The Ham Arundel News

Providing Fellowship and Community Service through Amateur Radio since 1951

May 2020 ***41st Year of Publication***

Keith Miller, AE3D

Prez Sez

It's May, as in we 'may' soon be seeing reductions in the restrictions placed upon us for our own good, by Governor Hogan. Apparently we are waiting for a reduction in hospitalizations from the virus, with the goal being two straight weeks of decreasing numbers, and a reduction in intensive care patients. There is more to it, but things are looking good. On the other hand the death toll in Maryland continues to grow especially among our most vulnerable populations. This includes senior citizens with other health issues, a group who's members include many of us.

Apparently in phase one, local governments will be able to open libraries, parks and other services. Things like our club meetings, indoor classes, organized childcare, indoor religious services, the use of restaurants and bars with some restrictions and even elective procedures at hospitals don't come till phase two. In phase three most things approach the old normal, leaving some restrictions on nursing homes and hospitals. Thought we have no timetable, we do see a light at the end of the tunnel that does not include a train.

So it looks like during phase one, we will continue to meet via Zoom. This is not all bad. Our first Zoom meeting, had 50 attend. We don't get nearly that many at the club house. This has led me to believe that as we move into phase two, we should consider continuing Zoom use during our in-person club house meetings. This would allow those with health issues to stay home, but still attend, while allowing others to come to the club house for those all important eyeball QSOs that happen before and after most meetings. Your Board will be discussing how to do such hybrid meetings when it meets via Zoom in May. You might want to attend?

Unfortunately this info leaves Field Day in limbo. Though we are looking into the possibility of running 2A by remote control, it is far from a sure thing.

To pull this off we would need a member to volunteer his QTH as the Field Day site. He would need enough property, and trees spaced to allow for the erection of 20m and 40m dipoles. We can find him a tent, but he will need to give us access to high speed Internet to include port access to the router. Finally he has to either keep the generator running for 24 hours, or allow someone to camp in the tent with the stations in order to do so. Right off the bat that's a pretty tall order.

Each user would then require high speed Internet, a computer and a 2 meter rig capable of hitting the club's repeater. The user would have to install the required software on their computer, and go through the configuration process with telephone support from the club's IT group. The 2m access is for using the club repeater during the contest, to coordinate with the Field Day site.

Before any of this can start we must install and test the proposed software somewhere, and make sure it all works as advertised. Then as each user completes their installation, it will likewise have to be tested. This sets a high bar for our IT guy Ted Rudie KC3LVM and his friends.

But even with all these roadblocks I think we can do it, but, we need resolve to do so. We must also have enough ham's committed to participate as remote operators to keep everything running most of the time, or it will not be worth the effort. We'll be looking for a Field Day site volunteer, and a show of user interest, at the May 7th meeting, with the final decision to follow at the May Board Meeting. Again, you might want to attend? When you do, remember you can always just enter Field Day as 1E or 1D and operate from home. The choice is yours.

The good news is, we will likely be able to operate the Maryland DC QSO Party without too many problems. So don't take that one off your calendar just yet. It's August 8th.

Another thing I am sad to report is that improvements to our ham shack antenna system are going to take longer than expected as a result of COVID-19. That project may get pushed back into the fall, or even into 2021. But I believe it will be completed, and we will get the ham shack we deserve, or maybe better. I will be glad to work with whoever the new 2021 President is to make sure that happens.

I am most sorry to have to report that some individual has taken it upon themselves to email out a phony Zoom event cancellation notice in the name of your club. It resulted in about half of the students missing their first General License Class. The good news is, that we will repeat that class on May 23rd for those who missed it. The even better news is that two additional club members signed up for the class after this incident, knowing they could start May 2nd and not miss anything.

As for the dirty deed itself, the first thing you should know is that this was not some Zoom security issue. It was an email issue, plain and simple. Let me

explain.

When we originally scheduled the Zoom meeting for the General License Class, we scheduled 7 consecutive Saturday sessions. We then cancelled the one on Memorial Day Weekend, May 23rd getting us down to the required 6. The guilty party copied that cancellation notice, which was sent in plain text to all class members and a few select club members, changed the date from May 23rd to April 25th, then sent it out to everyone on the list. They then disguised the sender of that email by changing the senders address entry to reflect the gmail address of one of our members, a person not involved with either teaching this class, or administering Zoom meetings.

Right off the bat, I realized that sending out any Zoom invite with all recipient's email addresses in plain text was a bad idea. I will admit knowing of this problem. That's why I sent out the invites to our Membership Meeting using the club's membership mailing list. All class emails will now be sent out without such information. I apologize for not doing this earlier. If you want to blame someone, it's me.

Sadly our wrongdoer now has a class roster list, and can try this trick again. I have already told class members two things. 1) all invites will come from my personal email. 2) if they receive any instructions to cancel or change a meeting, they should call me immediately to verify its authenticity. I must do this because the email system allows anyone to send out emails with modified FROM: and REPLY TO: addresses. Many believe, as I do, that this is a major flaw in the email system.

So though we have fixed the problem with our class, we have not yet identified the guilty person, though several members of our IT group are working on that.

This culprit had access to the valid cancellation email, and apparently knew at least one club member, and his gmail address. These facts lead me to believe this person is either a club member, or a member of the General License Class or both. We may never find out who actually did this. But sadly I will never have the same trust I've had in AARC's members as I once had. It is a sad day for all of us.

73!
Keith, AE3D

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W3VPR Club News

Upcoming Presentations at The Anne Arundel Radio Club

Our Vice President, Jim Wallace N3ADF, has lined up a could of Presentations for our next two Membership Meetings.

May 7: Jim Wallace N3ADF will give us a 30 minute Presentation called "Build a 28' EMT Mast".

May 31 Brian Berlanger KB3PRS is going to give us a one hour Presentation on "Early Television Development. Information on the presentation, and on the presenter are found below:

Television in the 1920s

Few Americans had an opportunity to view television broadcasts before the late 1940s or early 1950s. Color television broadcasting did not begin until 1954. But there was much experimentation long before that. Even in the 1890s, scientists were describing in some detail how someday people might be able to view live moving pictures in their living rooms. The first published book on the *history* of television had a copyright date of 1911! The first color television patent was filed in 1904, but it took exactly a half century before color TV became readily available to consumers. There was experimental television in the Washington, DC, area beginning in 1928, using motor-drive spinning discs to create the moving image. This talk describes the fascinating early history of television.

Biographical Sketch - Brian Belanger

Brian is the curator (as a volunteer) at the National Capital Radio & Television Museum in Bowie, Maryland, and was its executive director (also as a volunteer) for approximately a decade. He is a co-editor of *Dials and Channels*, the museum's quarterly journal. Prior to his retirement in 2000 from the National Institute of Standards and Technology, he held several senior management positions there, including Deputy Director of the Advanced Technology Program, Liaison to the Department of Defense, and Associate Director of the Center for Electronics and Electrical Engineering. He was a Commerce Department Science and Technology Fellow in 1983 and a recipient of Bronze and Silver medals from the Commerce Department. An electrical engineer, with a bachelor's degree from Caltech and a Ph.D. from the University of Southern California, Brian is an amateur extra-class ham operator with call letters KB3PRS. His first call in the 1950s was K0IUX. He serves on the board of directors of the Mid-Atlantic Antique Radio Club and is a co-editor of *Radio Age,* the club's newsletter.

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Net Control Radio Operators

ARE NEEDED for the HOLLY NET

during the work-weekdays -

from 0700 to 0900 am.

Contact: Jim Wallace, N3ADF

To All ARRL Members and ARRL VEC Accredited Volunteer Examiners

We know many examiners have canceled amateur radio license exam sessions to meet the requirements and recommendations of national and local government and of health officials. *The health and safety of examinees and our Volunteer Examiners (VEs) is first and foremost in any decision-making process.* The ARRL Volunteer Examiner Coordinator (VEC) does not offer video-supervised online amateur radio licensing exams at the present time. We are aware, however, that some VE teams are exploring alternative formats on a local basis. Please use ARRL's License Exam Search to find scheduled exam sessions in your area and verify with the local exam team that the session is still being held.

The ARRL VEC is continuing to process license examination materials from VEs who have completed exam sessions, although some delays may occur under the circumstances. The ARRL VEC electronically forwards all required data to the FCC for qualified examinees.

We understand that some examination candidates are continuing their studies toward new amateur radio licenses and license upgrades. We also know some will be frustrated that, at this time, the ARRL VEC does not offer online licensing exams. Amateur radio is not alone in this challenge, though.

While each of us continues to respond to the immediate evolving crisis, we also know that we must keep an eye on the future. Throughout its decades of service, the VEC system has served the FCC as a shining example of the successes of a privatized system. The ARRL VEC and our VEs are recognized throughout the Amateur Radio Service for our integrity and efficiency. Adapting our all-volunteer license examination administration will be a challenge, but it's a challenge we are committed to undertake in order to advance the program and improve service.

While we face unprecedented challenges, opportunities also await. We are grateful to support radio amateurs in our common pursuit of skill, service, and discovery. ARRL and the ARRL VEC remain steadfast in serving the amateur radio community. We will provide updates as they become available.

Used with permission The ARRL Letter for April 2, 2020

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Remotely Administered Amateur Exam Systems Showing Promise

Facing a growing demand for amateur radio exam sessions in a time of social distancing and stay-at-home orders, sponsors of some Volunteer Examiner (VE) teams have risen to the challenge and are developing systems to remotely proctor test sessions.

"Many of our VEs and VE Teams have been working on remotely proctored exam session ideas, employing both video and in-person components -- following social distancing protocols," ARRL Volunteer Examiner Coordinator (VEC) Manager Maria Somma, AB1FM, said. "We have been receiving interesting and innovative suggestions, and we appreciate the dedication and ingenuity our examiners have shown."

The Spalding County Amateur Radio Club in Georgia is among those that have come up with plans to remotely administer amateur exams while complying with ARRL VEC testing standards during COVID-19 stay-home mandates and social distancing guidelines. Current systems leverage Zoom video-teleconferencing technology, the "Fill & Sign" feature of Adobe PDFs, reliable email, appropriate computer equipment and internet connection, and no volunteer examiners (VEs) present at individual remote test sites. The Georgia club collaborated and shared ideas with the Emergency Amateur Radio Club (EARC) in Hawaii, which has successfully conducted sessions since 2011 with its own remote testing system, initially with paper exams with a proctor on site and now with fillable PDFs, with no on-site proctor.

The Georgia club obtained ARRL VEC approval to administer video-supervised exams. "We have started with testing just one candidate at a time, but are planning to ramp up to multiple candidates -- probably two or three -- simultaneously," club member David Robinson, K4WVZ, told ARRL. "Before we do that, we want a few more single sessions under our belt and a few more Video VEs trained."

The club's procedures entail a pre-exam video interview with candidates to ensure they understand all the requirements and procedures. Following the exam, the VEs score the test and sign off on the paperwork, with the VE Team Leader submitting the application online and by mail, per ARRL VEC instructions.

New England Amateur Radio Inc (NE1AR), an affiliate of New England Sci-Tech, (NESciTech), has taken it one step further, Somma said. It got the approval of ARRL VEC to begin trials of what it describes as "completely online testing with strict rules and protocols for maintaining the integrity of the testing environment." NE1AR is limiting candidates to one exam per session, due to the current candidate backlog and the "difficulty of administering exams online." Candidates must agree to a list of protocols, which include a cell-phone camera scan of the entire room and exam area "to show that there are no materials or people [in the room] that could aid in taking the exam."

"We began a series of trials on April 1 under ARRL VEC review and have now been asked to help train more VE teams on the process," NE1AR President Bob Phinney, K5TEC, told ARRL. "We have now tested 12 applicants and are still working on streamlining the process. We are working with the software developer of the exam delivery system to help them adapt the system for video-supervised testing."

With pressure continuing to build to provide testing compatible with COVID-19 guidelines and stay-home orders, ARRL VEC Manager Maria Somma has asked the amateur radio community to be patient. "Please remember that with the introduction of significant new processes such as these, that there should be proof of concept, establishment of protocols and procedures, and beta testing, before expanding to a larger audience," she said this week. Somma said video-supervised exam sessions require a different skillset than in-person exam administration, and not all teams will be equipped to deliver video exams right away.

"ARRL is pleased to be one of the leaders in providing an opportunity, although limited initially, for video-supervised exams in this time of social distancing and isolation required by the current health situation," Somma said.

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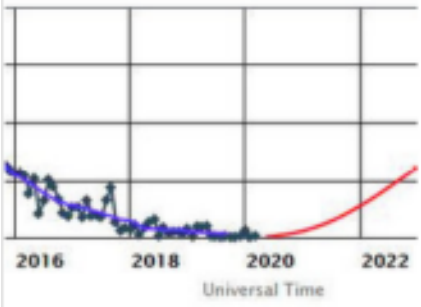
NOAA Updates Solar Cycle 25 Prediction

Frank Donovan, W3LPL, notes that the National Oceanic and Atmospheric Administration (NOAA) Space Weather Prediction Center (SWPC) has published its official updated prediction of Solar Cycle 25 in new, interactive Solar Cycle Progression graphs. The updated prediction is based on the results of NOAA's Solar Cycle 25 Prediction Panel.



"SWPC forecasts a solar maximum between 105 and 125, with the peak occurring between November 2024 and March 2026," Donovan said. "There is broad consensus that solar minimum is ongoing this year -- or may have already occurred -- and that Cycle 25 will have no major change in the level of solar activity compared to Cycle 24."

As Donovan explained, for many years the SWPC's solar cycle predictions have used the Royal Observatory of Belgium's International Sunspot Number. SWPC's official solar cycle prediction now uses the SWPC sunspot number. The International Sunspot Number is typically about one-third lower than the SWPC sunspot number.

"While this is SWPC's official Cycle 25 prediction, it's important to note there is still divergence among various forecasting methods and members of the space weather forecasting community," Donovan said. "Most forecasts and forecasters agree that the Cycle 25 peak is likely to be within ±20% of Cycle 24 and is likely to occur between 2024 and 2027."

More information is on the Springer Nature website. -- *Thanks to* The Daily DX

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Japan's Radio Amateurs Gain Expanded Access to 160 and 80 Meters

Effective on April 21, Japanese radio amateurs have new privileges on 160 and 80 meters. The new allocations are 1800 - 1810, 1825 - 1875, 3575 - 3580, and 3662 - 3680 kHz.

ARRL Life Member Kenji Rikitake, JJ1BDX/N6BDX, said the new regime allows Japanese radio amateurs to operate FT8 on 80 meters (3574 ~ 3577 kHz), and on 160 meters (1840 ~ 1843 kHz) as well as WSPR (1836.6 kHz).

On 160 meters, the allocations are:

- 1800 - 1810: All modes (new assignment)
- 1810 - 1825: CW only
- 1825 - 1875 kHz: All modes (as secondary service, new assignment)
- 1907.5 - 1912.5: CW and data (A1A, F1B, F1D, G1B, and G1D)

On 80 meters, the allocations are:

- 3500 - 3520: CW (A1A) only
- 3520 - 3535: CW and data (A1A, F1B, F1D, G1B, and G1D)
- 3535 - 3575: CW, phone, and image, and data only permitted for making contacts with non-JA amateurs
- 3575 - 3580: All modes (as secondary service, new assignment)
- 3599 - 3612: CW, phone, image, and data
- 3662 - 3680: All modes (as secondary service, new assignment)
- 3680 - 3687: CW, phone, and image
- 3702 - 3716, 3745 - 3770, and 3791 - 3805: CW, phone, and image (no data).

Additional details are on the Japan Amateur Radio League (JARL) website.-- *Thanks to Kenji Rikitake, JJ1BDX/N6BDX*

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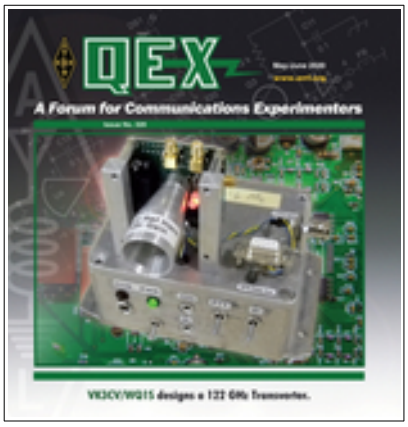
Scott's YouTube Channel

Scott DeMatteo (W3GTR) has started his own YouTubeChannel with info of interest to hams. Click on the link below to see it.
https://www.youtube.com/channel/UCFZa4GVqCL4tZN9afKc4i7Q

ARRL Announces New Benefits for Members

ARRL members will now receive digital access to four ARRL magazines beginning with their May/June issues. Joining *QST* and *On the Air* magazines on a digital platform will be the bimonthly editions of *QEX -- The Forum for Communications Experimenters* and *NCJ -- National Contest Journal*. *QEX* includes articles, columns, and other features ranging from construction projects to more advanced technical information in radio theory and practice. *NCJ*, published since 1973, targets radio amateurs active in radiosport. *NCJ* includes scores, technical articles, contributions from top contesters, and advice for beginners and seasoned radiosport enthusiasts alike.



"Feedback from ARRL members and our readership surveys has shown that our magazines are one of the most valued member benefits," said ARRL Publications Manager Steve Ford, WB8IMY. "Our investment in digital access provides another channel through which we can deliver content to our members across the expanse of interests and activities in amateur radio. All members can enjoy specialized content and a high-quality reading experience whether at their desk or on the go. Offering this suite of digital magazines is an opportunity for us to give members more of what they want while adding value to ARRL membership."

ARRL's digital magazine editions provide replicas of the printed editions with added functionality, allowing users to fully search issues, enlarge pages, share articles, and more. The free *ARRL Magazines* app also supports downloading complete issues onto your mobile device or tablet for offline reading.

Members who have elected to receive a printed *QST* or *On the Air* as part of their membership benefits will continue to have this service. Members may not substitute a print subscription of *QEX* or *NCJ* as their delivered magazine member benefit. Print subscriptions of *QEX* and *NCJ* will continue to be available at additional cost for those who want to receive them.

All four magazines are easily accessed through any web browser from members-only links. The free *ARRL Magazines* app is available for iOS and Android in the Apple App Store and Google Play. If you're already an ARRL member and previously created an **arrl.org** website account, your username and password will provide you access to the digital editions, whether online or in the app. Members who have not previously registered will need to create a new account. If you've forgotten your password, visit www.arrl.org/forgot-password, or email circulation@arrl.org for assistance.

Previous and prospective members can join ARRL and take advantage of this and other membership benefits.

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Hamvention QSO Party Set for Saturday, May 16

The Hamvention QSO Party, a sort of virtual Dayton Hamvention®, will take place on the HF bands on May 16, which would be the Saturday of the now-canceled event.

"Let's celebrate the many years we have all had at the Great Gathering we call Hamvention," said an announcement over the signatures of Tim Duffy, K3LR, and Michael Kalter, W8CI. "We also want to remember Ron Moorefield, W8ILC, who never missed a Hamvention and contributed to our club until his recent death. Let's light up the airwaves with our remembrances of Hamventions of the past! See you on the air!"

Dayton Hamvention®
20
20
Amateur Radio
The Future

The Hamvention QSO Party will be a 12-hour event, from 1200 UTC until 2400 UTC on May 16. Operate CW or SSB on 160, 80, 40, 20, 15, and 10 meters, exchanging signal reports and the first year you attended Hamvention. If you have never attended Hamvention, send "2020."

Designated members of Hamvention's host, the Dayton Amateur Radio Association (DARA), will activate DARA's W8BI. Participants can add 10 points for each band/mode contact with W8BI (12 available).

Post scores (number of contacts) to 3830scores.com within 5 days of the event. An online certificate will be available to print. No logs will be collected.

N1MM Logger+ has provided a user-defined contest module for the event. More information is on the N1MM Logger+ website.

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AARC STAFF – 2020

Officers

President	Keith Miller / AE3D president@w3vpr.org	240 758 0423
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Director C	Scott DeMatteo, (W3GTR) scott.board 20@w3vpr.org	

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Fox Hunt	Jim Wallace / N3ADF fox.hunt@w3vpr.org	
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Club Sale & Auction	Ike Lawton / W3IKE club.sale@w3vpr.org	
Club Picnic	Jim Myrick / W3JLM picnic@w3vpr.org	
Digital Networking	Ted Ruddy / KC3LMV net.leader@w3vpr.org	
Facilities	Eric Berman / KC3GDV facilities@w3vpr.org	
Field Day	Brian Mary / K3HMX field.day@w3vpr.org	
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Holly Net	Jim Wallace / N3ADF holly.net@w3vpr.org	
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Newsletter	Milford Craig / N3WYG newsletter@w3vpr.org	301 218 8867
Photography	Ed Santilli / KB3YMU photo@w3vpr	
Presentation	Jim Wallace / N3ADF presentation@w3vpr.org	
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Repeater Ops	John Williams / K8JW repeater@w3vpr.org	410 647 7406
Rules	Chuch Tanner / K3ACT rules.chair@w3vpr.org	301 464 2667
Service Hours	Jim Wallace / N3ADF service.hours@w3vpr.org	301 538 6233
Tower	(TBD) tower@w3vpr.org	
Training	Keith Miller / AE3D learn@w3vpr.org	240 758 0423
VE Team	David Rawley / N3AT ve.team.leader@w3vpr.org	
Video	Ed Santilli / KB3YMU video@w3vpr.org	
Webmaster	Mark Bova / W2PAW webmaster@w3vpr.org	240 274 6294
Wed. Nite Net	Mike Waterson / K3MAW wednesday.night.net@w3vpr.org	
Winter Field Day	Rick Steer / AB3XJ winter.field.day@w3vpr.org	
Workshop	(TBD) workshop@w3vpr.org	

Groups

Board of Directors	board20@w3vpr.org
Kit Building Committee	kitbuilding@w3vpr.org
Rules Committee	rules@w3vpr.org

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VE Testing Schedule

Second Saturday of each month – Noon – AARC –
David Rawley, N3AT
testing@w3vpr.org

Third Saturday of each month – 9AM – Laurel ARC – John Creel, 301-572-5124
Fourth Tuesday of each month – 6PM – MMRC – Mike Montrose, [illegible], 443-310-4907, website is tinyurl.com/marylandmobileers

To all exams bring:

- Picture ID
- Social Security Number or FCC Registration Number (FRN)
- **ORIGINAL** and a **COPY** of current FCC amateur radio license**ORIGINAL and a COPY of all element credits (eg., FCC letters, old licenses or unexpired** Certificates of Successful Completion of Examination-CSCE)

Please Check W3VPR.ORG for VE Testing Schedule

Please Check W3VPR.ORG for VE Testing Schedule

New *TQSL* Version 2.5.2 Provides Better LoTW Rover Support, Other Improvements

The latest version of *TrustedQSL* (*TQSL*), version 2.5.2, offers improved Logbook of The World (LoTW) support for operations from several locations, as well as the ability to detect uploads that contain incorrect location data. The primary new feature in *TQSL* 2.5.2 allows logging programs, in conjunction with *TQSL*, to avoid incorrect contact uploads, while adding mechanisms to allow easy uploading of logs for roving stations. LoTW had required rovers to identify each location used as a separate location in *TQSL*. The new version of *TQSL* allows these operations to be handled much more smoothly by using information from the station's logging program.

When a log is signed by *TQSL*, the station details -- call sign, DXCC entity, grid square, and other location details provided by the selected station location (and call sign certificate) -- are compared with the details in the log. If the US state and station location in a log do not agree, *TQSL* 2.5.2 will reject the contact, detecting errors in instances when an incorrect station location has been chosen. This feature will necessitate changes in many logging programs, because it requires that the log provide station details previously not used by *TQSL*. Once a logging program supplies these (MY_STATE, MY_DXCC, MY_CQ_ZONE, etc.), then *TQSL* will validate them against the log. Currently, Cabrillo logs use the CALLSIGN field to verify that the contacts are for the correct call sign.

Optionally, a station performing roaming operations (e.g., from multiple grid squares) can choose to have *TQSL* assume that the log is correct. When call sign or home station are provided with the log, *TQSL* will automatically update the details on the upload. Select "Override Station Location with QTH Details from your Log" on the "Log Handling" preference page to enable this feature.

This release also includes an update to the most recent *TQSL* configuration file. -- *Thanks to Rick Murphy, K1MU*

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Greater LoTW Database Accuracy is the Goal of TQSL Update(s)

04/16/2020

The recently released *TQSL* version 2.5.2 application for uploading logs to Logbook of The World (**LoTW**) tightens requirements for data consistency, with the goal of improving the integrity of the LoTW database. Starting with *TQSL* version 2.5.2, discrepancies in submitted logs now are flagged, especially when it comes to the Amateur Data Interchange Format (**ADIF**) files frequently uploaded to LoTW. This has prompted questions and concerns, however, when the system fails to accept a user's uploaded contact or log.

ADIF exists precisely to help ensure the accuracy of "data interchange" among amateur radio applications — different logging programs, for example. *TQSL* uses ADIF file data for cross-checks that help to keep inaccurate or incomplete information from contaminating the LoTW database, and that's where some user issues have arisen. For example, the OPERATOR field, which should be a call sign, sometimes shows up as a name. Occasionally, operators have reversed their ITU and CQ zones. Another issue is in the MY_STATE field, which should show a US Postal Service two-letter state abbreviation. Anything else is a problem.

"The value of the checks added to *TQSL* is that it lets operators know when the data they're handling in their computer-based logs is correct," said TQSL Developer Rick Murphy, K1MU. "Just as most hams would not knowingly send out a QSL card with the wrong details, it's important to make sure that when a ham submits a log to LoTW that the content of that log accurately captures the details. It also prevents operators from uploading logs that contain incorrect information."

Some help is on the way. Murphy soon will release *TQSL* version 2.5.3, which, among other things, skips over the OPERATOR field check. "We have found that some of the checking performed for TQSL 2.5.2 was incomplete in some cases — for example, allowing incorrect zone information to pass, and overly strict in other cases — for example, the STATION_OWNER tag," Murphy said. "We've taken feedback from users and made great strides in improving the way logs are checked to ensure that checking is more complete while not raising false alarms."

The problem is not always with the user. The initial implementation of cross-checks in *TQSL* 2.5.2 revealed that not all logging applications conform to the ADIF standard, which is maintained and voted on by the 22-member ADIF group, which includes ARRL. *TQSL* 2.5.2 has offered support for operations from several locations, as well as the ability to detect uploads that contain incorrect location data, and the field used for checking location has been in the ADIF standard since 2004.

Some commenters have suggested that ARRL has not defined the ADIF fields appropriately, but this represents a misunderstanding of how the ADIF standard is developed and maintained. Logging applications are obliged to follow the standard, if they generate files that claim to be ADIF compatible.

"Operators have a right to insist that the logging applications they use conform to the standards agreed

upon by the ADIF collective," said Greg Widin, K0GW, the chair of the ARRL LoTW Committee. "Those who find that their logger is out of conformance should demand an update, or, if the logger is unsupported or the developer is unwilling to update, should investigate switching to an application that is a cooperative member of the universe of amateur radio logging applications."

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The Claimed Transatlantic Record On 2 Meters

The claimed transatlantic record on 2 meters has been extended to nearly 4,760 kilometers (2,951 miles). "The incredible tropo conditions between Cape Verde Islands and the Caribbean continue to amaze with transatlantic contacts on 144 MHz and 432 MHz being made," John Desmond, EI7GL, said in a blog post. The April 8 FT8 contact was between D4VHF in the Cape Verde Islands and PJ2BR on Curacao. The distance covered was some 300 kilometers greater than the previous transatlantic record, set last summer by D41CV and NP4BM. The new 2-meter transatlantic record distance is about 10 kilometers short of the IARU Region 1 tropospheric propagation record on that band, Desmond said. On April 7, an operator at D4VHF and Burt Demarcq, FG8OJ, on Guadeloupe completed the first direct transatlantic contact on 70 centimeters, spanning 3,867 kilometers (2,398 miles) using FT8.

Used with permission The ARRL Letter for April 9, 2020

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What is that signal I just heard?

SIGNALWIKI

Here is a site that has cataloged various transmissions and attempts to identify them. There are recording and waterfall signature that you can use to compare.

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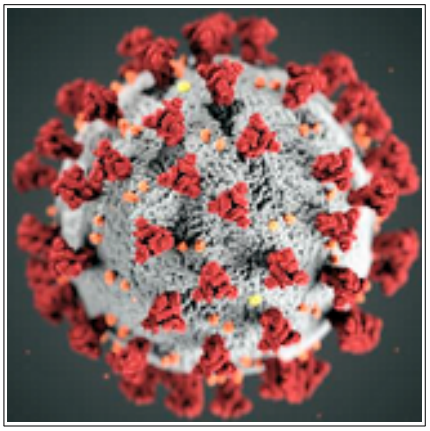
Several Countries Authorize COVID-19 Advisory Suffixes

A growing number of countries have authorized selected radio amateurs or organizations to identify with suffixes that propagate the advice to stay at home during the COVID-19 pandemic. A60STAYHOME/# call signs are on the air from the United Arab Emirates, while the Kuwait Amateur Radio Society's 9K9STAYHOME; TC1STAYHOME, in Turkey, and the Saudi Amateur Radio Society's HZ1STAYHOME are among these stations spreading the word from that part of the world.

In Canada, Michael Shamash, VE2MXU, is using VC2STAYHOM "to raise awareness for social distancing during the COVID-19 pandemic." Canada limits call sign suffixes to seven characters. On the air from Indonesia is 8A1HOME; Indonesia limits suffixes to four characters. Australia has permitted the Radio Amateur Society of Australia (RASA) to use the special call sign VI2020STAYHOME, which, at 14 characters, may set a record for world's longest call sign.



SRAL, Finland's IARU member-society, is sponsoring the Global Amateur Radio Network special event, with "messenger stations" on the air with STAYHOME suffixes, such as OH5STAYHOME. The event runs through July 8. The Global Messenger Award and the Stay Home Award are available, with credit for working "STAY HOME" stations in other countries and at least five of the Finnish stations.

Also in Finland, the Amateur Radio Club of Lahti, OH3AC, has been authorized to use OH0PYSYKOTONA and nine others in that series with a different number in the prefix. "Pysy kotona" is Finnish for "stay home." Contacts will be confirmed via LoTW with paper cards via OH3AC. An award is available for working all 10 in the series.

CR2STAYHOME will be on the air from Sao Miguel, one of the nine islands in the Azores, while operators in Bosnia and Herzegovina will transmit the alert as E7STAYHOME (QSL via E77E and E73Y or LoTW). R3STAYHOME is another special call sign (QSL via the bureau to R3KEE). Also, listen for 5B4STAYHOME from Cyprus, operated by Norman Banks, 5B4AIE (no QSLs).

Finland's SRAL has suggested the new Q signal QSH for "stay happy and healthy," while N3ADF is encouraging the use of QWH for "wash hands."

FCC Part 97 Amateur Radio Service rules do not provide for amateur call sign suffixes longer than three characters, but a potential workaround exists. As §97.119(c) of the FCC's Amateur Radio Service rules states: "One or more indicators may be included with the call sign. Each indicator must be separated from the call sign by the slant mark (/) or by any suitable word that denotes the slant mark. If an indicator is self-assigned, it must be included before, after, or both before and after, the call sign. No self-assigned indicator may conflict with any other indicator specified by the FCC Rules or with any prefix assigned to another country."

While ARRL has no plans to sponsor or support a stay home related event, US radio amateurs may do so as a one-off stay-at-home event.

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Maryand and District of Columbia Section Monthly Section Wide Winlink Test

Description

The MDC Section-Wide Winlink Check-In is a monthly Amateur Radio digital net sponsored by the Maryland-DC Section of the ARRL where check-ins are accomplished using the Winlink (Global Email via amateur radio) system. All amateurs are welcome to check in via any Winlink mode.

Purpose

The primary purpose of this Check-In is to encourage the regular use of Winlink among amateur radio operators in and around the MDC Section. All amateurs in and around the Mid-Atlantic area are welcome to check in. The MDC Section encourages the use of Winlink in an EmComm environment and therefore its use by all amateur radio operators.

During an incident radio operators from the MDC Section will most likely need to contact operators outside the section or even the division. Participation from these areas will become a valuable resource and are encouraged to use Winlink regularly.

Participation

Check-ins may be submitted anytime between 0000 and 2359 (ET) on the second Tuesday of each Month with the use of Winlink Express Software available on the Winlink.org site. Visit the FTP link of https://downloads.winlink.org/User%20Programs/. Simply download the file entitled "Winlink_Express_install_1-5-26-0.zip" file. The last few numerics indicate the current version number so this changes often. This file is always the last stable non-beta version. This program does not make entries in your system files, it simply extracts all of its files so it can be installed on any drive including your internal hard drive, USB drives, external hard drives, additional partitions on your hard drives, etc. Choose the default location unless you have a specific need for running different instances of Winlink.

Messages may be sent via ***any*** session type but ***RF truly tests the system***. Learning the Winlink software is an important step in using Winlink in an EmComm environment. Sending check-in's via Telnet (using your current internet connection with no additional hardware) allows new users to learn the software without the purchase of any additional equipment other than their computer. If you have RF capabilities please use it.

Users sending check-in's via RF will be accessing a RMS station (Remote Mail Server) Winlink gateway. A map of these stations can be viewed at www.winlink.org/RMSchannels. At the top of the map select the "Packet" radio button to see the 2m/70cm stations near you. Selecting another mode will provide a map of the other stations running the selected protocol.

Messages & Form Completion

All must send their check-in to the Winlink Tactical Address **MDCASEC**. To encourage the use of Winlink's Forms, check-in's can be sent using any of Winlink Forms (open in your default browser for completion, one example below) where the format can be followed or simply the default message window but all must use the below standard format to allow easy tabulation of data:

To: MDCASEC
Subject: MDC Section Check-In
Message body: callsign, first name, city or town, county, state and session type and protocol used to send the message.

Message body example:
KC3DSO, Steven, Lanham, Prince George's, MD HF VARA

Session type examples are "HF VARA," "HF Winmor," "HF Pactor", "VHF Packet," VHF VARA," "Telnet," etc. Most check-in's will be "Telnet" or "VHF Packet."

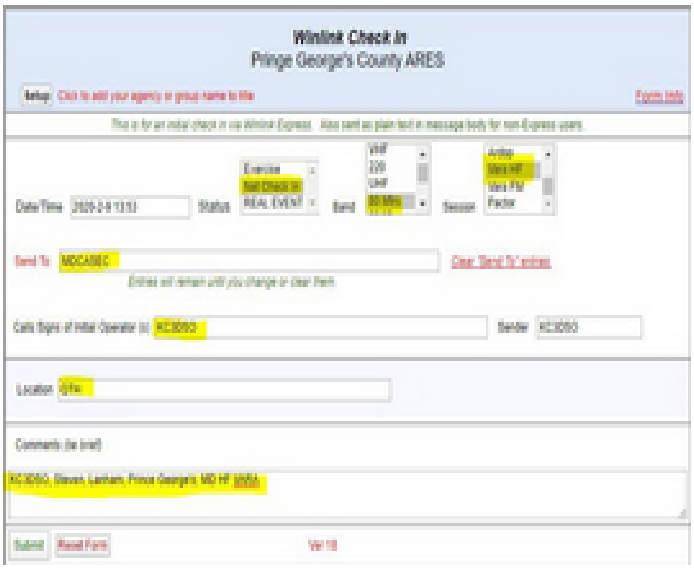
The easiest way to check-in is to send using the default New Message Window (no form).

Top Menu select Message->New Message. The new message window opens then simply complete as shown above, then from the top menu select "Post to Outbox" then make your connection.

Using the Winlink Check In form built into Winlink

Top Menu select "Message->New Message->Select Template (unless you have this form saved as one of your favorites). This will display a directory tree of template options. Selected "+" to the left of "Standard Templates (Version 1.0.113.0)." This version changes

often as updates are done. Then the “+” sign to the left of “GENERAL forms.” Then click Winlink Check In.txt which is at the bottom. Sometimes this directory tree changes as forms are added/changed.



Setup is if you want to enter a agency/group name, Sender is automatically filled in for you, balance you complete. Click in the “Date/Time” block at add the current date/time from your computer. Status will be “Net Check In,” “Band” will be whatever applies (if Telnet choose “-N/A-“, Session will be “Packet” or “Telnet” for most users. Choose what applies to the session type you are using for the submission. “Send To” will be the MDC ASEC’s tactical callsign of MDCASEC.

“Callsigns of Initial Operator” will be the callsign of the operator checking in. The “Sender” is the default Winlink account you are logged in under for this session. “Location” can be left blank if at your QTH as I will be using the address of your call for mapping. If other location enter the data. “Comments” will be the same Message Body like above. This must be exact for recording purposes. Click submit and Winlink will put the data in your message window for you to post to the Outbox.

Peer-to-Peer Sessions

Peer-to-Peer (P2P) sessions on VHF, UHF and HF will be added in the future as in a true emergency we will most likely only have P2P operations available. P2P sessions using various modes and bands will allow Winlink users in the Mid-Atlantic area to be ready for an incident. Minor changes are needed when operating a P2P session vs a Winlink (using RMS gatesways) session which need to be practiced.

Net Results, Statistics & Questions

A brief message is distributed via Winlink to the current week’s participants acknowledging their check-ins, providing links to maps which show the locations of the Mid-Atlantic Check-in’s, a check in roster, and additional information. Stations are encouraged to send multiple check-in messages exercising different protocols. Questions can be sent to Steven Keller, KC3DSO, MDC ASEC via Winlink to mdcasec@winlink.org or kc3dso@gmail.com. For updates on these instructions, check in lists, etc. visit the MDCASEC webpage at https://www.qsl.net/mdcasec/.

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Western Pennsylvania ARES Group Conducts District-Wide Simplex Drill

Amateur Radio Emergency Service (ARES) Western Pennsylvania Southwest District, which includes Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Washington, and Westmoreland counties, conducted a district-wide simplex practice drill on March 21. The exercise lasted about 4 hours, with all participants meeting on their local ARES county repeaters. Each county Emergency Coordinator served as net control stations, and all stations kept logs, which were to be sent to their local Emergency Coordinator for forwarding to the District Emergency Coordinator.

All stations were asked to stay on their county simplex frequency for at least 15 minutes before going to other county simplex frequencies. After checking in on the repeater, all stations switched to their county-assigned simplex frequencies, to test the capabilities of operators and stations and their simplex operating range. In all, 162 operators participated in the drill.

"We have received so many great comments about the drill that I plan on running it again sometime after the Simulated Emergency Test (SET) drill on April 4," Western Pennsylvania Southwest District Emergency Coordinator Terry Nemitz, KA3UTD, said. "I also heard a lot of comments about operators wanting to improve their stations. A good thing."

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Arrl/Tapr Digital Communications Conference (Dcc) Will Be Held Online

The ARRL/TAPR Digital Communications Conference (DCC) will be held online this year, due to the coronavirus pandemic. Originally planned for Charlotte, North Carolina, the 2020 ARRL-TAPR DCC will take place as an online virtual conference on the same dates, September 11 - 13. Details of the virtual DCC will be announced in the coming months as event plans are finalized. Plans call for holding the 2021 DCC in Charlotte.

Used with permission The ARRL Letter for April 9, 2020

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W1AW 2020 Spring/Summer Operating Schedule

Morning Schedule:

Time	Mode	Days
1300 UTC (9 AM ET)	CWs	Wed, Fri
1300 UTC (9 AM ET)	CWf	Tue, Thu

Daily Visitor Operating Hours:

1400 UTC to 1600 UTC - (10 AM to 12 PM ET)
1700 UTC to 1945 UTC - (1 PM to 3:45 PM ET)

(Station closed 1600 to 1700 UTC (12 PM to 1 PM ET))

Afternoon/Evening Schedule:

2000 UTC	(4 PM ET)	CWf	Mon, Wed, Fri
2000 "	"	CWs	Tue, Thu
2100 "	(5 PM ET)	CWb	Daily
2200 "	(6 PM ET)	DIGITAL	Daily
2300 "	(7 PM ET)	CWs	Mon, Wed, Fri
2300 "	"	CWf	Tue, Thu
0000 "	(8 PM ET)	CWb	Daily
0100 "	(9 PM ET)	DIGITAL	Daily
0145 "	(9:45 PM ET)	VOICE	Daily
0200 "	(10 PM ET)	CWf	Mon, Wed, Fri
0200 "	"	CWs	Tue, Thu
0300 "	(11 PM ET)	CWb	Daily

Frequencies (MHz)

CW:	1.8025 3.5815 7.0475 14.0475 18.0975 21.0675 28.0675 50.350 147.555
DIGITAL:	3.5975 7.095 14.095 18.1025 21.095 28.095 50.350 147.555
VOICE:	1.855 3.990 7.290 14.290 18.160 21.390 28.590 50.350 147.555

Notes:

CWs = Morse Code practice (**slow**) = 5, 7.5, 10, 13 and 15 WPM
Cwf = Morse Code practice (**fast**) = 35, 30, 25, 20, 15, 13 and 10 WPM
CWb = Morse Code Bulletins = 18 WPM

CW frequencies include code practices, Qualifying Runs and CW bulletins.

DIGITAL = BAUDOT (45.45 baud), BPSK31 and MFSK16 in a revolving schedule.

Code practice texts are from QST, and the source of each practice is given at the beginning of each practice and at the beginning of alternate speeds.

On Tuesdays and Fridays at 2230 UTC (6:30 PM ET), Keplerian Elements for active amateur satellites are sent on the regular digital frequencies.

A DX bulletin replaces or is added to the regular bulletins between 0000 UTC (8 PM ET) Thursdays and 0000 UTC (8 PM ET) Fridays.

Audio from W1AW's CW code practices, and CW/digital/phone bulletins is available using EchoLink via the W1AW Conference Server named "W1AWBDCT." The monthly W1AW Qualifying Runs are presented here as
well. The CW/digital/phone audio is sent in real-time and runs concurrently with W1AW's regular transmission schedule.

All users who connect to the conference server are muted. Please note that any questions or comments about this server should not be sent via the "Text" window in EchoLink. Please direct any questions or comments to w1aw@arrl.org .

In a communications emergency, monitor W1AW for special bulletins as follows: Voice on the hour, Digital at 15 minutes past the hour, and CW on the half hour.

FCC licensed amateurs may operate the station from 1400 UTC to 1600 UTC (10 AM to 12 PM ET), and then from 1700 UTC to 1945 UTC (1 PM to 3:45 PM ET) Monday through Friday. Be sure to bring your current FCC amateur license or a photocopy.

The complete W1AW Operating Schedule may be found on page 91 in the March 2020 issue of QST or on the web at, http://www.arrl.org/w1aw-operating-schedule .

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American Red Cross Will Conduct A Communication Drill

Amateur radio operators affiliated with the American Red Cross will conduct a nationwide communication drill on May 30. The drill will simulate the types of message traffic that are typical of a national disaster response, such as a hurricane or wildfire. Hams will utilize digital modes to move a variety of Red Cross data, with special focus given to methods that do not require infrastructure, such as a repeater or the internet. The drill features a local option where ARES organizations can work with local Red Cross chapters to drill local and regional functionality. For more information, contact ARRL Rhode Island Section Emergency Coordinator Paul Silverzweig, W1PJS. -- *Thanks to Brian S. McDaniel, N4AE, executive director, American Red Cross of the Illinois River Valley*

American Red Cross

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New Volunteer Monitor Program is Up and Running

04/10/2020

After kicking off on January 1, the new **Volunteer Monitor Program** has ramped up to operational status. A "soft rollout" of the program began on February1, designed to familiarize Volunteer Monitors (VMs) with issues on the bands and to put into practice what to report — and what to ignore, based on their training. The VMs not only will be looking for operating discrepancies, but for examples of good operating. The VM program has, at least for the moment, put Riley Hollingsworth, K4ZDH, back in the center of amateur radio enforcement as the Volunteer Monitor Coordinator (VMC). He was brought aboard to get the program up and running, and ARRL will eventually take over the VMC function.

Hollingsworth is using a system called *VMTRAC* — developed by a VM — to measure the work of VMs and determine instances that qualify for good operator or discrepancy notices, referral to the FCC, or follow-up with FCC requests to the VM program. Hollingsworth reported that during March, the 165 active VMs logged upward of 2,300 hours of monitoring on HF, and nearly 2,000 hours on VHF-UHF and other frequencies.

"I am extremely pleased with the number of hours devoted to monitoring this early in the program," Hollingsworth said. No stone is being left unturned. Two VMs constantly monitor FT8 watering holes and have developed programs that alert them if a licensee is operating outside of privileges accorded to that license class or if a license has expired. "That has occurred in a half dozen cases so far," he said.

"We have 30 open cases, five of which are good operator cases," Hollingsworth said. "Regarding open cases relating to rule violations, none have yet had to be referred to the FCC." He said he's experimented with letters, telephone calls, or emails to the subjects of discrepancy reports where they could be identified. While he's still waiting for replies to his written correspondence, he has received responses to his calls and emails, and the violations have either stopped or were explained. "They were violations such as expired licenses, Technicians operating on General frequencies, unauthorized use of a call sign, and deliberate interference," he said.

One case "being groomed for FCC referral," he said, involves long-standing interference to a repeater in the Philadelphia area by someone using an unauthorized call sign. Hollingsworth said he worked with net control operators of nets on 75 and 40 meters that had been suffering serious interference, and so far the solutions are working.

"It is becoming apparent that if informal contact can be made by the VMC with a known offender, the problem can sometimes be stopped," Hollingsworth said. "If this continues to work, it will minimize FCC referral and make those we do refer more worthy of FCC resources and more severe action. We do not want to call upon the FCC unless absolutely necessary, but when we do, the subjects should understand that FCC action will be expedited. I think our own enforcement outreach may resolve all but our very worst cases. At the present time, we have only one in which we do not have a suspicion as to who is causing the problem."

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A Welsh Radio Amateur Copied The *Titanic* Distress Call

A Welsh radio amateur copied the *Titanic* distress call, but authorities did not believe him. April 15 marked the 108th anniversary of the *Titanic* disaster. As the passenger vessel was going down, frantic shipboard radio operators transmitted repeated distress calls. Arthur "Artie" Moore, MNX, near Pontllanfraith, Wales, heard one of the calls for help: "CQD CQD SOS de MGY Position 41.44N 50.24W. Require immediate assistance. Come at once. We have struck an iceberg. Sinking." At that time, operators used "CQD" (come quickly, distress) and "SOS" interchangeably. MGY was the RMS *Titanic*'s call sign. The then 26-year-old Moore picked up the distress calls from the stricken ship thousands of miles away, and, as recounted in *The South Wales Argus* newspaper, he raced to inform police about what he'd heard, but the authorities would not believe him. It wasn't until a day or two later that the grim news reached the shores of Great Britain. More than 1,500 people died in the tragedy, including some prominent individuals, on the voyage from England to the US on the *Titanic*'s maiden voyage.

Used with permission The ARRL Letter for April 23, 2020

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The Anne Arundel Radio Club
is a registered 501C3 charity.
We are pleased to receive any donations over your yearly dues.

A Modest Proposal (For The Next Extra Class Question Pool)

By Dan Romanchik, KB6NU

At our last club meeting, I was discussing the changes to the Extra Class question pool with someone, and the topic of memorizing the answers popped up. As I always do, I mentioned that many of the questions you can only get right by memorizing the answer. At that point, someone down the way piped up. "Not me," he said, "I studied the material so that I didn't have to memorize the answers."

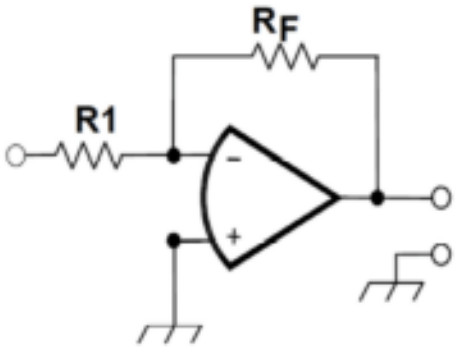
At that point, the president called the meeting to order, so I didn't get to challenge him on that point, but that statement is just plain wrong. First of all, it's true that some questions you can only get right by memorizing the answer. Almost all of the rules questions are that way, for example.

Secondly, there is no way to study the rest of the material in any depth and still have time to actually be an amateur radio operator. The amount of material that the Extra Class question pool covers takes an electrical engineering student four years or more to study thoroughly. And even then, some topics are bound to get short shrift.

So, we're back to memorizing. I would say that even an "engaged" person will memorize about half the answers. I'd go even further and say that those that "study" the technical topics, don't study it as thoroughly as a college student would.

For example, there are a dozen questions in

Figure E7-3



Section E7G – Active filters and op-amp circuits: active audio filters; characteristics; basic circuit design; operational amplifiers. Despite the name, you don't need to know how to design or build an op-amp filter. All you really need to know is that op-amps are high gain devices and if you have a circuit like the one shown below, $V_{out}/V_{in} = R_F/R_1$.

These concepts are relatively easy to learn. but there are also two questions on filter "ringing." Honestly, you're better off just memorizing the answers to those questions unless you have a real interest in active filters that use op amps. Wading into the mathematics isn't all that hard, but when you consider this is only one of dozens of topics, you can see where doing any kind of in-depth study is going to take you months, if not years, to accomplish.

A modest proposal

The end result of this approach to testing is that we have many Extra Class licensees who know about a lot of things, but not in very much depth. Perhaps that's OK. Perhaps that's just what the question pool committee of the National Council of Volunteer Examiner Coordinators (NCVEC) was shooting for. If, however, we want an Extra Class license to denote that the licensee has some real technical expertise, I have a modest proposal.

Basically, my idea is that instead of testing on an incredibly wide range of topics, we test applicants on a set of basics, plus one or two particular topics. These would be topics that the person has expertise in already or enough of an interest in to study the topic in some depth.

Below are the topics that I would consider to be basic and some that I consider to be more specialized. This is, of course, not an extensive list.

- Basic questions (20 questions, everyone takes this part of the exam)
- Safety
- Rules and regulations
- Electrical principles/basic circuits
- Technical Interests (Choose two, 20 questions each)
- Antennas and transmission lines
- Radio wave propagation
- EMI/RFI
- Analog and digital design
- Digital communications and networking
- Software/software-defined radio
- Operating: contests, DXing, direction finding etc.
- VHF/UHF

The questions in each of the technical interest question pools would be designed to really test the knowledge of the person taking the test. We'd have to figure out a way to make them difficult enough so that one couldn't just simply memorize the answer. Questions could appear in one or more technical interest test. For example, a question on VHF/UHF propagation could appear in both the Radio Wave Propagation and VHF/UHF question pools.

Having said all this, I realize that this would not be easy to implement. You'd have to first decide on the topics and then enlist experts for each of the topics and get them to come up with a list of 80 – 100 questions each.

I realize that this has very little chance of being adopted, but it's interesting to think about, no? And, we have four years to do this, so it could be possible.

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Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (KB6NU.Com), the "No Nonsense" amateur radio license study guides (KB6NU.Com/study-guides/), and often appears on the ICQPodcast (icqpodcast.com). When he's not thinking up ways to make the lives of the NCVEC question pool committee more difficult, he likes to build stuff and operate CW on the HF bands.

Used with permission

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Circuit Board For Bare-Bones Ventilator Moves Toward Production With Radio Amateurs' Help

04/01/2020

Radio amateurs continue to play key roles in developing the electronic control system for an open-source/architecture, modular, low-cost human patient ventilator. The device itself was designed by researcher Sem Lampotang and his team at University of Florida Health — the school's academic health center — using such commonly available components as PVC pipe and lawn-sprinkler valves. The idea is to create a bare-bones ventilator that could serve in the event of a ventilator shortage.

"The way I looked at it is, if you're going to run out of ventilators, then we're not even trying to reproduce the sophisticated ventilators out there," Lampotang said. "If we run out, you have to decide who gets one and who doesn't. How do you decide that? The power of our approach is that every well-intentioned volunteer who has access to Home Depot, Ace, Lowe's, or their equivalent worldwide can build one."

His team is working on adding safety features to meet regulatory guidelines, then they will run engineering tests to determine safety, accuracy, and endurance of the machine, which can be built for as little as $125 to $250.

Dr. Gordon Gibby, KX4Z — a retired associate professor of anesthesiology at the University of Florida and an electrical engineer — is among those involved in the project, developing control-system prototypes. He reports that a trial printed circuit board is being created, populated, and tested prior to large-scale fabrication. "This should lead to a documented open-source design that can be replicated or improved upon by any interested manufacturer," Gibby said, noting that the board could be built anywhere in the world, based on the Arduino Nano microcontroller.

"A huge amount of work has gone on in the design of the circuit boards," Gibby told ARRL. "We have at least two, maybe three designs, ready for fabrication." Current design specifications and a video of prototypes have been **posted online**. The Arduino-based control software will set the respiratory rate and other key parameters in treating critically ill coronavirus victims. Other radio amateurs involved in the control system aspect of the project include Jack Purdum, W8TEE, and uBITX transceiver maker Ashhar Farhan, VU2ESE.

Using a **Groups.io** forum, up to 140 volunteers have been studying or working to push the project to completion. Software is being created by multiple volunteers, with amateur radio operators involved in that phase as well.

The ventilator's valves will precisely time the flow of compressed oxygen into a patient with lungs weakened by viral pneumonia in order to extend life and allow time for the body to clear the infection.

Among the project's assumptions: The Food and Drug Administration will waive clearance for the bare-bones design, if a massive shortage develops; traditional medical components and supplies used in ventilators will be in short supply, and transportation will be impaired or disrupted.

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ARRL Suggests Taking a Creative Approach to Field Day 2020

This year, ARRL Field Day promises to be a unique iteration of this annual event, with many individuals and groups coming up with new and interesting ways to adjust their approach. As an event, Field Day is structured to be versatile and can be adapted for any situation.

Many groups have asked how they can adjust their Field Day planning to address social-distancing guidelines that may be in effect in many areas of the country, as gathering at their traditional Field Day site may not be feasible or safe. Instead of participating in a group event this year, consider operating as a Class B, C, D, or E station, utilizing your own call sign.

ARRL will include club names for all participating stations in the published results, so the efforts of your club's members can be acknowledged. While we will not publish an aggregate club score, seeing the name of your club associated with various individual member's results is certainly a way to highlight your club's activity.

Myriad opportunities are possible in this year's Field Day setting. A few options are as follows:

- Consider having an intra-club competition among members, seeing who can make the most contacts during the event. You can award prizes or distribute certificates at a club meeting. This can be a fun way to bolster the activities of individual club members, even though they cannot all gather together at the same location this year.
- Set up a Field Day Challenge with rival clubs in neighboring communities. See how many members of each club get on the air from their own stations and participate in the event. In addition to "bragging rights," perhaps certificates to the top-scoring individual entries in each category can be presented as part of this inter-club camaraderie.

One club is planning to conduct its Field Day as a 4A club group, with participants spaced to comply with social distancing guidelines within the required 1,000-foot-diameter circle and operating individual stations. This club also plans to set up a "Get on the Air" (GOTA) station. The club's plan is to have the GOTA coach at the Field Day site, while GOTA operators participate via remote link.

ARRL invites your stories about the interesting and creative ways you're planning to use to adapt your Field Day operation. Share these on the **ARRL Field Day Facebook** page.

Another club is planning to set up a remote-controlled station at its usual Field Day site, with club members taking turns controlling the station from their homes. The club is developing a schedule that outlines when each member of the club will be at the helm via the remote link.

Whatever approach you take to this year's Field Day, keep up to date with the current guidelines issued by local and state health agencies that may impact your proposed operation.

For the latest news and updates, visit the Field Day webpage. -- *Thanks to ARRL Contest Program Manager Paul Bourque, N1SFE*

Used with permission The ARRL Letter for April 23, 2020

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MDC SECTION MANAGER MOMENT

Perhaps a new definition for QTH is:
"Quarantine @ The House"

We are still adapting to new daily challenges, opportunities and re-arranging our Amateur Radio schedules to accommodate our ARC, ARES and MDC Section Members. Plenty of conversations about PANDEMIC ending and communities re-opening but not too soon.

Please continue to check on your fellow Hams while being safe and healthy. Continue to use online web outlets for status of Amateur Radio events, meetings and activities. Your MDC Section leaders are tracking served agencies needs and attending on-line meetings for situational awareness - I hope you are doing the same.

For our MDC Section Members receiving the MDC NEWS via e-mail, your reminded to review last month's MDC Section Manager's Operational Resources & Guidance

Here the list of topics:

1. Crisis Communications
2. Disaster Response Plans
3. Field Crew Safety Concerns
4. Response Readiness
5. Cybersecurity & Privacy
6. Work together

7 Have One Line of Communication

Announce your methods of notifying your ARC members.

The MDC Section will use:

- https://twitter.com/MDCARRL
- https://www.facebook.com/ARRLMDC/
- ttp://www.arrl.org/sections/view/maryland-dc
  - MDC Section News
- American Radio Relay League (ARRL), MDC Section New via Listserv
- Announcement through your Amateur Radio Clubs [ARC]
- Monthly MDC Section EchoLink Net, 3rd Friday 8PM ***WASH_DC***

Adjacent State Emergency Management via TWITTER

- MD - https://twitter.com/MDMEMA
- VA - https://twitter.com/vdem
- DC - https://twitter.com/DC_HSEMA
- WV - https://twitter.com/WVDHSEM
- PA - https://twitter.com/ReadyPA
- DE - https://twitter.com/DelawareEMA

Please use best judgment until our Maryland State Government Officials reduce the levels of restriction; all MDC Section Staff are required to maintain diligence throughout this event and not attend in-person any Ham Radio event(s).

Tnx es 73,
Marty KB3MXM
Maryland / DC Section Manager, ARRL

Used with permission MDC Section News, April 15, 2020

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MDC SECTION TRAFFIC MANAGER'S REPORT

MDC 202002 STM REPORTS

- - - - - - - - - - - - -
QST MDC 2002 STN PSHR = >70 TOTAL
CALL PSHR
KK3F 140
W3YVQ 135
AA3SB 100
WB3FTQ 100
AB3WG 92
N3JET 87
K3IN 70
- - - - - - - - - - - - -
QST MDC 2002 STN BPL: KK3F 2002 SAR 13/252/252/0/517
- - - - - - - - - - - - -
MDC NETS 2002:
MEPN/C2, MARYLAND EMERGENCY PHONE NET, 3820/1800L-DY
Liaisons: 3RN2/MDD/DTN/BTN/WVA/NTSD/WL2K MEPN 2002 W3YVQ QND/29 QNI/339 QTC/33 MINS/549
BTN/C4, BALTIMORE TRAFFIC NET, 145.33/1830L-DY
Liaisons: MEPN/MDD/NTSD/WL2K
BTN 2002 AB3WG QND/29 QNI/299 QTC/45 MINS/522
MDD/C4, MARYLAND/DC/DELAWARE NET, 3557/1900L-2200L-DY
Liaisons: 3RN4/MEPN/BTN/DTN/NTSD/WL2K
MDD 2002 AA3SB QND/56 QNI/252 QTC/84 MINS/476
MSN, MARYLAND SLOW NET, 3563/1930L-DY

TRAINING,
Liaisons: MDD
MSN 2002 N3AEA QND/28 QNI/119 QTC/11 MINS/515
- - - - - - - - - - - - -
MDC 2002 PSHRS FILED (Zero entries omitted.):
CALL DATE PSHR
KK3F 2002 PSHR 1/40 2/40 3/30 4/30 TOTAL 140
W3YVQ 2002 PSHR 1/40 2/40 3/30 4/25 TOTAL 135
AA3SB 2002 PSHR 1/40 2/40 3/20 TOTAL 100 WB3FTQ 2002 PSHR 1/40 2/40 3/20 TOTAL 100 AB3WG 2002 PSHR 1/32 2/40 3/20 TOTAL 92 N3JET 2002 PSHR 1/27 2/40 3/20 TOTAL 87 K3IN 2002 PSHR1/40 2/40 3/30 TOTAL 70
- - - - - - - - - - - - -
MDC 2002 SARS FILED:
CALL DATE SAR ORIG/RCVD/SENT/DLVD/TOTAL
KK3F 2002 SAR 13/252/252/0/517
K3IN 2002 SAR 0/125/118/4/247
W3YVQ 2002 SAR 0/36/56/0/92
AA3SB 2002 SAR 2/60/16/2/80
WB3FTQ 2002 SAR 0/28/15/6/49
N3JET 2002 SAR 0/26/23/0/49
AB3WG 2002 SAR 0/25/20/3/48
- - - - - - - - - - - - -
FOR THE MDC WEB SITE 2002
MDC NTS NETS:
MEPN 2002 W3YVQ QND/29 QNI/339 QTC/33 MINS/549
BTN 2002 AB3WG QND/29 QNI/299 QTC/45 MINS/522
MDD 2002 AA3SB QND/56 QNI/252 QTC/84 MINS/476
MSN 2002 N3AEA QND/28 QNI/119 QTC/11 MINS/515
PSHR: KK3F 140, W3YVQ 135, AA3SB 100, WB3FTQ 100, AB3WG 92, N3JET 87, K3IN 70;
TFC: KK3F 517, K3IN 247, W3YVQ 92, AA3SB 80, WB3FTQ 49, N3JET 49, AB3WG 48

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HF PROPAGATION

MEPN: TIME CHANGE -

On MAR 8, the net moved to the summer schedule; 1730L pre-net, 1800L formal call. The net NVIS propagation was functional in February, 2020, with good signals most evenings. Due to the low solar activity, the afternoon propagation suffered with less effective NVIS propagation during the pre-net. The MEPN DTS stations continue to provide liaison with the national digital messaging services including DTN and Winlink.

MDD: February NVIS propagation for local MDC stations on MDD early was fair to good on nights when the MUF was above net frequency (fxi). When the MUF dropped below 3.557MHz, the NVIS prop failed totally unless some residual E-layer provided some help. If the MUF remained that low without E-layer help, both early and late MDD and the 3RN/C4 nets failed. The MUF sometimes recovered for the Region nets and MDD late, but March is likely to see more failed nets, both early and late, without help from the sun. That help is coming due to the increasing sun angle as spring approaches.

John, WB3GXW-L, continues to make that EchoLink resource available for MDD use on nights when propagation fails. 160m may need to be used as winter progresses. Check out your antennas. Outbound traffic to 3RN may be handled by DTS representatives as needed for posting on the Digital Traffic Net (DTN) when prop permits. DTN stations operate 24/7 so traffic will flow across the country as prop permits, day or night.

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CW OPERATORS NEEDED

Additional CW operators are needed for liaison from MEPN and BTN to MDD and to the higher nets, and Net Control Stations are also needed on MDD and 3RN/C4. The evening NTS and RRI nets in Cycle 4 nation-wide are conducted on CW.

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MEPN/BTN/MDD/3RN ECHOLINK

MEPN representatives check for EchoLink check-ins starting at net call daily via the WB3GXW-L link node (or ***WASH_DC*** conference node backup if the -L node is not available). The conference bridge is available for MEPN, MDD, BTN, MSN, and 3RN stations during periods of failed propagation.

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MSN CW TRAINING

The MSN net continues to operate and serve nightly at 1930L on 3563 kHz. Ron, N3AEA, has stepped up to fill the Net Manager´s role. Thanks, Ron. Show your support by checking in even if you do not take training. MSN needs NCS stations and liaison stations to early and late MDD. Ron could use your help.

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BTN LOCAL NTS TRAFFIC AND TRAINING NET

The BTN continues to meet on 145.33/R (no tone) daily at 6:30PM local time. The BTN was established to provide a welcoming place for newcomers to the Amateur Service, and their first exposure to directed traffic nets and message handling. The NM, AB3WG, has initiated plans for broader cooperation between BTN and MSN to foster more awareness between operators using the respective modes. Instructive message swapping and liaison duties are in effect. A new cooperative effort has been launched between ANAR ARES(r) and the BTN as well.

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Thanks to all the Section´s traffic net NCS stations, RRI/DTN and WL2K stations, liaisons, and traffic handlers for the continuing effort to keep the nets running and traffic moving.

Thank you for your continued support of MDC integrated ARES®, RRI, and NTS operations.

73, W3YVQ, MDC ASM, STM
w3yvq@arrl.net
w3yvq@winlink.org

Used with permission MDC Section News, April 15,2020
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2020 Youth On The Air In The Americas Camp Is Canceled

The inaugural camp for radio amateurs in the Americas aged 15 through 25 has been put off until next year. It was set to take place June 21 - 26 at the National Voice of America Museum of Broadcasting in West Chester Township (North Cincinnati, Ohio). It has been rescheduled for July 2021. Campers accepted to the 2020 camp will have the first chance to register for next year's camp. The daily schedule and plan for the 2020 camp will be the same for the 2021 camp as much as possible. The committee found that July was a more accessible date for the widest range of campers to attend.

Youth on the Air

The committee is also looking at ideas for a shortened, virtual camp this summer, so that campers can participate in limited activities from home. The camp was meant to focus on building peer and mentor relationships and taking amateur radio to the next level.

While many sponsors and donors have already expressed support for holding over funds received for 2020 to use in 2021, refunds of donations made to the camp are being offered. Groups or individuals wishing to receive a refund should contact director Neil Rapp, WB9VPG. Less than $350 of the money spent thus far went to items that may not be usable in 2021, Rapp said.

More information about YOTA in the Americas can be found at YouthOnTheAir and on YOTAregion2 on Facebook, Twitter, Instagram, and YouTube.

Used with permission The ARRL Letter for April 23, 2020

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ARRL 2020 Teachers Institute Sessions

The ARRL 2020 Teachers Institute sessions have been canceled. The landscape of education in the US has been greatly affected by the current pandemic. As K - 12 school systems and universities have been forced to move entirely to remote learning, teachers and students have had to make dramatic adjustments to their teaching and learning methods. After considering these educational challenges, along with travel restrictions and restraints on the ability to gather in groups, ARRL leadership feels it is appropriate and necessary to cancel the 2020 Teachers Institute. We look forward to bringing back this important program in 2021, so that we can continue promoting amateur radio in the classroom through our Education and Technology Program (ETP). ARRL will communicate directly with those who have already applied, and they will receive a full refund. Please direct questions to EAD@arrl.org.

Used with permission The ARRL Letter for April 23, 2020

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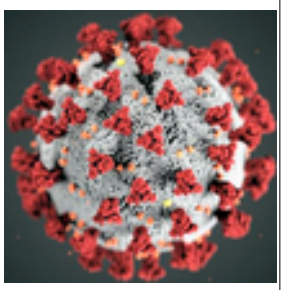
The Medical Net, A Special Covid-19 Net



The Medical Net, a special COVID-19 net, is running Wednesdays, 0130 UTC, on 7.222 MHz. The net deals with correct data on COVID-19 epidemiology care, care issues, and more. Net control will be Dr. Harry Przekop, WB9EDP, a past president of the Medical Amateur Radio Council Organization (MARCO) and now a director at large. Przekop is a specialist in infectious diseases and biomedical physics and is board-certified as an expert in HIV care. Participants do not need to be physicians or medical providers to check in, ask questions, and otherwise take part, but no diagnoses can be rendered. The regular MARCO Grand Rounds Net is held on Sundays, 1500 UTC, on 14.342 MHz.

Used with permission The ARRL Letter for April 23, 2020

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Armed Forces Day Crossband Test Postponed

The annual Armed Forces Day Crossband Test has been postponed, due to the ongoing COVID-19 response and mitigation actions. The 2020 Armed Forces Day (AFD) Crossband Test was scheduled to be held on Saturday, May 9. Because it's uncertain just when stay-at-home orders will be lifted across the US, AFD planners chose to postpone this year's event, because the government stations that typically support this event may not be available. Armed Forces Day Crossband Test planners are considering scheduling a November event in honor of Veteran's Day, depending on COVID-19 mitigation actions. During the AFD Crossband Test, military stations in various locations transmit on selected military frequencies and announce the specific ham frequencies they are monitoring to work radio amateurs. -- *Thanks to US Army MARS Program Chief Paul English, WD8DBY*

Used with permission The ARRL Letter for April 9, 2020

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***The Ham Arundel News* is the monthly official publication of**

The Anne Arundel Radio Club, Inc.
(ARRL Club No. 0484).

Editor: Milford Craig / N3WYG
Send newsletter articles, questions and information to **Milford** at **newsletter@w3vpr.org**
Deadline for submissions – The Saturday after the 3rd Thursday of the month

Mailing Address:
Anne Arundel Radio Club
Post Office Box 308
Davidsonville, MD 21035

Meetings:
General Business 1st Thursday at 7:30 PM
Board Meeting 2nd Thursday at 7:30 PM
Program/Activity 3rd Thursday at 7:30 PM

Dues:
$30 per year, payable December 1st
Discounts available for family members and students

World Wide Web: **www.w3vpr.org**

AARC Supports The Maryland Slow Net:
3.563 MHz CW 7:30 P. M. Daily

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Free Money for AARC!

ARRL Membership Reminder

ARRL affiliated clubs receive a commission for every new ARRL membership and renewal they submit to ARRL Headquarters. Clubs retain a portion of the dues for each regular or senior membership submitted to ARRL Headquarters:

Clubs retain $15 for each new membership OR lapsed membership (of two years or more).
Clubs retain $2 for each renewal,
A RENEWING MEMBER can renew at any time, even before their current membership expires.

Send your application and payment (made out to AARC) to the club treasurer.

Mark Your Calendars

REGULAR ACTIVITIES

Club Meetings are held on the first and third Thursdays of the month from 7:30 to 9PM at the clubhouse located at the Davidsonville Family Recreation Center in Davidsonville, MD

Free License Exams every 2nd Saturday of the Month - Check in at Noon, Exams at 1PM - At the clubhouse - Contact David Rawley / AE5Z, testing@w3vpr.org

Weekly AARC 2-Meter Net on 147.105 (Typically linked to 147.075 and 444.400 with CTCSS tone of 107.2 Hz) every Wednesday at 8 PM - All Welcome

2 meter "HOLLY NET" on 147.105 (Typically linked to 147.075 and 444.400 with CTCSS tone of 107.2 Hz) every morning 7:00 am to 9:00 am. All hams are welcome.

EVENT SCHEDULE

Saturday, May 2 General Class
Thursday, May 7 Membership Meeting
Saturday, May 9 General Class
VE Testing
Sunday, May 10 Mother's Day
Thursday, May 14 Board Meeting
Saturday, May 16 General Class
General Class
Thursday, May 21 Membership Meeting
Saturday, May 23 General Class
Monday, May 25 Memorial day
Memorial Day
Thursday, May 28 Rules Committee
Rules Committee
Saturday, May 30 General Class

P L E A S E during this extraordinary time, check the AARC Calendar for full information.
Stay tuned to the W3VPR Repeaters for information and also lend assistance where necessary.
Thank you very much.

AARC Repeaters and Nets

2 Meter Repeaters

Location	Frequency	Tone	Notes
Davidsonville	147.105+	107.2	AARC Repeater with morning traffic net.
Glen Burnie	147.075+	107.2	AARC repeater Located in Northern AA County.
BrandyWine	147.150+	114.8	SMARC Repeater.
Prince Frederick	145.350-	156.7	SPARC/CARC Repeater.
Laurel	147.225+	156.7	Laurel ARC Repeater.
Millersville	146.805-	107.2	Repeater.

1.25 Meter Repeaters

Location	Frequency	Tone	Notes
Davidsonville	223.880-	107.2	AARC 1.25M repeater *check to see if tied into 7.105...
Millersville	224.560-	107.2	AARC repeater Located in Northern AA County.

70cm Repeaters

Location	Frequency	Tone	Notes
Davidsonville	444.400+	107.2	AARC 70 cm Repeater.
Annapolis	442.300+	107.2	AARC 70 cm repeater
Laurel	442.500+	156.7	Laurel ARC 70 cm Repeater.
Millersville	449.125-	107.2	Maryland Mobileers Repeater.
Upper Marlboro	443.600+	103.5	SMARC 70 cm Repeater.

Packet Stations

Location	Frequency	Call	Notes
Davidsonville	145.050	W3VPR	AARC Club packet node running JNOS
Davidsonville	145.010	W3VPR-5	Digipeter Relay to EOC Winlink
Millersville	145.010	W3AAC-5	Digipeter Relay to EOC Winlink
Glen Burnie	145.010	W3AAC-10	EOC Winlink system and digipeter

Amateur Radio NETS

Name	Frequency (in Mhz)	Day	Time
The “Holly Net”	147.105+ PL 107.2	Weekdays	0700
AARC Talk Net	147.105+ PL 107.2	Wednesday	2000
AA County ARES Net	146.805- PL 107.2	Sunday	2000
Baltimore Traffic Net	146.670-	Daily	1830
Boating Net	146.805- PL 107.2	Wednesday	1930
Maryland Emergency Phone Net	3.920	Daily	1800
Maryland-DC-Delaware Traffic Net	3.643	Daily	1900 and 2200
Maryland Slow Net	3.563	Daily	1930
React Net	442.300+ PL 107.2	1st Sunday	1930

*We use **simplex 146.430 Mhz** frequently enough that you should probably program that into your HT or mobile. This is the go-to frequency for many 5K race/walk volunteering efforts, local communication, Field Day setup, and the like when we're not using a repeater.*

REPEATER FREQUENCIES

Davidsonville	Millersville	Glen Burnie	Annapolis
147.105+		147.075+	
223.880-	224.560-		
444.400+			442.300+

PL: 107.2 for all repeaters
The 147.105 and 147.075 repeaters are frequently linked. Please leave an extra second after the courtesy beep to allow the link to reset as well.

Visitors are welcome *to all meetings and nets.*
Meetings are held in the Clubhouse at the
Davidsonville Family Recreation Center*,*
Queen Anne Bridge and Wayson Roads off
MD Route 214 near Davidsonville, MD.
For en-route directions,make initial contact on the 147.105 repeater.

Wednesday Night Talk Net -- All are welcome

8PM, On the AARC Repeater 147.105

Other Amateur Radio nets

Name	Frequency	Day	Time
The "Holly Net"	147.105+Mhz PL 107.2	Weekdays	0700
AA County ARES Net	146.805- Mhz PL 107.2	Sunday	2000
Baltimore Traffic Net	146.670- Mhz	Daily	1830
Maryland Emergency Phone Net	3.820Mhz	Daily	1800
MD-DC-DE Traffic Net	3.557Mhz	Daily	1900 and 2200
Maryland Mobileers Net	146.805 PL107.2	Monday	1930
Maryland Slow Net	3.563 MHz	Daily	1930
REACT Net	442.300+Mhz PL 107.2	1st Sunday	1930

The Radio Amateur Operator is...

CONSIDERATE

...He/[She] never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL

...He/[She] offers loyalty, encouragement and support to other amateurs, local clubs, the IARU Radio Society in his/[her] country, through which Amateur Radio in his/[her] country is represented nationally and internationally.

PROGRESSIVE

...He/[She] keeps his/[her] station up to date. It is well-built and efficient. His/[Her] operating practice is above reproach.

FRIENDLY

...He/[She] operates slowly and patiently when requested; offers friendly advice and counsel to beginners; kind assistance, cooperation and consideration for the interests of others. These are the marks of the amateur spirit.

BALANCED

...Radio is a hobby, never interfering with duties owed to family, job, school or community.

PATRIOTIC

...His/[Her] station and skills are always ready for service to country and community.

- adapted from the original Amateur's Code, written by Paul M. Segal, W9EEA, in 1928The Radio Amateur's Cod