

**DELAWARE LEHIGH AMATEUR RADIO CLUB Inc.**  
**NOVEMBER 2020**



# *W3OK*

# *CORRAL*

**Club Meeting November 4th, 7:30PM**  
**Via ZOOM**

**NOVEMBER MEETING PROGRAM**

**“RF Exposure For the Average Ham”**

**Stephanie / WX3K**

**OCTOBER PROGRAM**



**“Elections & Awards**

**John / NT3P & Terry / KC3JHT**



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### OCTOBER MEETING MINUTES

A General Meeting of the Delaware-Lehigh Amateur Radio Club was held on October 1, 2020 via a Zoom video-conference. President Stephanie Koles / WX3K called the meeting to order at 7:11 p.m. with 32 members online.

**President's Report:** Stephanie opened the meeting announcing the new website constructed by Larry / AB3TY was up and running. Newsletters, pictures and other pertinent information have been loaded. Stephanie said October 10-11 the PA QSO Party will take place with members working under their own call sign from their own QTH. Stephanie said the Club is in need of a Program Chair as time is of the essence as 2021 is on the horizon. She noted our December holiday party is in doubt with the Covid restrictions. Stephanie said a new set of Bylaws have been approved by the Board and will be sent out to members for their comment. At the December general meeting, there will be a vote to approve. Stephanie said the Club is considering conducting a survey to find out why those who do not attend meetings on a regular basis, what they would like to see, and what would be of interest.

**Announcements:** Steve / N2IYR said his son Christopher, unbeknownst to him, passed all the exams and has become an Extra. He has taken his grandfather's original call W9CPF.

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

**Treasurer's Report:** Mike / KB3LOD, reported on the Club's financial status for August 2020 Dean / AB3BD motioned to accept. It was seconded by Les / W3LES and so moved.

#### **Committee Reports:**

**Membership:** Membership Chair Terry / KC3JHT announced one membership applicant, Dave Fuller / KC3PYP. Dave is a Tech. Terry for reported there are currently 173 total members: 153 paid; 11 associates; and 9 life members.

**Club Station:** Steve / NS3L reported no issues at the Milkhouse.

**Tech Committee:** Al / W3CE reported the beam at the Milkhouse had been repaired and is now working

**Website:** No Report

**Repeater:** No issues.

**Adjournment:** There being no further business, the meeting was adjourned at 8:00 p.m.

**Program:** John / NT3P – Election and Terry / KC3JHT –Awards

### W3OK CLUB STATION

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

de Steve / NS3L

### WEDNESDAY EVENING DINNER CLUB

The Wednesday Evening Dinner Club is on hold until further notice due to the COVID-19 Pandemic. Listen to the nets and watch the Forum for the latest information on our get together.

### MEETING PROGRAM CHAIRMAN

The DLARC is still in need for a General Meeting Program Chairman. Someone who can plan and organize programs for each monthly meeting, beginning in January 2021. This chairman can select a committee to assist him and can get ideas from his committee and the general membership. Ideas from the general membership, will enable the Chairman and his committee to get an understanding of what subjects would be of interest to those attending the meetings. Subject matter does not have to be amateur radio related, but just of interest in general. If you are interested in volunteering for this position, contact any member of the Executive Committee.

## MEMBERSHIP DUES ARE DUE!

It's that time, already! DUES are payable for the calendar year 2021. Here's how easy it is to remit your club DUES and keep your valuable D.L.A.R.C. Membership current. Whether in person or by mail, **CHECKS made payable to the D.L.A.R.C.** Is one method of payment to more accurately record your timely renewal. Please ensure that your callsign appears somewhere on the instrument, such as in the memo field. Payment may also be made using PayPal. Paying with cash is discouraged, but if you really, *really* have to, kindly make certain you are prepared with the correct sum according to the rate table shown below. Remember, if your DUES are not paid by December 31st, your membership will expire.

2021 DUES Rates	
Regular Membership 18-64 years of age:	
Jan. - Dec. ....	\$20.-
65 and over, or retired from all forms of employment (no age limit)	
Jan. - Dec. ....	\$15.-
Additional Family member	
each \$5.-	
Associate Individual Membership	
\$12.-	

**You are strongly encouraged to MAIL your DUES** so that I may conduct the bulk of the record-keeping duties apart from where I believe you deserve the most of my attention. In person at Club Meetings, I'd prefer to answer your questions, address your concerns, and welcome your thoughtful revenue raising and savings ideas. Therefore, it is firmly advocated that DUES correspondence be mailed to:

**Lawrence R. Butler**  
**800 Maple Lane**  
**Easton, Pa. 18045**

Enclosing a S.A.S.E will bring your new membership card back to you immediately if you can't attend the next Meeting where they are routinely distributed. You may write to me anytime with questions regarding DUES, or to discuss issues that you believe are my responsibility at: [Treasurer@dlarc.org](mailto:Treasurer@dlarc.org). Include your phone number if you prefer a live reply.

de Larry / KC3JTK, DLARC Treasurer

### NOVEMBER CONTESTING AT THE OK CORRAL

- November 7 & 8 – Ukrainian DX Contest
- ARRL Sweepstakes Contest – CW
- November 14 & 15 – WAE DX Contest – RTTY
- 10-10 International Fall Contest – Digital
- November 21 & 22 – LZ DX Contest
- ARRL Sweepstakes Contest – SSB
- November 28 & 29 – ARRL EME Contest
- CQ World Wide DX Contest – CW
- 

### IMPORTANT NOTICE

Please check the web page roster listing. It is important that your telephone number and email address are correct. This is the only way we can contact members. If you do not receive the newsletter in your email and are registered for the phone tree and do receive the notices by phone, your email address is incorrect on the roster, and the same for your telephone number.

**NOVEMBER QUICK CHECK CALENDAR**

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1 Day Light Savings Ends	2	3 Election Day	4 DLARC Net (N3WR)	5 DLARC MEETING 7:30 PM	6	7
8	9	10	11 DLARC Net (K3PDL)	12	13	14
15	16	17	18 DLARC Net (ND3JJ)	19	20	21
22	23	24 DLARC BOARD MEETING	25 DLARC Net (KC3MKP)	26 Thanksgiving	27	28
29	30					

**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

**OCTOBER BRAINTEASER ANSWER**

" A ton, 2000 pounds, backwards N-O-T."

The winner is Doreen / K3PDL

**NOVEMBER BRAINTEASER**

Two Scientists Walk Into A Bar. One Asks For H2O,  
The Second Asks For H2O, Too.  
Which Scientist Dies?



**HAPPY THANKSGIVING**



**EASTERN STANDARD TIME BEGINS NOVEMBER 1**

## OCTOBER PROGRAM REPORT

**Election:** John / NT3P announced that the slate of nominations were unopposed. Larry /

AB3TY as Secretary cast the lone ballot for the following:

President – Jim Matlack / KC3KMP

Vice-President – Steve Harper / W3NAM

Secretary – Larry Kaplan / AB3TY

Treasurer – Larry Butler / KC3JTK

Director – Gabe Lantos / KZ2A

Director – Steve Nordahl / NS3I

**Award Presentation:** Terry / KC3JHT presented the following awards:

Al Wiemann W3CE - Ham Instructor, Net Control Wednesday, RFI Committee, Provided D-Star Training, Updated Dstar & ICOM Software, September Meeting Presentation – Drones & Practical Applications, TECH Committee Chair

Andrew A. Parker - WV1B National Museum of Industrial History

Barbara Wiemann - W3ATC Club Historian, Achieves

Barry Kery KU3X - Loaner Equipment Custodian

Barry Vogt N3NVA - Station Trustee, Repeater Maintenance, August Meeting Program "The W3OK Repeater System, Christmas Station, Reconnected the "VOTER RX"

Ben Ramig N3WR - Net Control Wednesday, RFI Committee, Field Day Team Leader - Computers / Network / Cables, Compilation of Field Day Logs

Bill Connelly W3MJ - Club Board of Directors

Bob Green KE3AW - Club Public Relations, Ham Class Organizer, Emmaus Halloween Parade Chairperson, Christmas Station, Baseball Night, By-Laws Committee, Coordinator of National Museum of Industrial History, Education Chairperson, Field Day Team Leader - Public Relations, Christmas Station

Bob Oppen NE2C - Christmas Station

Carl Seier AA3IX - National Museum of Industrial History

Chris Hornaman NU3L - Field Day

David Blankenship N3EYT = Club Badges, Event Photographer, Election Committee, Christmas City Station Chairperson, Emmaus Halloween Parade

David Eisenberg WA3HVR - National Museum of Industrial History

Dean Guth AB3BD - Board of Directors, Assistant Ham Instructor, WXMAS Trustee, Emmaus Halloween Parade, Field Day Team Leader - Safety Officer, National Museum of Industrial History

Don Holmes KC3II - Newsletter Editor, Net Manager, Net Control Wednesday

Donald W. Reamer KA3JWE - DLARC forum List Administrator

Doreen Gramling K3PDL - Social Activities, Christmas Station, 50/50 Raffle, Net Control Wednesday, Emmaus Halloween Parade, National Museum of Industrial History

Doug McNair N3WGH - Emmaus Halloween Parade

Ed Pitosky AA3OU - Wednesday Dinner Night, Beverage Chairperson for Christmas Party, Field Day Co-Chair for Food

Edward J. Neitz W3LUX - National Museum of Industrial History

Eric Harper KC3AOK - Emmaus Halloween Parade

Eric Lipscomb W3LJC - Field Day

Evelyn Uhler W3DOY - Program Chairperson, Accommodating Program Changes, Emmaus Halloween Parade, Christmas Station

Frank McGrath W3WOW - National Museum of Industrial History

Gabe Lantos KZ2A - Board of Directors Member

George Wieland N3SQD - Northampton County Emergency Coordinator, Ham Instructor, Net Control Wednesday, Halloween Parade Net Control, September Club Presentation Linux For Hams, Club ARES/RACES Chairman, Christmas Station, Field Day

Jay Mason N3OW - Christmas Station

Jim Matlack KC3MKP - Field Day Chairperson, Net Control Wednesday, Emmaus Halloween Parade, Christmas Station

Joe Garvey AB3OS - Christmas Station

JoAnn Schaffer ND3JJ - Club Secretary, Board Member, Net Control Wednesday, Christmas Station, Chairperson food for Christmas Party, Emmaus Halloween Parade

Joseph J. Matyas KC3IBL - National Museum of Industrial History

John Barbaz NT3P - VE Coordinator, Elections Committee Chairman, Field Day – Team Leader VE, Club Facebook Page Administrator

Lawrence Kaplan AB3TY - Secretary, Emmaus Halloween Parade, February Meeting program "CBD and You," Newsletter Circulation, Field Day

Larry Butler KC3JTK - March Meeting Program Arduino: What's All About, Field Day

Larry "Adam" Gauntz KC3OJA - Field Day, Christmas Station

Lester Morrow W3LES - Club Board of Directors, W3OK Station Manager, Christmas Station, Surplus Equipment Sale Chairperson, Field Day



Malcom "Skip" Leslie KD2BDA - Christmas Station, June Meeting Program "Whose Shack Is It?"  
 Mark Bond W2MB - Club Clothing Manager, Election Committee, Emmaus Halloween Parade, Christmas Station,  
 Program Chairperson  
 Mark Hilliard W3BQD - May Meeting Program "Powerline Interference Detective"  
 Mark Miller AK3M - Emmaus Halloween Parade  
 Marylou Parker WZ1X - National Museum of Industrial History  
 Maurice Heller KC3AVX - Emmaus Halloween Parade  
 Mike Gower KB3LOD - Club Treasurer, Board Member  
 Paul Morrison N3YNT - Newsletter Circulation  
 Pete Varounis NL7XM - By-Law Committee Chair, Door Prizes, January Program "I Remember Ray"  
 Rich Hurd WC3T – Webmaster  
 Rick Saeger K3OO - Christmas Station  
 Rob James AB3RC - Hamfest Committee  
 Ron Johnson N3ZO - Field Day  
 Scott Vanek KC3LNB - Field Day Chairperson, Net Control Wednesday, Emmaus Halloween Parade, Christmas Station  
 Skip Paulsen W1PV - Christmas Station  
 Stephanie Koles WX3K - Club President, Board of Directors, Hamfest Committee Chairperson, April Meeting Program  
 "Homebrew Night: Hands on Experience, Field Day FT8 Digital Platform Chairperson, National Museum of Industrial  
 History  
 Stephen J. Nordahl NS3L - Club Board of Directors, Field Day Satellite Communications Chairperson, Compilation of  
 Field Day Logs  
 Steve Harper W3NAM - Vice President, Net Control Wednesday, Field Day  
 Steve Levine K2OPA - Assistant Ham Instructor  
 Thomas Vogt W3HMX – National Museum of Industrial History

## **FCC RELEASES PROPOSAL FOR NEW FILING FEES STRUCTURE**

### **NEW FEES FOR HAM RADIO**

On Wednesday, the FCC released a Notice of Proposed Rulemaking (NPRM) in MD Docket 20-270 which implements portions of the Repack Airwaves Yielding Better Access for Users of Modern Services Act of 2018 (or RAY BAUM'S Act), which gives the FCC statutory authority to collect application fees. As a part of the Act, the FCC is required to switch from a fee structure mandated by Congress 20 years ago to a new cost-based system. This change will result in some fees being reduced and in some cases, such as the Amateur Radio Service, new fees are being added.

#### **Proposed new fees for Amateur Radio and reduction in GMRS fees**

Section 8 of the RAY BAUM'S Act does not provide any kind of statutory exemption for filing fees in the Amateur Radio Service, which, historically has had no filing fees. Citing the costs involved in the automated processes, routine maintenance of the Commission's Universal Licensing System (ULS) and limited instances where staff needs to be involved in the application process, the FCC is proposing an across-the-board fee of \$50 for new and modified licenses in the personal radio services, which includes Amateur Radio and the General Mobile Radio Service (GMRS). For GMRS, this is a reduction of the current \$70 fee. The FCC also proposes these fees for license renewals and requests for vanity call signs, the latter which had its filing fee eliminated several years ago. The FCC is proposing to still not charge for administrative updates, such as mailing address changes on amateur or GMRS applications. Amateur Radio will remain exempt from annual regulatory fees under Section 9 of the RAY BAUM'S Act.

#### **Commenting on the changes**

Once the NPRM is published in the Federal Register, filing deadlines for comments and reply comments will be established. Those dates will be announced by the FCC in a separate Public Notice. Comments will be accepted in the FCC's Electronic Comment Filing System under proceeding **20-270**.

A copy of the NPRM, which includes the proposed fee structures, can be found **here**. REC is still evaluating the NPRM and is not prepared to make a position statement, but plans to do so in a subsequent news release.

The RAY BAUM'S Act is part of Public Law 115-141 and can be found in [this PDF Document](#) starting on page 734 (Division P). The relevant part of the law starts on Page 736, under Section 8.

## **FCC APPLICATION FEE PROPOSAL PROCEEDING IS OPEN FOR COMMENT**

Comments are being accepted on the Notice of Proposed Rulemaking (NPRM) in MD Docket 20-270, which proposes application fees for radio amateurs. Formal deadlines for comments and reply comments will be determined once the NPRM appears in the Federal Register.

Comments may be filed now, however, by using the FCC's Electronic Comment Filing System (ECFS), located at, <https://www.fcc.gov/ecfs/filings>, and posting to MD Docket No. 20-270. The docket is already open for accepting comments, even though deadlines have not yet been set.

The NPRM can be found online in PDF format at, <https://docs.fcc.gov/public/attachments/FCC-20-116A1.pdf>

### **NEW MEMBER**

The DLARC is continuing to grow, so be sure to greet our new member, shake their hands, and give him a warm welcome to our club. The newest member is Dave Fuller / KC3PYP.

## W3OK CLUB STATION ANTENNA UPDATE

Our Skyhawk beam is now operational again. Thanks to Charlie Adams and Industrial Communications for getting the rotor lowered to the ground. And thanks to George N3SQD for the repair. Pictures include Climber on top of the tower, the inside of the broken rotor, and George replacing broken resistor.



de AI / W3CE

### FCC ORDERS AMATEUR ACCESS TO 3,4 GHz BAND TO “SUNSET”

Despite vigorous and continuing opposition from ARRL and others, the FCC has ordered the "sunset" of the 3.3 - 3.5-GHz amateur radio secondary spectrum allocation. The decision allows current amateur activity on the band to continue, "grandfathering" the amateur operations subject to a later decision. The FCC proposed two deadlines for amateur operations to cease on the band. The first would apply to the 3.4 - 3.5 GHz segment, the second to 3.3 - 3.4 GHz. The FCC will establish the dates once it reviews additional comments.

"We adopt our proposal from the Notice of Proposed Rulemaking to remove the amateur allocation from the 3.3 - 3.5 GHz band," the FCC said in its R&O. "[W]e adopt changes to our rules today that provide for the sunset of the secondary amateur allocation in the band, but allow continued use of the band for amateur operations, pending resolution of the issues raised in the Further Notice."

The Report and Order (R&O) and Further Notice of Proposed Rulemaking in WT Docket No. 19-348 adopted on September 30 followed a 2019 FCC Notice of Proposed Rulemaking (NPRM) in which the FCC proposed re-allocating 3.45 - 3.55 GHz for "flexible-use service" and auctioning the desirable "mid-band" spectrum (generally defined as between 1 GHz and 6 GHz) to 5G providers. These and other recent spectrum-repurposing actions stem from the MOBILE NOW Act, enacted in 2018, in which Congress directed the Commission to make additional spectrum available to auction for mobile and fixed wireless broadband. The FCC action is consistent with worldwide allocations adopted by the ITU for these frequencies.

**The Report and Order can be found online in PDF format at,**  
<https://ecfsapi.fcc.gov/file/1002214202488/FCC-20-138A1.pdf>

In the run-up to the Commission's decision, ARRL met with the FCC's professional staff to explain its concerns and to answer questions. Subsequently, ARRL met with the wireless advisors to the FCC Chairman and two Commissioners. In those meetings, ARRL reiterated

that continued secondary status for amateurs will not impair or devalue use of this spectrum by the primary licensees intending to provide 5G or other service. ARRL noted amateur radio's long history of successful coexistence with primary users of the 9 cm band, sharing this spectrum with the federal government users and secondary, non-federal occupants.

ARRL pointed out that vital links in amateur television and amateur radio high-speed mesh networks using the band have been especially valuable during such emergency situations as the wildfires currently raging on the west coast. Deleting the amateur secondary allocation will result in lost opportunities for experimentation and public service with no public interest benefit to make up for that.

ARRL argued that deleting the secondary allocation would waste the scarce spectrum resource, particularly in areas where commercial services often do not construct full facilities due to small populations. The FCC action means that amateur radio will lose access to the 3.5-GHz secondary allocation even where commercial operations do not exist. ARRL told the Commission that it should not intentionally allow this spectrum to be vacant and unused, wasting the public resource, when amateurs can use some portion of it in many geographic areas with no detriment to any other licensee, just as it has in the past. ARRL argues that amateur operations should be permitted until and unless an actual potential for interference exists.

Deletion of the 3.3 - 3.5 GHz secondary amateur allocation will become effective on the effective date of the FCC's order, but amateur radio operation as of that date may continue while the FCC finalizes rules to license spectrum in the 3.45 - 3.55 GHz band and

establishes deadlines for amateur operations to cease. The FCC proposed allowing amateur operation in the 3.3 - 3.4 GHz portion of the band to continue "pending further decisions about the future of this portion of the spectrum," the timing for which is unknown. The

Commission proposed to mandate that operations cease in the 3.4 - 3.5 GHz portion when commercial licensing commences for the new 3.45 - 3.55 GHz "5G" band, which is predicted to begin in the first half of 2022.

"[W]e seek comment on whether it is in the public interest to sunset amateur use in the 3.3 - 3.55 GHz band in two separate phases, e.g., first above 3.4 GHz, which is the focus of [the R&O] and later in that portion of the band below 3.4 GHz," the FCC said.

ARRL expressed gratitude to the many members and organizations that joined ARRL in challenging the FCC throughout this nearly year-long proceeding. They included multiple radio clubs, weak signal enthusiasts, moonbounce participants, and the Amateur Radio

Emergency Data Network (AREDN), the Amateur Television Network (ATN), AMSAT, and Open Research Institute (ORI).

ARRL will continue its efforts to preserve secondary amateur radio access to 3.3 - 3.5 GHz. Members are invited to share comments by visiting <http://www.arrl.org/3-GHz-Band>.

"We recognize that any loss of our privileges will most directly impact radio amateurs who use the frequencies to operate and innovate," said ARRL President Rick Roderick, K5UR. "Such instances only embolden ARRL's role to protect and advocate for the Amateur

Radio Service and Amateur Satellite Service. There will be continued threats to our spectrum. So I urge all amateurs, now more than ever, to strengthen our hold by being ceaseless in our public service, experimenting, and discovery throughout the radio spectrum."

### REFLECTIONS FROM THE PAST



Barry / KU3X Program on Baluns

### W3OK CLUB STATION

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

de Steve / NS3L

### WEDNESDAY EVENING DINNER CLUB

The Wednesday Evening Dinner Club is on hold until further notice due to the COVID-19 Pandemic. Listen to the nets and watch the Forum for the latest information on our get together.

### 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](mailto: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.



## RACES EMERGENCY REQUIREMENTS

As of September 2006, NIMS IS-700 and ICS-100 course certifications are required in order to receive the county issued photo IDs. The photo IDs are required by federal law for participation in, on site RACES emergency operations. These courses can be taken on line by going to [www.fema.gov](http://www.fema.gov) and following the directions. These requirements are not needed to participate in the weekly Wednesday nets. The only requirement for these nets is a valid amateur radio license and an interest in emergency communications.

## ARISS TO CELEBRATE 20 YEARS OF HAM RADIO ON THE INTERNATIONAL SPACE STATION

Amateur Radio on the International Space Station (ARISS) will soon celebrate 20 years of continuous ham radio operations on the International Space Station (ISS). NASA is commemorating the milestone with a newly produced [infographic](#) highlighting the educational contacts via amateur radio between astronaut crew members aboard the ISS and students. Over its 20 years, ARISS has supported nearly 1,400 scheduled ham radio contacts with schools, student groups, and other organizations.

Planning for ARISS began in 1996 as a cooperative venture among national amateur radio and amateur satellite societies, with support from their respective space agencies. The ARISS ham radio gear actually arrived on the station before the Expedition 1 crew, headed by Commander Bill Shepherd, KD5GSL. The FCC issued ham radio call sign NA1SS for ISS operations. After Expedition 1 arrived on station, some initial tests with ARISS ham radio ground stations and individual hams confirmed the ham gear was working properly. The first ARISS school contact was made with students at Luther Burbank Elementary School in Illinois on December 21, 2000, with Shepherd at the helm of NA1SS on the ISS, and ARISS operations team mentor Charlie Sufana, AJ9N, guiding the operation on the ground.

NASA produced a [video](#) of students talking with astronaut Chris Cassidy, KF5KDR, during an ARISS contact in May 2020.

Before and during scheduled ham radio contacts, students, educators, parents, and communities learn about space and related technologies, and radio communication using amateur radio. ARISS has inspired thousands of students, promoting exploration through educational experiences spanning science, technology, engineering, the arts, and mathematics.

ARISS relies on a large network of amateur radio operator volunteers, many associated with radio clubs in the communities where students and groups participating in the contact reside. ARISS volunteers support satellite ground stations, serve as technical mentors, and provide additional help in the areas of education, community outreach, and public relations.

While student-to-astronaut radio contacts are a primary objective for ARISS, the capability has also inspired further experimentation for amateur radio in space and evaluation of new technologies. In September, ARISS [announced](#) that the initial element of its next-generation ham radio system had been installed in the ISS *Columbus* module. The new radio system replaces equipment originally certified for spaceflight in mid-2000. The onboard ham station also provides a contingency communications system for the ISS crew. Several astronauts have also enjoyed using NA1SS to make casual contacts with — and delighting — earthbound members of the ham radio community.

In the US, ARISS sponsors include [ARRL](#), [AMSAT](#), and NASA, the ISS National Lab-Space Station Explorers, and NASA's Space Communications and Navigation program. Global organizing partners include International Amateur Radio Union (IARU) member-societies as well as AMSAT organizations, and space agencies in Canada, Europe, Russia, Japan, and elsewhere.

The next proposal window for US schools and educational organizations to [host an amateur radio contact](#) with a crew member on board the ISS opened on October 1 for contacts that would take place from July through December 2021.

Like many educators who have coordinated ARISS radio contacts for their students, teacher Rita Wright, KC9CDL, an ARRL member, described the first ARISS school contact as inspirational and having a lasting impact on their community. Five months after their contact, nearly 500 students greeted Bill Shepherd when he visited Luther Burbank School. Wright said it was “like tossing a pebble into a stream.”

“The ripple effects are still occurring, and I suspect will continue to occur for a long time,” she said. “We have a young staff, and witnessing these events has inspired some to look for other interdisciplinary projects. They are beginning their dream. Many of our students are looking forward to careers associated with the space

## DLARC SHIRTS AND JACKETS

DLARC members, there is available club shirts and jackets. The shirts are short sleeved polo shirts in royal blue with the club logo and your call sign. The jackets are fleece line nylon in royal blue with the club logo and your call sign. Order form and related information is on the DLARC website.

## THE BONES OF AN ORGANIZATION

**The body of almost every organizations as 4 kinds of bones:**

**The Wishbones** – Who spent all their time wishing someone else would do the work..

**The Jawbones** – Who doing all the talking but little else.

**The Knuckle bones** – Who knock everything that anybody else tries to do.

**The Backbones** – Who get under the load and do the work.

**F.Y.I.**

The December Program will be **On Hold due to COVID 19**

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.

**EXECUTIVE COMMITTEE 2020– 2021  
OFFICERS**

President – Jim Matlack / KC3MKP ----- president@dlarc.club  
Vice President – Steve Harper / W3NAM ----- vicepresident@dlarc.club  
Secretary – Larry Laplan / AB3TY ----- secretary@dlarc.club  
Treasurer – Larry Butler / KC3JTK ----- treasurer@dlarc.club

**BOARD of DIRECTORS**

Gabe Lantos / KZ2A ----- gpl-3639@gmail.com  
Dean Guth / AB3BD ----- babydean1@hotmail.com  
Stephanie Koles / WX3K ----- wx3k@arrl.net  
Steve Nordahl / NS3L ----- ns3l@yahoo.com  
John Barbaz / NT3P ----- n3p@arrl.net

Last director to be filled at a later date

**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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