DELAWARE LEHIGH AMATEUR RADIO CLUB Inc.
JULY 2020

W3OK CORRAL

Club Meeting July 2nd, 7:30PM
Via ZOOM

JULY MEETING PROGRAM
"Welcome ARRL Directors"

Tom / W3TOM & Bob / K3RF

JUNE PROGRAM REPORT

"Whose Shack Is It?"
Skip / KD2BDA

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JUNE MEETING MINUTES

A General Meeting of the Delaware-Lehigh Amateur Radio Club was held on June 4, 2020 via a Zoom video-conference. President Stephanie Koles / WX3K called the meeting to order at 7:18 p.m. with 31 members online.

President's Report:

Stephanie opened the meeting with using the of repeater and the mentoring of new hams that are members of the Club. Stephanie also said there is a need for help with distributing the Newsletter as the member responsible is no longer in the area. Stephanie said that 6m and 10M were open from time to time. With 6M and Sporadic-E, Stephanie said she was able to make contacts in California, South America and Europe. Stephanie said this side of the State would be going to Yellow status on Friday June 5 with the Covid-19 re-opening allowing lifting of certain restriction. The Sussex Hamfest has been cancelled. Stephanie said and how the Club is planning future events dependent on the State ordered shutdown. Stephanie said Bicentennial Park will be closed until July and the Club is looking for alternative plans. Stephanie announced the Club has purchased a security camera/dvr system for the Milkhouse. The security camera system, the D-Star repeater, and other necessary equipment will be connected to a brand new UPS, which has been donated.

Announcements:

Stephanie asked if there were any health and welfare information. Mark / W2MB said Robert / KC2FU had become a SK. Ed / AA3OU asked for a moment of silence in memory of Robert.

Secretary's Report: Larry /AB3TY, announced the Minutes for the May 2020 General Meeting. Dean / AB3BD motioned to accept. It was seconded by Steve / N2IYR and so moved.

Treasurer's Report: Mike Gower / KB3LOD reported on the Club's financial status for April 2020. Mark / W2MB motioned to accept. It was seconded by Steve / N2IYR and so moved.

Committee Reports:

 Membership: Membership Chair Terry / KC3JHT reported there are currently 159 paid members, 9 Associates, and 9 life members.

 Club Station: No Report.

 Classes: No report.

 Tech Committee: George / N3SQD said with the Covid-19 restrictions in place there has been no action with regards to fixing the beam at the Milkhouse.

 Field Day: Jim / KC3KMP said Bicentennial Park will not be available for Field Day. George / N3SQD said Louise Moore Park would be most likely unavailable as it is solidly reserved for the year when bookings begin after January 1. There might be a possibility for the Club to rent Plainfield Township site that was used many years ago. A discussion ensued over the use of the Milkhouse not withstanding the number of members who could be on site at any one time with social distancing requirements. Larry / AB3TY read the ARRL notice concerning Field Day 2020 which gives the particulars on home stations combining their contacts with those of a Club Station. Ben / N3WR said the Club can run the Milkhouse with home stations. George / N3SQD said the Club's Honda generators with auxiliary tanks can be used to power the Club station. George also said that before formulating plans, it is necessary to learn how many of the Field Day attendees would be comfortable with any of the scenarios in respect to social distancing requirements. Jim / KC3KMP will be canvassing the members with regards on what the consensus is for Field Day operations.

 Website: No issues reported.

Presentation: Skip / KD2BDA—Whose Shack Is It?

Adjournment: There being no further business, the meeting was adjourned at 8:05p.m

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JULY QUICK CHECK CALENDAR   *

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1 DLARCC Net (KC3II)	2 BY ZOOM 7:00	3 VE SESSION	4
5	6	7	8 DLARCC Net (N3SQD)	9	10	11
12	13	14	15 DLARC Net (N3WR)	16	17	18
19	20	21 DLARC BOARD MEETING	22 DLARCC Net (K3PDL)	23	24	25
26	27	28	29 DLARCC Net (W3NAM)	30	31	

JULY CONTESTING AT THE OK CORRAL

July 4 & 5   – YBOXC 80m Contest
                     – Marconi Memorial HF Contest
July 11 & 12   – IARU HF World Championship
                     – SKCC Weekend Sptintathon
July   19 & 20 – CQ Worldwide VHF Contest
                     –North American QSO Party - RTTY
July   25 & 26 – RSGB IOTA Contest

VE TEST SESSION

There will not be a test session this month. The next session will be held at the Northampton County 911 center. Upon reopening of the center.   Pretest registration is required. Contact John / NT3P at nt3p@arrl.net

W3OK CLUB STATION

Better known as the "Milkhouse" the W3OK Station is closed unti further notice.. Our repeater 146,700 is always on … So just call W3OK and check.

de Steve / NS3L

MONTHLY BRAIN TEASER

"A special prize awaits the first Club Member to submit the correct answer to this month's Brainteaser to the Pete / NL7XM, *only,* at nl7xm@arrl.net The winner must be present at the next Meeting to receive it, or it goes unrewarded. Officers, Board members, Newsletter staff, and Brain Teaser Authors are not eligible to win."

de Pete / NL7XM

JUNE BRAINTEASER ANSWER
" **Zero – Noah built the ark.**"

The winner is **NO WINNER**

JULY BRAINTEASER
Divide 30 by half and add 12.
What is the result?

WEDNESDAY NIGHT NETS

Additional Net Controls are needed for the Wednesday Night ARES, RACES & DLARC net. If we have enough interested operators, it will only be necessary for each operator to have only one net session in each three month period. Actually 13 weeks in a period, so 13 net controls would be ideal, and maybe some extras to fill in if needed. This would give us a pool of experienced controls, for any emergency which would arise. Interested operators should contact Don / KC3II at kc3ii@arrl.net. The NIMS IS-700 and ICS-100 courses are not required to be a net control, but should the need arise and we do supply controls and operators for real emergencies, then the courses requirement will be in effect and EMA issued IDs will be needed to be on the scene of an emergency.

WEDNESDAY EVENING DINNER CLUB

The dinner club is not meeting at this time due to the COVID 19 Pandemic. Liston to the DLARC repeater, the Wednesday Evening Net and watch the Forum for details on the resuming details.

REFLECTIONS FROM THE PAST

Gary N2AUO demonstrating his "spud gun" for launching wire antennas
April 2009 Meeting

JUNE MEETING PROGRAM REPORT

For the second month in a row for this year we are forced to hold our meeting via zoom. But hopefully this will pass soon, and we will be able to meet with our friend again. Skip / KB2BDA rose to the occasion and modified his planned presentation. The original program was to show that ham shacks of Delaware Lehigh Amateur Radio Club members and friends. But COVID-19 changed that, so the event which was planned as a game which the audience attempt would identify the shack's operator .to became a self scored event.

Presented with the shacks of Fritz / W2CET and his Kenwood TS 590S shack, John / W2EGG, and his Kenwood TS 830S shack, Skip / KD2BDA and his Kenwood TS 440S shack , Mark / W2MB and his TS 590S shack and Mosley 67 on the 55 foot tower , Ken / kb3mdt and his SDR, and skip / KD2BDA and his T YT M.D. 2017, which is a painting by Giovanni Annunziato " The Shore Shack". Skip slipped in an extra shot which was of a Shad not a shack.

Thanks Skip or making an enjoyable program under such poor conditions.

KN6EQU BALLOON WINS CROSS-COUNTRY EDUCATIONAL CHALLENGE RACE

Amateur Radio on the International Space Station (ARISS) partner ISS-Above inventor Liam Kennedy, KN6EQU, of Pasadena, California, has been declared the winner of a mid-altitude cross-continent educational challenge balloon race. His balloon was one of four launched on June 1 from the west coast with the goal of being the first to reach the Eastern Time Zone.

Coming in second was the balloon of Ted Tagami, KK6UUQ, from ARISS partner Magnitude.io.

It all began when educator Joanne Michael, KM6BWB -- a science coach at the Wiseburn Unified School District in Los Angeles -- challenged another ARISS partner group to a mid-altitude, cross-continent balloon race. Michael has led her students in several balloon launch attempts from the Los Angeles area. Given the disruption caused to schools by the COVID-19 pandemic, Michael wanted to shake things up a bit and give students worldwide a unique distance-learning treat that could safely be accomplished during the pandemic. She challenged Tagami, and he accepted. On May 31, a fourth team joined in the competition: Steve Potter, K7HAK, and Trevor Macduff of Washington.

Tagami launched his balloon from Oakland, California. Kennedy got wind of the idea and also came on board, launching from Pasadena, California. Michael set her balloon aloft in Los Angeles, while Potter and Macduff's balloon lifted off from southern Washington.

ARISS, Magnitude.io, and ISS-Above are ISS National Lab Space Station Explorer (SSE) partners that work to inspire, engage, and educate students in science technology engineering, arts, and mathematics (STEM) topics and to pursue careers in those fields.

The story caught fire on social media, inspiring one teacher to figure out how to initiate a launch from her school. "Let's get planning and get your thoughts and ideas, and let's make this happen for the students," she said in a post.

Students can still track each balloon's location, altitude, and temperature, which are fed automatically via the Automatic Packet Reporting System (APRS). The call signs are KM6BWB-9, KK6UUQ-8, KN6EQU-2, and K7HAK-11.

ARISS said the race initiative gave students the opportunity to tally and track the states each balloon traveled through and plot altitude versus temperature (and other parameters). Also, by researching weather patterns, students could make assumptions from their own data. This could include speed variations due to weather. They could also predict each balloon's flight path and when each might cross the finish line.

For more information on the balloon launch, lesson plans, and the livestream video link, visit the ARISS Mid Altitude Balloon Race Page

ARISS ESTABLISHES ITSELF AS AN INDEPRNDENT ORGANIZATION

Going forward, the US arm of the Amateur Radio on the International Space Station International working group will be known as ARISS-USA, an independent organization. ARISS serves as the intermediary to arrange contacts between schools and organizations on Earth and ISS crew members. ARISS-USA incorporated as a non-profit entity in Maryland in late May. The move will allow ARISS-USA to work independently, soliciting grants and donations. ARISS-USA will continue promoting amateur radio and science, technology, engineering, arts, and math (STEAM) goals within schools and educational organizations. ARISS-USA lead Frank Bauer, KA3HDO, noted that the scope and reach of what ARISS accomplishes has grown significantly since its modest start in 1996.

"Our working group status made it cumbersome to establish partnerships, sign agreements, and solicit grants," Bauer said. "These can only be done as an established organization." Bauer made it clear that ARISS-USA is "deeply indebted to our working group partners — ARRL and AMSAT, who enabled the birth of ARISS — and our steadfast sponsors, NASA Space Communication and Navigation (SCaN), and the ISS National Lab (INL)."

The move toward becoming an independent organization has been discussed for quite a while, ARISS-USA said in announcing the change.

"ARISS-USA will maintain its collaborative work with ARISS International as well as with US sponsors, partners, and interest groups," the announcement said. "The main goal of ARISS-USA remains as connecting educational groups with opportunities to interact with astronauts aboard the [space station]. ARISS-USA will expand its human spaceflight opportunities with the space agencies beyond low-Earth orbit, starting with lunar opportunities including the Lunar Gateway. ARISS-USA will continue to review and accept proposals for ISS contacts and expand its other educational opportunities to increase interest in space sciences and radio communications."

ARISS-USA said it's in the process of applying for tax-exempt status as an IRS Section 501(c)(3) charitable, scientific, or educational organization. Approval will mean that donations made directly to ARISS-USA will be tax deductible for US taxpayers. In the meantime, ARISS-USA can accept tax-deductible contributions via AMSAT-NA through the ARISS website.

In its announcement, ARISS-USA acknowledged several individuals who were instrumental in its formation in 1996. The list included past ARRL President Vic Clark, W4KFC; past ARRL CEO David Sumner, K1ZZ; former AMSAT-NA presidents Bill Tynan, W3XO (SK), and Tom Clark, W3IO; Roy Neal, K6DUE (SK), whom ARISS-USA described as "a major guide for SAREX and ARISS;" NASA astronaut Owen Garriott, W5LFL (SK), the first astronaut to use ham radio from space, and the late Pam Mountjoy of NASA Education, "who had the vision to develop the ARISS working group as a single amateur radio focus into the space agencies."

ARISS-USA said it aims to continue earning high regard from all of its partners and sponsors.

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."

"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

.   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.

REPEATER ETIQUETTE

Atlantic County ARES Web Page Via **Bob Green / KE3AW**

Every couple of years it seemed we used to "remind" operators using our repeaters of the proper etiquette to be used on W3OK. With numerous new hams over the past couple years, or hams new to this area, it may be worth considering using/altering to suit us some such guide to operators in our club. I know, from recent questions to me about a number of points covered in this article, below...
Here is the Delaware-Lehigh Amateur radio Club Repeater Etiquette.
Use of the W3OK Repeater
1-Usage will be in accordance with FCC Rules Part 97.
2-Users will comply with directives of the control operator.
3-Transmissions will be courteous and professional. (See Basic Repeater Etiquette Below)
4-The time out timer is set for 90 Seconds. Keep transmissions under that time. Leave breaks between
   transmissions so the repeater can drop and the time out timer resets.

Basic Repeater Etiquette

1-Starting a QSO via a directed call. There are two main ways by which a QSO can begin, one is via a directed call and one is via monitoring. A directed call is where one amateur calls another amateur individually, such as "N3XYZ from K3ABC". In such a case, K3ABC is looking for one particular individual, N3XYZ. It generally is not an invitation for anyone other than N3XYZ to return the call. If N3XYZ doesn't answer the call, K3ABC may just clear off by saying "K3ABC clear", or may clear and listen for other calls by saying "K3ABC clear and listening". The "and listening" or "and monitoring" implies they are interested in hanging around to QSO with anyone else who might be listening at that time. "Listening" and "monitoring" don't mean you are listening to somebody else's conversation, they mean you are listening for other people who may want to call you to start a new QSO. Likewise, just saying your call by itself with nothing following it is meaningless. If you were to say "N3XYZ", people listening wouldn't know if that means you were monitoring for calls, whether you were testing, or whether they missed the callsign of a party you were calling. Be concise, but be complete.

2-Starting a QSO via a monitoring call. If the repeater is not in use, simply stating your callsign followed by "listening" or "monitoring" implies that you are listening to the repeater and are interested in having a QSO with anyone else. Calling CQ on a repeater is generally not common, a simple "N3XYZ listening" will suffice. There is no need to repeat the "listening" message over and over again as you might do when calling CQ on HF. Once every few minutes should be more than sufficient, and if someone hasn't answered after a few tries, it probably means there is nobody around. If someone is listening and wants to QSO, they will answer back. Avoid things like "is anybody out there" or "is there anybody around on frequency"; it sounds like a bad sci-fi movie.

3-Joining a QSO in progress. If there is a conversation taking place which you would like to join, simply state your callsign when one user unkeys. This is the reason for having a courtesy tone: to allow other users to break into the conversation. One of the stations in QSO, usually the station that was about to begin his transmission, will invite you to join, either before making his own transmission or afterward. Don't interrupt a QSO unless you have something to add to the topic at hand. Interrupting a conversion is no more polite on a repeater than it is in person.

4-Interrupting a QSO to make a call. If you need to make a directed call to another amateur but there is already another QSO going on, break into the conversation during the courtesy tone interval by saying "Call please, N3XYZ". One of the stations will allow you to make your call. If the station you are calling returns your call, you should quickly pass traffic to them and relinquish the frequency to the stations who were already in QSO; don't get into a full QSO in the middle of someone else's conversation. If you need to speak with the party you call for a significant length of time (say, more than 15 seconds), ask them to either wait until the current QSO has cleared, or ask them to move to another repeater or simplex channel to continue the conversation.

5-Round tables and "Turning it Over". When more than two amateurs are in a QSO, it is often referred to as a "round table" discussion. Such a QSO's usually go in order from amateur A to amateur B to amateur C ... and eventually back to amateur A again to complete the round table. To keep everyone on the same page, when any one amateur is done making a transmission, they "turn it over" to the next station in sequence (or out of sequence, if so desired). Without turning it over to a particular station when there are multiple stations in the QSO, nobody knows who is supposed to go next, and there ends up either being dead silence or several stations talking at once. At the end of a transmission, turn it over to the next station by naming them or giving their callsign, such as "...and that's that. Go ahead Joe." or "....and that's that. Go ahead XYZ." If it's been close to 10 minutes, it's a good time to identify at the same time as well, such as "...and that's that. N3XYZ, go ahead Joe."

6-IDing and Who's Who? By FCC regulations, you must always identify at 10 minute intervals and at the end of a transmission. If you are making a test transmission or calling another party, this is a one-way transmission. Since it has no "length" as there is no QSO taking place, you should identify each time you make a call or a test transmission. When identifying yourself and another party (or parties), or when making a directed call, your callsign goes **LAST.** "N3XYZ, K3ABC" means that K3ABC is calling N3XYZ, not the other way around. There is no need to identify each time you make a transmission, only once every 10 minutes. You do not need to identify the station with whom you are speaking, only your own callsign, but it is generally polite to remember the call of the other station. Avoid phonetics on FM unless there is a reason for using them, such as the other station misunderstanding your callsign. When phonetics are needed, stick to the standard phonetic alphabet.

7-Demonstrations. From time to time, an amateur may want to demonstrate the capabilities of amateur radio to another non-amateur. The typical way to do this is to ask for a "demo" such as "N3XYZ for a demonstration." Anyone who is listening to the repeater can answer them back. Usually telling the calling party your name, callsign, and location is what they are looking for, not a lengthy conversation. Someone doing a demo may ask for stations in a particular area to show the range of amateur radio communications, such as if the calling station is in the Poconos they may ask for any stations in south Jersey or Harrisburg areas, which is more interesting than demonstrating that they can talk to someone in the same town as they are in.

8-Signal Reports. If you are unsure how well you are making it into the repeater, **DO NOT** kerchunk the repeater. Any time you key up the repeater, you should identify, even if you are just testing to see if you are making the machine. "N3XYZ test"is sufficient. Do not use the repeater as a "target" for tuning or aiming antennas, checking your transmitter power, etc. Use a dummy load where appropriate, or test on a simplex frequency. If you need someone to verify that you are making the repeater OK, ask for a signal report such as "N3XYZ, can someone give me a signal report?" "Radio check" is a term most often used on CB, "signal report" is what most amateurs ask for.

9-Language. Aside from some of the techno-syncracies inherent in amateur vernacular, use plain conversational English. The kind of English that would be suitable for prime-time television, not R rated movies. Avoid starting or encouraging conflicts on the air. If a topic of conversation starts to draw strong debate, change the subject. Avoid "radio-ese" lingo whenever

possible. CB has its own language style and so does amateur radio, but the two are not the same. Amateurs have "names" not "personals". Although many new hams have graduated from the CB ranks, let's try to keep CB lingo off the amateur bands. When visiting a new repeater, take some time to monitor before jumping in to get a feel for the type of traffic and operating mannerisms of that particular system. Some repeaters are very free-wheeling in that there are people jumping in and out of conversations constantly. Others primarily have directed calls on them and discourage ragchewing. Others are member-exclusive repeaters.   Listen before you talk, when in Rome do as the Romans do.

10-Emergencies. If there is a QSO going on, break into a conversation with the word "Break" or "Break for priority traffic**."** **DO NOT USE THE WORD BREAK TO JOIN IN A QSO UNLESS THERE IS AN EMERGENCY!** All stations should give immediate priority any station with emergency traffic.

11-Malicious Interference. If there is malicious interference, such as kerchunking, touch-tones, rude comments, etc. **DO NOT ACKNOWLEDGE IT!** Continue the QSO in a normal fashion. If the interference gets to the level where it is impossible to carry on the QSO, simply end the QSO as you normally would.

12-Power. Use the minimum power necessary to complete a QSO. However, the minimum power necessary doesn't just mean you are barely tickling the repeater receiver squelch. If someone says that you are noisy, increase power or relocate or take whatever measures you can to improve your signal. Continuing to make transmissions after being told your signal is noisy is inconsiderate to those listening. The amateur radio manufacturers continue to come up with newer, smaller handheld radios, many with power levels well under a watt. Many new amateurs start out with a handheld radio as their "first rig". Although convenient, they aren't the most effective radios in terms of performance. Without a good external antenna, operating a handheld radio indoors or inside a car is going to result in a lot of bad signal reports.

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.

FFT8 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. "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 passband 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.

ARRL VOLUNTEER MONITOR PROGRAM RECOGNIUZES GOOD OPERATOTS

Volunteer Monitor Program Coordinator Riley Hollingsworth, K4ZDH, said the program has recognized numerous radio amateurs with Good Operator Notices.   "One facet of the ARRL and FCC agreement that set up the Volunteer Monitor Program calls for ARRL to recognize especially good amateur radio behavior, in order to encourage compliance with FCC rules and further the efficiency of the Amateur Radio Service," Hollingsworth said. "Seventeen operators in 15 states received Good Operator Notices in the first quarter of 2020. The Good Operator Notices went to veteran operators as well as newcomers, including a 13-year-old in North Carolina for CW operation during the Youth on the Air Special Event, and a 14-year-old in Wyoming for SSB operation."   Hollingsworth also said that a 2-meter repeater operator received a Good Operator Report for establishing and managing a COVID-19 net in Pennsylvania, while other operators of various license classes received notices for everyday SSB and CW operation on the HF bands. Recipients were nominated on the basis of operation observed by Volunteer Monitors (Vms).

According to Hollingsworth, Volunteer Monitors reported 2,035 hours monitoring on HF, and 2,856 hours monitoring on VHF/UHF and other frequencies during May.   After kicking off on January 1, the new Volunteer Monitor Program ramped up to operational status earlier this spring, starting with a "soft rollout" that started on February 1, designed to familiarize VMs with issues on the bands and to put into practice what to report and what to ignore, based on their training.

Hollingsworth uses a system called *VMTRAC v--* 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.

F.Y.I.

The August Program will be **"The W3OK Repeater System"** – Barry / N3NVA

The D.L.A.R.C. meets the "FIRST" Thursday of each month. Membership, friends and interested persons meet at the Bethlehem Township Community Center, 2900 Farmersville Road, Bethlehem, Pa. 18020 at 7:30 PM. Committee reports and announcements of all present and future activities will be presented at that time. Followed by that month's program.

NORTHAMPTON COUNTY ARES, RACES AND DLARC NET

All Radio Amateurs are welcome to participate in the ARES, RACES and DLARC net. This net meets Wednesday at 1900 hours local time, on the W3OK Repeater 51.76, 146.70 and 444.90 (pl 151.4). With an alternate frequency of 147.350 (DCS 315) W3OI Repeater.

 QCWA Chapter 17 holds a net Monday evenings at 8:30 PM on 3960 +/- depending on conditions. Other inputs are the 146.85 repeater, (151.4 PL) and Echolink at K2PM-R.

 Mid-Atlantic D-Star Net meets each Tuesday at 7:30 PM. The following repeaters Dstar repeaters are available in the Lehigh Valley. W3OK -145.11000MHz -0.600 Port C – W3OI -147.16500MHz +0.600 Port C, – W3OI - 445.02500MHz -5.000 Port B All repeaters on the net are linked through **Reflector 020 port A**, so all stations checking into the net should make sure that they have *their local repeater call sign followed by the letter "G" in the eight position of the RPT2 field*. Otherwise, you will only be heard locally and not over the Reflector. Dongle users wishing to check into the net should Log On by connecting directly to Reflector 20, port A, rather than through your local repeater in order to conserve local bandwidth.

    The OK Corral is an organization publication for the purpose of informing members of the D.L.A.R.C. of educational and training opportunities, club events, relevant news articles and a monthly calendar of daily activities, meetings and dates.

PHONE NUMBERS FOR THE EXECUTIVE COMMITTEE OF THE DLARC
CAN BE FOUND ON THE WEBSITE / MEMBERSHIP LISTING
CLUB MEETINGS

All regular meetings of the D.L.A.R.C. Are held on the first Thursday of each month at 7:30 PM at the Bethlehem Township Community Center
TALK IN ON 146.700 (PL 151.4)

Club Station Telephone Number – 484 291-1527   Email Address – w3ok146700@gmail.com

THE W3OK TRUSTEE --- Barry Vogt / N3NVA

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