1996.



**QST de W1AW  
Space Bulletin 004 ARLS004  
From ARRL Headquarters  
Newington, CT May 15, 2020  
To all radio amateurs**

### **ARLS004 HuskySat-1 (HO-107) Transponder is Open**

The transponder on HuskySat-1, now designated as HuskySat-OSCAR 107 (HO-107), has been activated and is open for use and testing, AMSAT Vice President - Operations Drew Glasbrenner, KO4MA, reports.

"It's fairly sensitive, and 5 - 10 W is plenty most of the time. There are some fades due to satellite orientation, and some passes are definitely better than others. Strong signals may impact the beacon strength."

HuskySat-1 is the first CubeSat from the Husky Satellite Lab at the University of Washington and the first mission with AMSAT's linear transponder module (LTM-1), a V/u transponder and integrated telemetry beacon and command receiver. University researchers recently completed their Part 5 (Experimental) operations and have opened up the amateur radio transponder, which is available for use in educational CubeSat missions that are willing to enable the transponder for worldwide use.

The HuskySat-1 V/u transponder is inverting, with an uplink passband of 145.910 - 145.940 MHz, and a downlink passband of 435.810 - 435.840 MHz. The 1200-baud BPSK telemetry beacon is at 435.800 MHz..

His Majesty King of Spain Contest, CW  
May 16, 2020

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

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

Summary :

Band QSOs Mults

---

80 :	17	17
40 :	43	21
20 :	28	21

---

Total : 88 59  
Total Score : 8,142

Club : Frankford Radio Club 68

Comments :

Rig : FTDX-9000D/Acom 2000A

Antennas :

80m Dipole @ 85ft  
40m Delta loop @ 65ft  
20m Delta loop @ 65ft

Thanks for all the Qs!  
Limited time.

73 Darrell AB2E

CQ-M International DX Contest  
May 9, 2020

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

Class : SOABCW HP  
QTH : SNJ  
Operating Time (hrs) : 3.5  
Location : USA

Summary :

Band CW Qs Ph Qs Mults

---

80 :	29	0	13
40 :	102	0	25
20 :	89	0	27

---

Total : 220 0 65  
Total Score : 35,425

Club : Frankford Radio Club 65

Comments :

Rig : FTDX-9000D/Acom 2000A

Antennas : all wires.

80m - dipole @ 85ft  
40m - delta loop @ 65 ft  
20m - delta loop @ 60ft

Seemed like a lot more activity this year than last. With the point structure 2 pts within your own continent, vs. 3 points for another continent, you can still score decently if the bands are not good. However, 20m stayed open late for the time I was on, and 40m was in decent shape, with many EU answering my CQs. 80m seemed to be the poor band this time.

CU in the WPX CW!  
73 Darrell AB2E

CQ Worldwide WPX Contest, CW  
May 30, 2020

Call : WK2G  
Operator (s) : WK2G  
Station : WK2G

Class : SO (A) AB HP  
Class Overlay : TB-Wires  
QTH : PA  
Operating Time (hrs) : 35  
Location : USA

Summary :

Band QSOs

---

80 :	67
40 :	311
20 :	1005
15 :	241
10 :	177

---

---

Total : 1,801 Prefixes : 723  
Total Score : 2,674,377

Club : Frankford Radio Club 72

Comments : Was quite happy with band conditions especially the little tickle of 10 and 15 openings. I hope it's the beginning of good things to come soon as the new cycle kicks in.

Antennas used :  
Hexbeam at around 40 feet 10/15/20  
40 meter A 40 meter delta loop and 35 feet at apex  
80 meter end fed at 50 feet.  
Amp SPE EXPERT 1.3 KA -FA



**CQ Worldwide WPX Contest, CW  
May 30, 2020**

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

**Class : SO (A) AB HP  
Class Overlay : TB-Wires  
QTH : SNJ  
Operating Time (hrs) : 28  
Location : USA**

**Summary :**

**Band QSOs**

-----  
**160 : 12  
80 : 219  
40 : 574  
20 : 660  
15 : 151  
10 : 122**

-----  
**Total : 1,738 Prefixes : 723  
Total Score : 2,892,723**

**Club : Frankford Radio Club**

**70**

**Comments :**

*Rig : FTDX-9000D/Acom 2000A  
Antennas : All Wires  
160m Inverted L @ 100ft  
80m Dipole @ 90ft  
40m Delta loop @ 75ft  
20m Delta loop @ 65ft  
15m/10m Homebrew Fan Dipole @ 65ft*

Band	QSOs	Pts	WPX	Pt/Q
1.8	12	24	2	2.0
3.5	219	359	77	1.6
7	574	1955	289	3.4
14	660	1344	296	2.0
21	151	185	30	1.2
28	122	134	29	1.1
<b>Total :</b>	<b>1738</b>	<b>4001</b>	<b>723</b>	<b>2.3</b>
<b>Score : 2,892,723</b>				
<b>1 Mult = 2.4 Q's</b>				

**CQ Worldwide WPX Contest, CW  
May 30, 2020**

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

**Class : SO (A) AB HP  
QTH : SNJ  
Operating Time (hrs) :  
Location : USA**

**Summary :**

**Band QSOs**

-----  
**160 : 0  
80 : 6  
40 : 156  
20 : 231  
15 : 49  
10 : 23**

-----  
**Total : 465 Prefixes : 375  
Total Score : 516,000**

**Club : Frankford Radio Club**

**71**

*Comments : I was expecting rain all weekend, but the weather just got nicer and nicer, and calling me away from the shack, so I had trouble staying in the chair. My brand new call sign was worth at least 6 dB, as I had no trouble working DX even on 10 meters. The highlight was working a BY on 20m for the very first time. Lots of activity, with literally hundreds of calls spotted. Thanks to all for the QSO's and hope to hear all of you on Field Day.*



*Wow, what a great weekend. Condx did not seem very good at the beginning Fri evening on 40m. Generally worked EU on S&P, but did get a couple good runs going. Probably stayed on 20m too long, but was at least working EU there. Much better on Sat night. Highlight Fri evening was working 5W1SA first call on 40m about 0800Z. Personal best from home QTH for this contest, and with fewer hours. If I could have operated full time could have had an even better score!*

*Seemed like an endless stream of callers on Sun afternoon when I got back on at 1900Z until the end. Nice to see 10m open awhile although just US and 1 or 2 Carib stations. 15m not open for me to EU on Sat, but worked EU Sun AM just before had to leave so missed a nice opening. First time in a long time I've made QSOs on all 6 bands. Some other highlights included A41CK, 5Z4/G3AB and others calling in Sun afternoon. Although all wires, I was able to get decent runs going on 20, 40, and 80, and ran about 90% of the time this contest.*

## 2019-2023 Element 3 General Class License Question Quiz

This month we continue with **Subelement G3 : Radio Wave Propagation**  
(Answers on 'Last Page Calendar')

### G3B07

**What does LUF stand for?**

- A. The Lowest Usable Frequency for communications between two points
- B. The Longest Universal Function for communications between two points
- C. The Lowest Usable Frequency during a 24-hour period
- D. The Longest Universal Function during a 24-hour period

### G3B08

**What does MUF stand for?**

- A. The Minimum Usable Frequency for communications between two points
- B. The Maximum Usable Frequency for communications between two points
- C. The Minimum Usable Frequency during a 24-hour period
- D. The Maximum Usable Frequency during a 24-hour period

### G3B09

**What is the approximate maximum distance along the Earth's surface that is normally covered in one hop using the F2 region?**

- A. 180 miles
- B. 1,200 miles
- C. 2,500 miles
- D. 12,000 miles

### G3B10

**What is the approximate maximum distance along the Earth's surface that is normally covered in one hop using the E region?**

- A. 180 miles
- B. 1,200 miles
- C. 2,500 miles
- D. 12,000 miles

### G3B11

**What happens to HF propagation when the LUF exceeds the MUF?**

- A. No HF radio frequency will support ordinary skywave communications over the path
- B. HF communications over the path are enhanced
- C. Double hop propagation along the path is more common
- D. Propagation over the path on all HF frequencies is enhanced

### G3C01

**Which ionospheric layer is closest to the surface of Earth?**

- A. The D layer
- B. The E layer
- C. The F1 layer
- D. The F2 layer

*General Class Quiz - Continued on page 21*

**G3C02**

**Where on Earth do ionospheric layers reach their maximum height?**

- A. Where the sun is overhead
- B. Where the sun is on the opposite side of Earth
- C. Where the sun is rising
- D. Where the sun has just set

**G3C03**

**Why is the F2 region mainly responsible for the longest distance radio wave propagation?**

- A. Because it is the densest ionospheric layer
- B. Because of the Doppler effect
- C. Because it is the highest ionospheric region
- D. Because of meteor trails at that level

**G3C04**

**What does the term “critical angle” mean, as used in radio wave propagation?**

- A. The long path azimuth of a distant station
- B. The short path azimuth of a distant station
- C. The lowest takeoff angle that will return a radio wave to Earth under specific ionospheric conditions
- D. The highest takeoff angle that will return a radio wave to Earth under specific ionospheric conditions

**G3C05**

**Why is long-distance communication on the 40-meter, 60-meter, 80-meter, and 160-meter bands more difficult during the day?**

- A. The F layer absorbs signals at these frequencies during daylight hours
- B. The F layer is unstable during daylight hours
- C. The D layer absorbs signals at these frequencies during daylight hours
- D. The E layer is unstable during daylight hours

**G3C06**

**What is a characteristic of HF scatter?**

- A. Phone signals have high intelligibility
- B. Signals have a fluttering sound
- C. There are very large, sudden swings in signal strength
- D. Scatter propagation occurs only at night

**G3C07**

**What makes HF scatter signals often sound distorted?**

- A. The ionospheric layer involved is unstable
- B. Ground waves are absorbing much of the signal
- C. The E-region is not present
- D. Energy is scattered into the skip zone through several different radio wave paths

**The W1UL Ham Cram Website**

[www.ham-cram.com](http://www.ham-cram.com)

# Gloucester County Amateur Radio Club General Membership *ZOOM* Meeting Minutes Wednesday, June 3, 2020



Meeting opened at 1930 Hours via ZOOM online.

Previous meeting minutes moved, seconded, and approved as printed in CrossTalk by voice vote of members present.

**Attendance :** 36 members

**Visitors :** None

## **Treasurer's report :**

- YTD Income : \$2,045
- YTD Expenses : \$1,839
- Net : \$206

Treasurer's report approved by voice vote of members present.

## **Committees :**

**Clubhouse :** **Al KB2AYU** reported many improvements are happening at the Clubhouse due to generous donations from members, including new high performance satellite antennas and a second Yaesu AzEl rotor.

**Hamfest :** **Sheldon K2MEN** reported ARRL has approved our hamfest as the **Southern New Jersey Section Convention**.

**Contests :** **Tony K3TS** provided a report on the CQ WPX contest last weekend. There was lots of activity, including a short 10m opening to Europe on Sunday morning. Next event is Field Day.

**Field Day :** **Al KB2AYU** reported that there is meeting next Wednesday (6/10/20) for final go/no decision.

**ARES / RACES :** **Karl W2KBF** reported on a Joint Red Cross / Gloucester County ARES exercise held last weekend.

**Old Business :** None

**New Business :** None

**Note :** Meeting somewhat truncated due to thunderstorms moving through the area wreaking havoc with various internet service providers and network connections.

**Meeting adjourned @ 1952 Hours.**

**Program :** **Jim Wright, N2GXJ**, gave a presentation about using FT8 during Field Day. The presentation is available on the 2020 Field Day page on our w2mmd.org website.

**Respectfully submitted,**  
**John Zaruba Jr, K2ZA**  
**Recording Secretary**

# Gloucester County Amateur Radio Club

## Board of Directors Meeting Minutes

### Wednesday, June 17, 2020



Meeting opened @ 1909 Hours.

#### Attendance :

- President Jim Clark, KA2OSV
- Vice President Tony Starr, K3TS
- Treasurer Al Arrison, KB2AYU
- Recording Secretary John Zaruba Jr, K2ZA
- Corresponding Secretary Ron Block, NR2B
- Director Jeff Welsh, KD2AZI
- Director Bill Price, NJ2S
- Director Bob Durham, W2RAD
- Director Jeff Garth, WB2ZBN
- Director Chuck Colabrese, WA2TML
- Director Herb Dyer, KT2Y
- Member Ed DeFonzo, W2DE
- Member Jon Pearce, WB2MNF
- Member John O'Connell, K2QA
- Member Lee Marino, N2LAM
- Member Frank Romeo, N3PUU

#### Treasurer's Report :

- YTD Income : \$2045
- YTD Expenses : \$1978
- Net : \$66

#### Committee Reports :

**Clubhouse :** Grass has been cut for Field Day. All 4-H activities have been cancelled. Thanks to Chris Ciraula KD2SBR and Greg Ciraula KD3NDJ who came out with a front end loader to fill in the cable trenches.

**Field Day :** Al Arrison KB2AYU reported all is in readiness.

#### Old Business :

Ron Block NR2B asked about the status of the offer of a new remote capable HF amplifier and it's required ground system. Sense of the Board is that the project should be shelved for this fiscal year until the full budgetary impact of the pandemic is known. Herb Dyer KT2Y and Bob Durham W2RAD headed up discussion on the potential necessity of an increase in Club dues.

Jim KA2OSV asked for a motion from the board to approve holding in-person Field Day. Motion seconded and approved by voice vote of directors and officers present.

*June 2020 Board of Directors Meeting Minutes - Continued on page 24*

**New Business :**

Jeff Garth WB2ZBN raised the question about resumption of Tech Saturday. Discussion ensued, an outside meeting may be considered, but is highly weather dependent. If we were to have a July Tech Saturday, it would have to be moved to July 11<sup>th</sup>, since July 4<sup>th</sup> is a holiday.

Jeff Welsh KD2AZI suggested the formation of a new member outreach committee to help increase membership.

Al Arrison KB2AYU reported the radiator in the Club generator has failed. Discussion followed about avenues to get it repaired. It is unlikely the generator will be available for Field Day.

**New Members :**

- David Christian, KB2VEO : Technician Class from Swedesboro, NJ
- Steven Farney, WB2VFJ : General Class from Erial, NJ (returning member from 1978)

**Meeting adjourned @ 2007 Hours**

**Respectfully submitted,  
John Zaruba Jr, K2ZA  
Recording Secretary**



**ARE YOU READY  
FOR TAX DAY?**

Wednesday, July 15, 2020

## July Birthdays

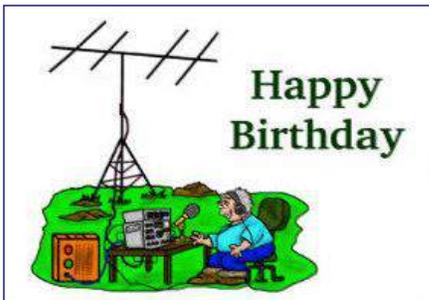
Congratulations to our members who are celebrating their birthday this month

Cortlandt Abbott Jr  
Alex Calabrese, WA2ADS  
Chris Chamberlain, N2IVN  
Herb Dyer, KT2Y  
Gary Hewitt, N2WHV  
Jerry Jacobus, WB2QEF  
Chris Kelly Sr, KC2PC  
Lee Marino, N2LAM  
Phyllis Martin, W2PDB  
Frank Messick Jr, W2FJM  
Linda Murphy, KD2RVH  
Charlie Olinda, N2SRQ (**President 1994**)  
Mike Pecorini, KD2RPE  
Ron Schaffer, W2RES  
Charlie Wahl Jr, KC2STO  
Jeff Welsh, KD2AZI  
John Wright, AC3FE

## 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 2020 issue : Monday, July 20, 2020

Club Website [www.w2mmd.org](http://www.w2mmd.org)

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

## July Contest Calendar

WA7BNM Contest Calendar : [www.contestcalendar.com](http://www.contestcalendar.com)

### July 2020

+ RAC Canada Day Contest	0000Z-2359Z, Jul 1
+ Phone Fray	0230Z-0300Z, Jul 1
+ CWops Mini-CWT Test	1300Z-1400Z, Jul 1
+ VHF-UHF FT8 Activity Contest	1700Z-2000Z, Jul 1
+ CWops Mini-CWT Test	1900Z-2000Z, Jul 1
+ QRP Fox Hunt	0100Z-0230Z, Jul 2
+ CWops Mini-CWT Test	0300Z-0400Z, Jul 2
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 2
+ NRAU 10m Activity Contest	1800Z-1900Z, Jul 2 (CW) and 1900Z-2000Z, Jul 2 (SSB) and 2000Z-2100Z, Jul 2 (FM) and 2100Z-2200Z, Jul 2 (Dig)
+ SKCC Sprint Europe	1900Z-2100Z, Jul 2
+ NCCC RTTY Sprint	0145Z-0215Z, Jul 3
+ NCCC Sprint	0230Z-0300Z, Jul 3
+ FISTS Summer Slow Speed Sprint	0000Z-0400Z, Jul 4
+ YBDXC 80m Contest	0900Z, Jul 4 to 0859Z, Jul 5
+ DL-DX RTTY Contest	1100Z, Jul 4 to 1059Z, Jul 5
+ Marconi Memorial HF Contest	1400Z, Jul 4 to 1400Z, Jul 5
+ Original QRP Contest	1500Z, Jul 4 to 1500Z, Jul 5
+ PODXS 070 Club 40m Firecracker Sprint	2000Z, Jul 4 to 2000Z, Jul 5
+ RSGB 80m Club Championship, CW	1900Z-2030Z, Jul 6
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 7
+ ARS Spartan Sprint	0100Z-0300Z, Jul 7
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 7
+ Phone Fray	0230Z-0300Z, Jul 8
+ CWops Mini-CWT Test	1300Z-1400Z, Jul 8
+ VHF-UHF FT8 Activity Contest	1700Z-2000Z, Jul 8
+ CWops Mini-CWT Test	1900Z-2000Z, Jul 8
+ QRP Fox Hunt	0100Z-0230Z, Jul 9
+ CWops Mini-CWT Test	0300Z-0400Z, Jul 9
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 9
+ NCCC RTTY Sprint	0145Z-0215Z, Jul 10
+ NCCC Sprint	0230Z-0300Z, Jul 10
+ FISTS Summer Unlimited Sprint	0000Z-0400Z, Jul 11
+ IARU HF World Championship	1200Z, Jul 11 to 1200Z, Jul 12
+ SKCC Weekend Sprintathon	1200Z, Jul 11 to 2400Z, Jul 12
+ QRP ARCI Summer Homebrew Sprint	2000Z-2300Z, Jul 12
+ 4 States QRP Group Second Sunday Sprint	0000Z-0200Z, Jul 13
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 14
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 14
+ Phone Fray	0230Z-0300Z, Jul 15
+ CWops Mini-CWT Test	1300Z-1400Z, Jul 15
+ CWops Mini-CWT Test	1900Z-2000Z, Jul 15
+ RSGB 80m Club Championship, SSB	1900Z-2030Z, Jul 15

*July Contest Calendar - Continued on page 27*

# July Contest Calendar

WA7BNM Contest Calendar : [www.contestcalendar.com](http://www.contestcalendar.com)

July Contest Calendar - Continued from page 26

+ NAQCC CW Sprint	0030Z-0230Z, Jul 16
+ QRP Fox Hunt	0100Z-0230Z, Jul 16
+ CWops Mini-CWT Test	0300Z-0400Z, Jul 16
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 16
+ NCCC RTTY Sprint	0145Z-0215Z, Jul 17
+ NCCC Sprint	0230Z-0300Z, Jul 17
+ Russian Radio Team Championship	0700Z-1459Z, Jul 18
+ Trans-Tasman Low-Bands Challenge	0800Z-1400Z, Jul 18
+ Feld Hell Sprint	1200Z-1359Z, Jul 18
+ North American QSO Party, RTTY	1800Z, Jul 18 to 0559Z, Jul 19
+ CQ Worldwide VHF Contest	1800Z, Jul 18 to 2100Z, Jul 19
+ RSGB Low Power Contest	0900Z-1200Z and 1300Z-1600Z, Jul 19
+ RTTYOPS Weekend Sprint	1600Z-1959Z, Jul 19
+ CQC Great Colorado Gold Rush	2000Z-2159Z, Jul 19
+ Run for the Bacon QRP Contest	2300Z, Jul 19 to 0100Z, Jul 20
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 21
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 21
+ SKCC Sprint	0000Z-0200Z, Jul 22
+ Phone Fray	0230Z-0300Z, Jul 22
+ CWops Mini-CWT Test	1300Z-1400Z, Jul 22
+ CWops Mini-CWT Test	1900Z-2000Z, Jul 22
+ QRP Fox Hunt	0100Z-0230Z, Jul 23
+ CWops Mini-CWT Test	0300Z-0400Z, Jul 23
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 23
+ RSGB 80m Club Championship, Data	1900Z-2030Z, Jul 23
+ NCCC RTTY Sprint	0145Z-0215Z, Jul 24
+ NCCC Sprint	0230Z-0300Z, Jul 24
+ RSGB IOTA Contest	1200Z, Jul 25 to 1200Z, Jul 26
+ ARS Flight of the Bumblebees	1700Z-2100Z, Jul 26
+ QCX Challenge	1300Z-1400Z, Jul 27
+ RSGB FT4 Contest Series	1900Z-2030Z, Jul 27
+ QCX Challenge	1900Z-2000Z, Jul 27
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 28
+ QCX Challenge	0300Z-0400Z, Jul 28
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 28
+ Phone Fray	0230Z-0300Z, Jul 29
+ CWops Mini-CWT Test	1300Z-1400Z, Jul 29
+ CWops Mini-CWT Test	1900Z-2000Z, Jul 29
+ QRP Fox Hunt	0100Z-0230Z, Jul 30
+ CWops Mini-CWT Test	0300Z-0400Z, Jul 30
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 30
+ NCCC RTTY Sprint	0145Z-0215Z, Jul 31
+ NCCC Sprint	0230Z-0300Z, Jul 31

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## Club Committees

Standing Committees	Committee Chairs
<b>Membership and Publicity</b> <b>Hamfest</b> <b>Repeater</b> <b>Hospitality</b> <b>W2MMD Clubhouse Site</b> <b>Field Day</b> <b>Nominations</b> <b>Health, Welfare, &amp; Silent Keys</b> <b>Budget</b> <b>Constitution and By-Laws</b> <b>Membership Badges</b>	<b>Bob Fields, KC6AOH</b> <b>Sheldon Parker, K2MEN and Bill Price, NJ2S</b> <b>Herb Dyer, KT2Y</b> <b>Jeffrey Garth, WB2ZBN</b> <b>Al Arrison, KB2AYU</b> <b>Al Arrison, KB2AYU</b> <b>Jim Clark Sr, KA2OSV</b> <b>Bill Price, NJ2S</b> <b>Al Arrison, KB2AYU</b> <b>Ron Block, NR2B</b> <b>Chuck Colabrese, WA2TML</b>

Activity Committees	Committee Chairs
<b>GC-ARES Emergency Coordinator</b> <b>GC-RACES Emergency Coordinator</b> <b>Club Publications</b> <b>License Testing/VEC Liaison</b> <b>Programs</b> <b>Membership Roster Database</b> <b>Club Historian</b> <b>GCARC Family Picnic</b> <b>Foxhunts</b> <b>W2MMD License Trustee</b> <b>Contests and Nets</b> <b>Holiday Dinner Party</b> <b>W2MMD Special Event Station</b>	<b>Karl Frank, W2KBF</b> <b>Walter Seitz Jr, KB2JCG</b> <b>Jeffrey Garth, WB2ZBN</b> <b>Gary Reed, N2QEE</b> <b>Tony Starr, K3TS</b> <b>Jeffrey Garth, WB2ZBN</b> <b>Jeffrey Garth, WB2ZBN</b> <b>Laurie Love, KD2EYW</b> <b>Jim Wright, N2GXJ</b> <b>Darrell Neron, AB2E</b> <b>Tony Starr, K3TS</b> <b>Jennifer Robinson, KD2EYR</b> <b>Mark Gottlieb, KK2L</b>

### 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 he 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.

FYI...If you use Comcast e-mail, you are limited to 100 addresses per message.  
 For more information about the e-mail reflector, goto : [www.mailman.qth.net](http://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 @ 1945 : 147.180 MHz Repeater

EchoLink : W2MMD-R

### **Gloucester County ARES/RACES Net**

Sunday @ 2000 : 147.180 MHz Repeater

EchoLink : W2MMD-R

### **10 Meter Rag Chew Net**

Every Monday @ 2000 Hours

Tune-In on 28.465 MHz or 28.475 MHz

### **2 Meter Rag Chew Net**

Every Thursday @ 2000 Hours

147.180 MHz Repeater/EchoLink : W2MMD-R

### **10 Meter Swap Meet**

2<sup>nd</sup> Saturday of the Month @ 2000 Hours

Check-in on 28.465 MHz or 28.475 MHz

## Meeting Calendar

### *General Membership ZOOM Meeting*

Wednesday, July 1, 2020 @ 1930 Hours

VP Tony K3TS will be the host

He will send out log-in instructions

### *Board of Directors Meeting*

Wednesday, July 15, 2020 @ 1900 Hours

\*\*\* In-Person or On-Line via ZOOM \*\*\*

(All members are welcome)

## **July 1, 2020 General Membership ZOOM Meeting**

**VP Tony K3TS will be the host  
& will send out log-in instructions**

### **\*\*\* Badges \*\*\***

**Need a new or replacement badge  
Contact "The BadgeMan"**

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

Question Pool Answers : G3B07:A; G3B08:B; G3B09:C; G3B10:B; G3B11:A; G3C01:A; G3C02:A; G3C03:C; G3C04:D; G3C05:C; G3C06:B; G3C07:D

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

Q