



April 2018 April 2018

Contents March Club Meeting - The Program Was Presented by Joe Sullivan, Giving Old Technology a New Life in the Modern World 4 Newton's Attic a Good Source for Reaching Out to Youth 6 It's The Rule - Why ARRL is Recommending Enhanced HF Minutes of the Bluegrass Amateur Radio Society, Inc., Looking Back . . . From "QUA/HAMnews," April 2006, Page 4 Cover Story - SERA Journal, February 2006 "KB8QLC/KA4MKG Calendar of Ham Radio Activities for April 2018 Inside Cover

Published and Distributed Monthly by the

Bluegrass Amateur Radio Society, Inc.
P.O. Box 4411, Lexington, Kentucky 40544-4411
Club Station K4KJQ
MARS Station AAV4CAB

Glenn E. Welman/KF4NB
Memorial BBS
145.010 and 145.090

K4KJQ
ATV Repeater: KY4ATV
Input: 439.250 // Output: 923.250

MARS Station AAV4CAB

Web Page: http://www.bluegrassars.org
E-mail: k4kjq@bluegrassars.org

"Ham News" was first published by Bobby Foster, WA4ZSQ, in August, 1972; the parent newsletter, "QUA," was first published in March, 1947

QUICKY NOTES

Accessing the Club's web page: http://www.BluegrassARS.org.

Telephone Number for the Shack (basement of the Red Cross Building): (859) 231-0974.

Subscribe to ListServ: Send an eMail to: bars-request@lsv.uky.edu; in Subject line type Subscribe plus <your call sign>

Post notes to the Club List Serv: <bars@lsv.uky.edu>.

-- THE PROGRAM FOR THE APRIL MEETING . . .

. .will be a discussion of the design and construction/use of an Eggbeater Omni-Directional antenna. . .(see "Meeting Notice" below).

-- JAWS SWAP MEET --

Jessamine Amateur Wireless Society will hold a Swap Meet in the parking lot of Saint Joseph Jessamine, RJ Corman Ambulatory Care Center, 1250 Keene Road, Nicholasville, Kentucky (across from Lowe's and visible from the bypass), Saturday, May 5 at 10:00 AM – 12:00 PM.

-- NEEDED, CHAIR/EDITOR OF THE NEWSLETTER COMMITTEE --

I decided some time ago that effective on my 80th birthday I

would retire as chair of the Newsletter Committee, and thus as editor/publisher of the Club's newsletter. I volunteered to take on the responsibilities in 1983 when the person who was editor/chair at that time was elected president of the Club. I had planned to give the responsibility back to him (Sam Humphries/WA4KKV) when he had fulfilled his duties as president for a two-year term in office. Well, I'm still doing it and it has been 35 years. My, my time really does fly when you're doing something you enjoy. So, it is time to pass the responsibilities on to someone new, and younger -- Ha! No hurry since I plan to finish this calendar year, but we need someone to at least consider taking this position on. . .Bill/

N4DIT STATUS OF JAWS REPEATERS UPGRADE —

Currently, the status of the JAWS repeaters is that both Yaesu DR-2X repeaters are mounted in the rack and operational. The 2M side is fixed on FM only at 25W output, and the 440 side is FM/Digital running 20W. Both Henry 100W amplifiers are mounted in the racks and RF cables are ready for install. Cutover to the new amplifiers and running at 100W will take place sometime in the spring. Right now we need to get some activity on the two repeaters and flush out any bugs. The next steps for the upgrades to the JAWS repeaters are: 1) Install the two Astron 50A power supplies in the rack. They are HEAVY and I will need one or two people to assist me getting them in place; 2) purchase two 12V AGM batteries for the battery backup of the repeaters. Each battery will serve one repeater and amplifier. The repeaters support automatic cutover from AC to battery in the event of an AC power failure; 3) purchase a second Deltran 4-phase charger for the second battery, as well as appropriate cabling for the second repeater.

QUA/HAMnews

April 2018

Meeting Notice

Bill DeVore/N4DIT,

Chair, Newsletter Committee Bluegrass ARS, Lexington, Kentucky

The general meeting of the Bluegrass Amateur Radio Society, Inc., will be held Monday, April 2, 2018, at 7:30 PM in Meeting Room B, second floor of the Red Cross Building, 1450 Newtown Pike, Lexington.

The program will be presented by Program Committee chair **James Schlesser/WA9MED.** James will give information on a homebrew-type antenna, the omnidirectional antenna called the eggbeater. The eggbeater is said to be a high-performance, circularly polarized omnidirectional antenna that is easy to build, easy to tune, inexpensive, and will work all the mode J Low Earth Orbit (LEO) satellites. (Jerry/K5OE describes his experience with building eggbeaters at http://wb5rmg.somenet.net/k5oe/Eggbeater_2.html). He says "I have built several of the traditional "eggbeaters" from plans floating around on the Internet, but was never satisfied with the overall performance. This design is the outcome of my investigations into methods of improving the performance of the "original" eggbeater without obviating the simple construction.

Location of the program will be Meeting Room "B," second floor of the American Red Cross Building, 1450 Newtown Pike, Lexington, Kentucky (take exit 115 off I-64/I-75 and travel toward downtown Lexington. The building is less than one mile from the exit, on the left).

We welcome your suggestions of how we can make a difference in the Club in 2018, and Amateur Radio in central Kentucky, and thank you for your participation and support.

If you have a program you would like to hear or a topic you would like to present, contact **James Schlesser/WA9MED** at (757) 478-2186, or e-mail to <wa9med@jschlesser.com>. (see the schedule on page 2). ◆

Board of Directors' Meeting

Bill DeVore/N4DIT, Chair, Newsletter Committee Bluegrass ARS, Lexington, Kentucky

The Board of Directors of the Bluegrass Amateur Radio Society, Inc., will meet Monday, April 16, 2018, at 7:30 PM in



"We must reject the idea that every time a law's broken, society is guilty rather than the lawbreaker. It is time to restore the American precept that each individual is accountable for his actions."

~ Ronald Reagan

the Education Center, basement of the Red Cross Building, 1450 Newtown Pike, Lexington.

Board meetings offer you the members, or anyone having an interest in amateur radio or public service, a forum to present your ideas, requests, congratulations or complaints to the officers and committee chairs of the Club. We always are in need of persons to share their expertise in a special area or to share an experience or activity by presenting a program at the Club's regular monthly meeting, or to make suggestions for program topics. Anyone wishing to present a program or who has suggestions for programs, should talk to James Schlesser/WA9MED, during a Club meeting, or contact him at (757) 478-2186, or e-mail to <wa9med@ jschlesser.com>.

Note that we still need volunteers to chair the Public Relations and Membership Committee. Contact **Andrew Cook/KF4OWP** at <kf4owp@gmail.com> or (859) 396-9930.

To attend the board meeting, enter the Red Cross building through the basement entrance on the left end of the building as you stand facing the front of the building. Follow the stairway down into the basement and into the Education Center adjacent to the Club shack. +

March Club Meeting

The Program Was Presented by Joe Sullivan, U.S. Weather Service, Louisville

The March general meeting was conducted by Secretary **Bruce Campbell/KM4EHU.** The program, sponsored by Bluegrass Chapter American Red Cross, LFUCG EOC, National Weather Service, Louisville, and Bluegrass ARS, was presented by **Joe Sullivan/KC7ITG**, meteorologist with the NWS, Louisville, Kentucky. The program was the Club's annual advanced training session for spotting, identifying, and reporting severe weather. The 46 attendees included 21 licensed amateur radio Bluegrass ARS members, 13 nonmember licensed ham operators, plus 12 additional participants.

Joe came to Lexington from Louisville to present the Club's annual weather spot-

ting/identifying program. He was welcomed by all those in attendance, and following his presentation signed certificates of successful completion of the course and thanked everyone for attending.

An abbreviated General meeting was held following the SkyWarn program. •



Program Schedule for 2018

James Schlesser/WA9MED, Chair, Program Committee Bluegrass ARS, Lexington, Kentucky

The following programs are scheduled for 2018. Your input and suggestions for programs for 2018 are needed. Call **James Schlesser/WA9MED** at (757) 478-2186, or e-mail to <wa9med@jschlesser.com>.

Month	Topic Presenter(s)	Comments	
√ January	"Winter Field Day, January 27-28, 2018" David Richardson, W9KHZ .		
✓ February	"Software Defined Radio (SDR)" James Schlesser/WA	A9MED What Programs Would You Like to Hear?	
✓ March	"Severe Weather Identification and Reporting" Joe Sullivan/KC7ITG of the NWS, Louisville		
April	"Design and Construction/Use of an Eggbeater Omnidirectional Antenna" James Schlesser/WA9MED		
May	Open		
June	"Field Day" (Presennter Pending) Site location, preparation, operating stations, etc. Open		
July			
August	Hamfest Dave Richardson/W9KHZ and Fest Committee Location, preparation, tickets, tables, work crews, etc. Der Annual Family Picnic Fun, Food, Conversation Picnic Shelter #2, Shillito Park, Lexington		
September			
October	Open		
November			
December			

Report #1 of the Bylaws Committee, March 6, 2018

Recorded and submitted by **Bruce A. Campbell, KM4EHU**Secretary

In attendance:

Andrew Cook, KF4OWP, John Barnes, KS4GL, Bruce Campbell, KM4EHU, David Richardson, W9KHZ, Brad James, WA4HBM.

Plan of Action:

- 1. Complete review, and rewrite as needed, article-by-article of current Bylaws (revised December, 2016).
- Emphasize simplification of Bylaws, and adoption of Standard Operating Procedures which can be modified as needed by committee and Directors without need for general membership vote of approval.
- Completion of updated Bylaws targeted for August, 2018, for presentation to Directors for approval, and vote of acceptance and adoption by general membership by year-end 2018.
- 4. Bimonthly meetings at 6:00pm before the General and Director's meetings on the first and third Mondays, respectively, of each month beginning on March 19, 2018.
- Report progress to the directors periodically.

Preparation for next meeting at 6:00pm on March 19th.

- 1. Review preamble and Articles I, II, III, IV for proposed updates and changes.
- Review JAWS (Jessamine Amateur Wireless Society) Bylaws as suggested model and example.
- Develop an organization chart illustrating the composition of the club officers and committees.
- 4. Review ARRL website: Home>Get Involved>Clubs>Tips & Resources For Clubs (learn more)>ARRL Affiliated Clubs>Sample Constitution, for form and content suggestions of constitutions and bylaws, plus also the Rules and Regulations for ARRL Affiliated Clubs.
- Contact Blain Early, KM4ZFQ, to ask for assistance with an acceptable document structure of the Bylaws. (Blaine was contacted on Sunday, March 11th, and agreed to attend as his schedule allows.) •

Have you been wanting to get on the air but don't have a rig? How about operating in a HF DX or VHF/UHF contest? The shack is open most Saturday mornings, 9:00 AM until Noon, so come on out! Arrangements can be made for other times. Telephone the shack at 231-0974.

Is It April 1 Yet?



Ernie Pridemore/W4HLNposted in JAWSK4HH
February 5, 2018

Heard the FCC just approved the "TEXZON" experimentation license. Possible nightmare for HF noise the likes of that we haven't heard since the Russian Woodpecker? I'd bet so!

Quote

"A Zenneck Surface Wave is an electromagnetic wave that uses the surface of the earth as a waveguide enabling it to carry communications signals or electrical power efficiently over long distances."

This wireless power system will employ a "transmitter probe," located near a power generation plant, to launch a Zenneck carrier wave. Receiver antennae will be positioned appropriately around the world to receive the signal and download the power into a local microgrid or conventional grid architecture.

The wave is impervious to weather effects such as lightning or geomagnetic disturbance or electromagnetic pulses (EMP), including those associated with a nuclear detonation. Unlike a wired grid, the Zenneck wave cannot be physically attacked and cyber attacks would be challenged to target or cause cascading failures to a wireless system.

When launched, the Zenneck Surface Wave literally envelops the planet like a balloon, enabling transmitter probes to be placed anywhere power can be generated and receivers to be placed anywhere power is needed. "EOQ"

http://www.texzontechnologies.com/

Preselector for SDR Receivers

Bill Cotter/N4LG <n4lg@QX.NET> March 10, 2018 via bars@lsv.ukv.edu

Described on the web page below is a great addition to the SDRplay or SDR

other receivers to keep strong out-ofband signals from trashing the received copy. Be aware there are other similar designs, components, available on the web.

73 Bill N4LG

Are you building a multiband receiver for HF? Or an HF up-converter for SDR? The HF ham-bands pre-selector module described here (https://www.svlafn.com/ham_band_ presel.html) can be used to enhance reception performance on all amateur bands by significantly reducing the signal strength of most unwanted signals outside those frequency bands, and will greatly improve IMD response. If you have never used a filter before your HF upconverter for SDR you can immediately see that it greatly improves receiver performance on the wanted frequency band by rejecting most unwanted.

The design uses RF type 5V DC relays to activate one band-pass filter every time, as selected by the control connector pins. Each band-pass filter uses two variable shielded inductors and three capacitors.

For even better results you can easily cascade two of those modules and use one HF preamp between them.

Rather than selecting one of the nine band-pass filters, one for every amateur radio band, a bypass function is available to switch out the preselector, if reception to any out of bands signal is needed.

In addition, any external fixed or variable attenuator can be switched in or out at the input, using an on-board relay and SMA connector and any external preamplifier can also be switched in or out of the circuit after the filters.

Hand-operated selector type switches can be used and any type of microcontroller interface, such as 2N7002 MOSFET, can be used for driving the relays.

The relays are powered by a 5V DC input, while the selection is done by applying a 3.3V high to each MOSFET gate. Remember to apply LOW (or 0V) to deselect before or after selecting another filter. Every relay needs about 30-50 mA so the total current per module for the 5V supply can be 150 mA max if the attenuator and preamp relays are energized altogether.

For additional information about preselectors, design, components, etc., in your web search bar type: *Preselector for SDR Receivers.* •

Greater Mason County News and Raffle

Brent Wells/N4BDW, Sent from my iPhone

Same day as the Portsmouth (OH) Hamfest, April 21, the Greater Mason County ARA has a big day planned! We are not only having a test session that morning at 10:00 AM at the Maysville Community College, BUT.....several of our members, including myself, will be aiding and lending communications for the "Two Bridge Run 10 Miler and 5K Run/Walk," (https://runsignup.com/Race/KY/Maysville/TwoBridgeRun). We will be coordinating with the Maysville Police Department and have members positioned along the route to detail progress of the runners.

I would also like to announce that the Club is making efforts to replace the Maysville repeater with a newer model, hopefully Fusion capable to match and work with our newly upgraded Beechburg machine. To do so, the Club has purchased an Icom IC7300 and are selling 100 tickets at \$20 each, toward each radio. Not sure yet myself when we will be doing the raffle, but I'll find out that information. This is NOT the only time we'll do this, as we plan to do several of these radios over the summer (one at a time) with all the money to go into the repeater fund. If ANYONE would like to buy tickets, they can email me (N4BDW73@gmail.com) or call me (606-301-1545) and I really hope many people are willing to help us work toward improving this aged machine!! ◆

Dale's Tales

Dale Williams/WA8EFK, Director ARRL Great Lakes Division, wa8efk@arrl.org

Greetings everyone, welcome to "Dale's Tales" for March 2018.

"So close and yet so far" as the 3Y0Z effort to put Bouvet on the air again has been delayed. The other interesting news is that the 3Y0I team who also has plans to activate Bouvet is continuing that effort. 3Y0I had delayed their schedule to allow 3Y0Z the earlier opportunity to activate. This may get very interesting as the 3Y0Y team turned down the offer from 3Y0I to collaborate for the effort.

A word about our QSL Bureaus. Two Bureaus serve the Great Lakes Division as we fall into two different call areas, 4-Land and 8-Land. Each bureau operates slightly differently, but each provides the same "Whatever you may look like, marry a man your own age. As your beauty fades, so will his eyesight."

~ Phyllis Diller

service, getting our foreign QSL delivered to us. NO, it is not totally automatic; you must provide the bureaus with postage and/or self-addressed envelopes to get your cards delivered. Each group will let you know the method they prefer. Still it all works very well and we owe a debt of gratitude to the many folks that work together to make this happen.

Basically, it typically works like this: the incoming cards are

received at a central point for the respective call areas and are then sorted and bulk shipped to "Letter Managers". The Letter Manager completes the sorting process and stuffs the cards into individual envelopes we supply, and mails them to us when enough cards have been accumulated. Sounds simple but keep in mind that there is an individual letter manager for the first letter in the suffix of the recipient's call. Mine is the "E" manager for example. Ten call areas times 26 letters means as many as 260 people sorting across the USA and each Letter Manager may have a couple hundred envelopes on hand. They really do deserve some thanks, don't theu?

To learn more about the QSL Bureau service in the Great Lakes Division check out the following URLs. The 8th Bureau has its own web page and the 4th is linked to the ARRL page.

8th AREA: http://arrl-greatlakes.org/8th bureau.htm

4th AREA: http://www.arrl.org/incoming-qsl-service

TOM'S COMMENTS: Comments from our Vice Director **Tom Delaney W8WTD**

February saw me attending more club meetings than normal. I was trying to get around and discuss some of the changes at ARRL. Thank you all for your hospitality and your willingness to discuss issues of importance to you and the League.

I was especially pleased to get your reactions on some of the work the various committees are doing on advancing education, both for our newest hams, and for all of us.

I'd say more, but for the past several days I have been working mostly full-time with the Red Cross on the Disaster Relief operation for the Ohio River flooding. So these brief remarks will have to do for this month.

A quick note on ham radio communications. There has been no communication outage, so ham radio has not played a role in this effort. But I was impressed with the preparation and coordination of the ARES teams locally and at the state level to make sure they were ready to respond if necessary. There will be communications needs in some future disaster. We just don't know where or when. So keep your batteries charged.

--73, Tom W8WTD, Vice Director, ARRL Great Lakes Division

CONVENTIONS: Hamvention® will host the ARRL Great Lakes Division Convention this year, by special request, May 18-20. Be sure to get it on your calendar. Hamvention's new venue in Xenia worked well last year and another building has been added for vendor use. Check out their web site for the latest information. http://hamvention.org/

In even numbered years, the ARRL Great Lakes Division's three Sections normally host their individual State Conventions. Kentucky's ARRL State Convention will be hosted by the Greater Louisville Hamfest in Shepherdsville, Kentucky, September 8, 2018 (see http://louisville hamfest.com/); Michigan's State ARRL Convention will be held at HamCon Brooklyn, Michigan, October 6-7 (http://glhamcon.org/); and while not a state convention, Ohio will be holding the Ohio Section Conference in conjunction with the Columbus Hamfest, August 4, 2018 (see http://columbushamfest.com/).

HAMFESTING: Here is the current Great Lakes Division ARRL Sanctioned Hamfest Schedule (for fests located within driving distance of central Kentucky) covering the next couple of months. These swaps have received their sanctioning approval from ARRL HQ at the time of this publication. We have approximately 65 ARRL hamfests each year in the Division. I do encourage each Hamfest Chair to register early for ARRL sanctioning. Be sure to invite your ARRL Officials as soon as your date is set.

4/7/18 Lincoln Trail, Elizabethtown, KY 4/21/18 Portsmouth, OH

4/28/18 RCARA Tailgate, Ashland, KY

Be sure to check your Section's news pages for the latest local happenings, club, and net information. •

Giving Old Technology a New Life in the Modern World

by **Andrew Schmertz**, Correspondent, February 23, 2018 https://www.njtvonline.org/news/video/ giving-old-technology-new-life-modernworld/

Submitted by **Pete Kragh/K2UPD**

You may think ham radio is part of the same bygone era of telegraphs, fax machines, and scenes from the Netflix show,

"Stranger Things," but students at the New Jersey Institute of Technology are giving the century-old technology a new voice in this social media world.

"That is probably my favorite part of ham radio, just the ability to talk, to be able to talk, to so many people from around the world, from so many different backgrounds

Andy Rooney wrote that . . .

... "Computers may save time but they sure waste a lot of paper. About 98 percent of everything printed out by a computer is garbage that no one ever reads."

Schedule for Volunteer Examinations in 2018

Harry Sparks/KN4S,*

Bluegrass Volunteer Examiners, kn4s@kn4s.com

The exam schedule for 2018 follows nearly the same format as past years. The scheduling is for Lexington/Fayette County and the sessions in Danville, Georgetown, Winchester, and Richmond hamfest. The Bluegrass Amateur Radio Society-sponsored ARRL exams will continue to be held on the second Saturday of the second month of each quarter (except the August Session will be the date of the Central Kentucky ARRL Hamfest in Lexington), and the WCARS sessions remain as they were last year, Tuesday evenings quarterly.

Test Session Locations

Lexington*	Winchester**	Danville	Georgetown
Red Cross Building	Clark County EOC	Amer Legion Post 46	Georgetown Police Dept
1450 Newtown Pike	200 Maryland Ave	45 Spears Lane	550 Bourbon Street
Lexington KY 40509	Winchester KY 40391	Danville KY 40422	Georgetown KY 40324
* August, Bluegrass ARS Hamfest, Eastland Shopping Center, Lexington, Kentucky			

** September, Richmond Hamfest, Madison County Fairgrounds, Richmond, Kentucky

Contact Information

ARRL VEC: Lexington and BARS ARRL Hamfest test sessions – Liaison Fernie

Williams/KE4MAI, ke4mai@arrl.net, 859-652-3393

(www.bluegrassars.org)

Danville – Liaison John Wulf/K4FT, johnk4ft@gmail.com, 563-505-

0339, Wilderness Road ARC, http://www.wrarc.com Georgetown – Liaison **Ron Malinowski/WX4GPS**,

wx4gps@arrl.net, 502-542-8252

WCARS VEC: Lexington - Liaison Margueritte Williams/KE4MAJ,

ke4maj@arrl.net, 859-489-6274 (www.bluegrassars.org)

W5YI VEC: Winchester - Liaison Darrell Epperson/AC4YD,

eppersond@aol.com, 859-771-1834

TEST SESSION FEE: ARRL - \$15; WCARS - \$10; W5YI - \$14

Date and Time		VEC	Location
Saturday, April 14 , 2018	10:00 AM	W5YI	Winchester
Saturday, April 28, 2018	10:00 AM	ARRL	Danville
Saturday, May 12, 2018	10:00 AM	ARRL	Lexington
Saturday, June 9, 2018	10:00 AM	ARRL	Georgetown
Tuesday, June 19, 2018	07:00 PM	WCARS	Lexington
Saturday, July 14, 2018	10:00 AM	W5YI	Winchester
Saturday, July 28, 2018	10:00 AM	ARRL	Danville
Saturday August 11 , 2018	11:00 AM	ARRL I	BARS Hamfest
Saturday. September 8, 2018	10:00 AM	ARRL	Georgetown
Saturday, September 15, 2018	12:30 PM	W5YI **F	Richmond Hamfest
Tuesday, September 18, 2018	07:00 PM	WCARS	Lexington
Saturday, October 13, 2018	10:00 AM	W5YI	Winchester
Saturday, October 27, 2018	10:00 AM	ARRL	Danville
Saturday, November 10, 2018	10:00 AM	ARRL	Lexington
Saturday. December 8, 2018	10:00 AM	ARRL	Georgetown
Tuesday, December 11 , 2018	7:00 PM	WCARS	Lexington

*Additional exam locations, dates, times are listed at website kn4s@kn4s.com

and exchange some simple data. It's a lot of fun," said **Josh Vega**, a junior at NJIT.

During and after the hurricane in Puerto Rico, ham radio was often the only way to communicate with emergency first responders. It doesn't need Internet access or cell phone towers to work, and the signal can travel around the world.

"When they had the major hurricane season that knocked out many of the communications systems and power on the island, amateur radio was the primary form of communication back to the United States," said **Nathaniel Frissell**.

Frissell is an assistant research professor and founder of HAMSCI, a group formed to join hams and scientists. NJIT held a conference in February to review data collected by ham radio operators during the solar eclipse. The purpose was to find out how part of the atmosphere that carries radio signals was affected.

"The conference joins ham radio operators and professional scientists, and we're very interested in studying the electrically charged portion of the upper atmosphere known as the ionosphere," said Frissell.

"Just getting into it you learn how far your radio signal can go. It depends on so many things in the atmosphere – how the sun is doing, how many sunspots there are. It doesn't surprise me at all that people can do real important science with it," said **Kyle Watt**, a senior at NJIT.

"There's a generation gap. Everyone now has cell phones, Olivia, and the Internet, and to learn you can do this all through radio waves, between AM and FM, it really encouraged a lot of them," said **Andrew Gerrard**, professor of Physics at NJIT. \bullet

Amendment to ARRL DXCC Rules

DX Bulletin 4 ARLD004 From ARRL Headquarters Newington CT, January 23, 2018

The ARRL Board of Directors approved a motion to amend the DXCC Rules, when it met January 19-20. Section II, Subsection 1 of the DXCC Rules now will include

a new Subsection (d): The entity has a separate IARU member society and is included on the US State Department Independent States in the World (https://www.state.gov/s/inr/rls/4250.htm) .

"The discussion during the Board meeting and the rule change did not address any specific entity," ARRL Radiosport Manager Norm Fusaro, W3IZ, said. "The amendment could allow some additions to the current DXCC List of entities. It's a good thing not only for DXCC but for all active hams."

In fact, the Republic of Kosovo (Z6) has been added to the DXCC List of current "A man who has committed a mistake and doesn't correct it is committing another mistake."

~ Confucius

entities, increasing the total number of current DXCC entities to 340. The addition of Kosovo raises to 331 the required number of current entities confirmed to qualify for DXCC Honor Roll; Top of Honor Roll is 340. DXCC award accounts are being tabulated to reflect the change.

A new Logbook of The World (LoTW) TQSL configuration file (v.11.4) will be re-

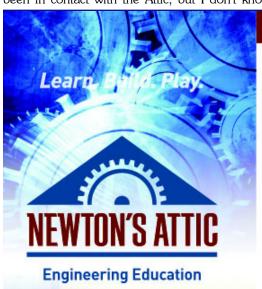
leased January 23. TQSL will detect when this file has been released and will install the update automatically. Radio Amateurs outside of Kosovo should continue to upload their logs to LoTW in the usual manner. LoTW users within Kosovo (either with a Z6 call sign or reciprocal call sign Z6/home call sign) will use TQSL to request a new call sign certificate for their call sign. The request will use Republic of Kosovo as the DXCC entity, and the QSO Begin date will be January 21 or later. LoTW will reject call sign certificate requests for the Republic of Kosovo with a QSO Begin date prior to January 21. Prefix Z6 users requesting call

Newton's Attic a Good Source for Reaching Out to Youth

Pete Kragh/K2UPD,

Member, Bluegrass ARS, Lexington, Kentucky

Here is the brochure for Newton's Attic. This may be a good program to do some PR for ham radio, give out our brochures and literature, make a presentation, demo drones, operate a QRP field station on their campus, etc. Woodford County ARC has been in contact with the Attic, but I don't know to what extent.







A Mechanalia student designed and built her own robotic arm and gripper during a week-long summer day cases.

Our Mission

Our mission is to stimulate interest in science and engineering through exciting, hands-on projects, classes, and summer camps.

"Newton's Attic's approach can inspire students. If they see how math and science can be fun, exciting and useful, they will be more likely to give it a chance."

 Dr. Bruce Walcott, Associate Dean of Engineering, University of Kentucky





4974 Old Versailles Rd. • Lexington, KY 40510 859.368.7334 • Email: Bill@NewtonsAttic.com

About Newton's Attic

Newton's Attic, a 501c3 nonprofit founded in 1998 by Bill Cloyd, is dedicated to providing students with highly unusual educational experiences and providing STEM [Science, Technology, Engineering, and Mathematics] educational resources to parents, students and teachers at all grade levels. Newton's Attic has worked with numerous middle and high schools and groups in Fayette and surrounding counties as well as the

University of Kentucky, Berea College, EKU, WKU and with students from as far away as Colorado, who have traveled to participate in the unique programs.

Frustrated by the confines of the classroom, Cloyd was inspired to create Newton's Attic where he developed a highly engaging approach to educating students about the excitement, fun, and career opportunities available to them through physics and engineering. Using the concept of play as the ultimate learning tool, Cloyd now has a library of programs that allow students to engage in hands-on design, fabrication and field-testing of their own mechanical devices in highly energized and competitive environments. Cloyd is a professional mechanical engineer.



Bill Cloyd works with a Wrestling Robots student during summer camp.

sign certificates may e-mail a copy of their Amateur Radio license to, LoTW-Help@arrl.org.

Kosovo's IARU member society, SHRAK (http://www.shrak.org/en/) and its president, **Vjollca Caka, Z61VB**, are hosting a 10th-anniversary activation to celebrate Kosovo's independence in February, 2008.

SHRAK Headquarters station Z60A now is active on several bands with multiple guest ops. Club Log will be used for this activation, while QSLs are via OH2BH. •

German Amateur's Call for Help Goes Global

Ed Durrant/DD5LP,

Amateur Radio Newsline, Report 2108, March 23, 2018 "The second half of the skill of creating understanding is seeking to be understood."

~ Stephen R. Covey

This story is about a disabled radio operator and his cries for help that were heard – quite literally – around the world. (Story by **Ed Durrant DD5LP.)**

Erding Radio Club member Lothar Fröhlich, whose call signs are DK8LRF and HK3JCL, was on the air from his QTH in Colombia, South America, recently talking to friends in New York and Germany, when he heard a voice call out repeatedly. At first he thought someone was trying to break into the QSO, but then he realized it was a ham in distress. He recognized the voice – it was an amateur in Dingden on the

German-Dutch border, a ham with whom he enjoys ragchews often.

The ham, who is disabled and relies on a wheelchair, had fallen and was home alone. His radio was on, fortunately with the transmitter in "VOX" mode so his cries activated the microphone.

Lothar called for any German hams who could copy him, asking them to please notify local police. Then, using EchoLink, he reached a repeater in Isen, east of Munich. A ham in Eichstätt in Bavaria responded and also called police who responded immediately.

Ham radio had made distance vanish. The ham in distress was five metres from the microphone, but his call went through anyway — and those who assisted astounded the police by the fact that the call was started by a ham in Colombia on the other side of the world. •



It's the Rule

Why ARRL is Recommending Enhanced HF Privileges for Technicians

"The ARRL Letter," Rick Lindquist/WW1ME, Editor, March 15, 2018

ARRL has asked the FCC to expand HF privileges for Technician licensees to include limited phone privileges on 75, 40, and 15 meters, plus RTTY and digital mode privileges on 80, 40, 15, and 10 meters. The FCC has not yet invited public comment on the proposals, which stem from recommendations put forth by the ARRL Board of Directors' Entry-Level License Committee, which explored various initiatives and gauged member opinions in 2016 and 2017.

"This action will enhance the available license operating privileges in what has become the principal entry-level license class in the Amateur Service," ARRL said in its Petition. "It will attract more newcomers to Amateur Radio, it will result in increased retention of licensees who hold Technician Class licenses, and it will provide an improved incentive for entry-level licensees to increase technical self-training and pursue higher license class achievement and development of communications skills."

Specifically, ARRL proposes to provide Technician licensees, present and future, with phone privileges at 3.900 to 4.000 MHz, 7.225 to 7.300 MHz, and 21.350 to 21.450 MHz, plus RTTY and digital privileges in current Technician allocations on 80, 40, 15, and 10 meters. The ARRL petition points out the explosion in popularity of various

digital modes over the past 2 decades. Under the ARRL plan, the maximum HF power level for Technician operators would remain at 200 W PEP. The few remaining Novice licensees would gain no new privileges under the League's proposal.

ARRL's petition points to the need for compelling incentives not only to become a radio amateur in the first place, but then to upgrade and further develop skills. Demographic and technological changes call for a "periodic rebalancing" between those two objectives, the League maintains.

"There has not been such a rebalancing in many years," ARRL said in its petition. "It is time to do that now." The FCC has not assessed entry-level operating privileges since 2005.

The Entry-Level License Committee offered very specific, data- and survey-supported findings about growth in Amateur Radio and its place in the advanced technological demographic that includes individuals younger than 30. It received significant input from ARRL members via more than 8,000 survey responses.

"The Committee's analysis noted that today, Amateur Radio exists among many more modes of communication than it did half a century ago, or even 20 years ago," ARRL said in its petition.

Now numbering some 378,000, Technician licensees comprise more than half of the US Amateur Radio population. ARRL said that after 17 years of experience with the current Technician license as the gateway to Amateur Radio, it's urgent to make it more attractive to newcomers, in part to improve upon science, technology, engineering, and mathematics (STEM) education "that inescapably accompanies a healthy, growing Amateur Radio Service"

ARRL said its proposal is critical to developing improved operating skills, increasing emergency communication participation, improving technical self-training, and boosting overall growth in the Amateur Service, which has remained nearly inert at about one percent per year.

The Entry-Level License Committee determined that the current Technician class question pool already covers far more material than necessary for an entry-level exam to validate expanded privileges. ARRL told the FCC that it would continue to refine examination preparation and training materials aimed at STEM topics, increase outreach and recruitment, work with Amateur Radio clubs, and encourage educational institutions to utilize Amateur Radio in STEM and other experiential learning programs.

Where's the Rare DX?

"OPDX Bulletin 1357" February 26, 2018 http://www.papays.com/opdx1357.html

BAKER ISLAND DXPEDITION (KH1) – Jun 2018, the call sign will be KH1/KH7Z. Info on <Baker2018.net>.

CATO REEF (OC-265) – Andy/VK5MAV will sign VK5MAV/9 from this rare IOTA Apr 9-18 on HF. QSL via ClubLog's OQRS or via RN3RQ. http://vk5mav.wixsite.com/dxpedition>.

CENTRAL KIRIBATI ISLANDS (T31)

- Members of the "Rebel DX Group" will sign T31T from Kanton Island (OC-043) in May.

CURACAO (PJ2) – Mason/KM4SII will sign PJ2/KM4SII as part of the Youth DX Adventure (YDXA) July 19-24 on all bands and modes. Mason is hoping to work some digital as that is where Curacao is most needed, according to ClubLog. http://km4sii.younghams.org

DJIBOUTI (**J28**) – F1TMY is signing J28PJ til 2020 on 160-6m. QSL via F1TMY. **EGYPT** (**SU**) – Jovica/E78A til the end of 2018 signing SU9JT. QSL via E73Y by the Buro or direct, and Clublog's OQRS.

KOSOVO (Z6) – Gab/HB9TSW will sign Z68BG til Apr 19 on 80-10m using CW. QSL via HB9TSW direct (see QRZ.com), LoTW or eQSL.

MADEIRA ISLANDS (CT9) - Hardy/DL3KWF and Rosel/DL3KWR will sign CT9/DL3KWF and CT9/DL3KWR til Apr 5 on 30/17/12m and CW. QSL via their home CBAs, direct, by the Buro (also via E-mail request), eQSL or LoTW. http://www.dl3kwf.com/CT39/CT39-Results-e.htm.

MARKET REEF (OJØ) (EU-053) – Ops will sign OJØY Jun 27-29 on various HF bands. QSL via MØSDV. NOTE: there will be s possible short activity on Jun 26 (evening) from **Aland Islands** as **OHØ/MMØNDX**. QRV on HF bands.

MARTINIQUE (FM) – Gerard/F2VX is signing FM/F2VX til April 18 on various HF bands using mainly SSB. QSL via F2VX direct or by the Buro.

NAKA ISLAND (JA) (AS-200) - Kenji/JA4GXS will sign JA4GXS/5 April 22-23 on 40-17 meters using CW, SSB and FT8. QSL via JA4GXS by the Buro or direct.

SAN PIETRO ISNALD (IJ7) (EU-073) – Vin/IK7IMO will sign IJ7V during the RSGB IOTA Contest (July 28-29), SSB-Mode/DXpedition entry. QSL via IK7IMO.

SOLOMON ISLANDS (H4) – Haru/ JA1XGI will sign H44XG from Honiara

Upcoming Contests

Sean Kutzko/KX9X,

QST, , scroll down, click on "Contest Corral"

- Apr 1 RSGB RoLo SSB, 80m, Phn, www.rsgbcc.org/hf
- Apr 2-8 IQRP Quarterly Marathon, 160m-UHF, CW/Digi/Phn, www.arimontebelluna.it
- Apr 2 RSGB 80-Meter Club Championship, 80m, CW, www.rsgbcc.org/hf
- Apr 3 ARS Spartan Sprint, 80-10m, CW, www.arsqrp.blogspot.com
- Apr 4 UKEICC 80-Meter Contest, Phn, www.ukeicc.com
- Apr 5 SARL 80-Meter QSO Party, Phn, www.sarl.org.za
- Apr 5 NRAU 10-Meter Activity Contest, CW/Digi/Phn, www.nrau.net
- Apr 7 LZ Open 40-Meter Sprint Contest, CW, www.lzopen.com
- Apr 7 Florida State Parks on the Air, 80-10m, CW/Phn, www.flspota.org/rules
- Apr 7-8 PODXS 070 Club PSK 31 Flavors Contest, 20m, Digi, www.podxs070.com
- Apr 7-8 SKCC Weekend Sprintathon, 160-6m, CW, www.skccgroup.com
- Apr 7-8 Mississippi QSO Party, 80m-UHF, CW/Digi/Phn, www.arrlmiss.org
- Apr 7-8 Missouri QSO Party, 160m-UHF, CW/Digi/Phn, www.w0ma.org
- Apr 7-8 Texas State Parks on the Air, 160m-UHF, CW/Digi/Phn, www.tspota.org Apr 7-8 SP DX Contest, 160-10m, CW/Phn, www.spdxcontest.pzk.org.pl
- Apr 7-8 EA RTTY Contest, 80-10m, Digi, www.concursos.ure.es/en/eartty
- Apr 8 North American SSB Sprint Contest, 80-20m, Phn. www.ssbsprint.com/rules
- Apr 9 4 States QRP Group Second Sunday Sprint, 160-10m, CW/Phn, www.4sqrp.com
- Apr 9 144 MHz Spring Sprint, CW/Digi/Phn, sites.google.com/site/ springvhfupsprints
- Apr 11 NAQCC CW Sprint, 80-20m, www.nagcc.info
- Apr 11 RSGB 80-Meter Club Championship, SSB, www.rsgbcc.org/hf
- Apr 14 QRP ARCI Spring QSO Party, 160-10m, CW, www.grparci.org
- Apr 14-15 JIDX CW Contest, 160-10m, www.jidx.org/jidxrule-e.html
- Apr 14-15 OK/OM DX Contest, SSB, 160-10m, www.okomdx.crk.cz
- Apr 14-15 New Mexico QSO Party, 160-6m, CW/Digi/Phn, www.newmexicogsoparty.org
- Apr 14-15 North Dakota QSO Party, 160-2m, CW/Digi/Phn, www.kg0yl.net/QSO.html
- Apr 14-15 Georgia QSO Party, 160-6m, CW/Digi/Phn, www.georgiaqsoparty.org
- Apr 14-15 Yuri Gagarin International DX Contest, 160-10m, satellites, CW, www.gc.qst.ru/en/section/32
- Apr 15 International Vintage Contest HF, 80-20m, CW/Phn, www.contest vintage.beepworld.it
- Apr 15 WAB 3.5/7/14 MHz Data Modes, Digi, www.wab.intermip.net
- Apr 15 Hungarian Straight Key Contest, 80m, CW, www.hskc.ha8kux.com
- Apr 15 ARRL Rookie Roundup, SSB, 80-6m, www.arrl.org/rookie-roundup
- Apr 16 Run for the Bacon QRP Contest, 160-10m, CW. www.qrpcontest.com/pigrun
- Apr 17 222 MHz Spring Sprint, CW/Digi/Phn, www.sites.google.com/site/springvhfupsprints
- Apr 20-21 Holyland DX Contest, 160-10m, CW/Digi/Phn, www.iarc.org/iarc/#Holy landContest
- Apr 21 ES Open HF Championship, 80/40, CW/Phn, www.erau.ee
- Apr 21 Feld Hell Sprint, 160-6m, Digi, www.sites.google.com/site/feldhellclub
- Apr 21-22 Worked All Provinces of China DX Contest, 80-10m, CW/Phn, www. mulandxc.org/438
- Apr 21-22 YU DX Contest, 80-10m, CW/Phn, www.yudx.yu1srs.org.rs
- Apr 21-22 CQMM DX Contest CW, 80-10m, www.cqmmdx.com/rules
- Apr 21-22 Nebraska QSO Party, 160m-UHF, CW/Digi/Phn, www.qcwa.org/chapter025.htm
- Apr 21-22 Michigan QSO Party, 80-10m, CW/Phn, www.migp.org/Rules.htm
- Apr 21-22 EA-QRP CW Contest, 80-10m, www.eaqrp.com
- Apr 21-22 Ontario QSO Party, 160-2m, CW/Phn, www.va3cco.com/oqp
- Apr 25 SKCC Sprint, 160-10m, CW, www.skccgroup.com
- Apr 25 UKEICC 80-Meter Contest, CW, www.ukeicc.com
- Apr 25 432 MHz Spring Sprint, CW/Digi/Phn, www.sites.google.com/site/spring vhfupsprints
- Apr 26 RSGB 80-Meter Club Championship, Data. www.rsgbcc.org/hf
- Apr 28-29 10-10 International Spring Contest, 10m, Digi, www.ten-ten.org
- Apr 28-29 SP DX RTTY Contest, 80-10m, Digi, www.pkrvg.org/strona,spdxrttyen.html
- Apr 28-29 Helvetia Contest, 160-10m, CW/Digi/Phn, www.uska.ch
- Apr 28-29 Florida QSO Party, 40-10m, CW/Phn, www.floridagsoparty.org/rules ◆

sometime in June or July on 40/30/20/15/10m using mainly CW, and sometimes FT8 (in the DXpedition Mode, if applicable). QSL via his home CBA, direct, by the Buro or LoTW.

SOUTH COOK ISLANDS (E5) – Jim/ KM7R will sign E51KMR from his station on Rarotonga Is (OC-013) sometime in May on various HF bands. QSL via his home CBA.

SRI LANKA (4S) – Takayuki/JI1SHQ is signing 4S7TNG for several years on 30 and 20m using CW. QSL via JI1SHQ by the Buro.

TOGO (5V) – John/N9MDH will sign 5V1JE til May 30 on 80-10m (prefers 30m) using SSB and Digi. QSL via eQSL or LoTW.

VIETNAM (3W) – Megumu/JA6QGF is signing 3W9A from Ho Chi Minh City on 17 and

6m SSB. QSL via his home JA6 CBA. **VIETNAM (3W)** – Charles/WØDLE will sign 3W9DLE thru Apr on 20m using CW, SSB, and FT8 (also in the Russian DX CW Test Mar 17-18). QSL via WØDLE. **WAKE ISLAND (KH9) (OC-053)** – Philip/N7NVK will sign KH9/N7NVK sometime in April. He will work SSB split and digital modes including FT8, Updates on QRZ.com (search KH9/N7HMO). ◆

Meeting Schedules for Area Clubs, Exam Sessions, etc.

Bill DeVore/N4DIT

Volunteer examinations are held in or near Lexington on a schedule that has tests in central Kentucky every month of the year. Schedules for area sessions, plus meetings, etc., are as follows:

The Bluegrass Amateur Radio Society, Inc. (Lexington) – (Fernie Williams/KE4MAI (ARRL – \$15.00) and Margie Williams/KE4MAJ (WCARS- \$10.00)), with Darrell/AC4YD in Winchester and Richmond (W5YI), John/K4FT in Danville (ARRL), and Ron/WX4GPS in Georgetown (ARRL - \$15.00), have a schedule to offer an exam monthly in Lexington/central Kentucky. (See schedules on page 5 of this newsletter). ARRL-sponsored tests are held the second Saturday of the month, 10:00 AM in the Red Cross Building, Meeting Room "B", 1450 Newtown Pike, Lexington (except the August session is the Saturday of the second weekend of the month and is held at the site of the Central Kentucky ARRL Hamfest), and WCARS-sponsored sessions are held the third Tuesday of the scheduled month, 7:00 PM in Meeting Room "A" in the Red Cross Building, 1450 Newtown Pike, Lexington. Contact Margie/KE4MAJ at 859-489-6274 or email to ke4maj@arrl.net. Go to http://www.lexkywcars.org for information.

Winchester (W5YI VEC) – They are located in the Clark County EOC, 200 Maryland Avenue, Winchester, Kentucky. Their 2017 schedule (10:00 AM): Saturday, January, 9, Saturday, April 9, Saturday, July 9, and Saturday, October 8. Contact Liaison Darrell Epperson/AC4YD, eppersond@aol.com. 859-771-1834

Danville (ARRL VEC) – Test sessions are fourth Saturday in January, April, July and October at 10:00 AM. Liaison **John Wulf/K4FT**, johnk4ft@gmail.com, 563-505-0339, Wilderness Road Amateur Radio Club, American Legion Post 46, 45 Spears Lane, Danville, KY 40422 – Repeater 145.310 (100 pl).

Georgetown (ARRL VEC) – Liaison **Ron Malinowski/WX4GPS**, wx4gps@arrl.net, 502-542-8252, Georgetown Police Dept, 550 Bourbon St., Georgetown (for dates see schedule on page 5 of this newsletter).

Radio Theory and Construction Workshop – Each Saturday 1:00-3:00 PM in the Bluegrass ARS Education Center, basement of the Red Cross Building, 1450 Newtown Pike, Lexington. Contact Bill Fuqua/WA4LAV at (859) 272-9523 or wa4lav@arrl.net.

Versailles/Woodford County – The Woodford County Amateur Radio Club meets the first Wednesday of each month at 7:00 PM in the Versailles Fire Station No. 2 on Big Sink Pike. Anyone interested in amateur radio is cordially invited. Also, visit their web site at http://www.ky4wc.org. You may contact **Todd Rose/KE4YAH** (atrose@windstream.net).

Fayette County ARES Net – Wednesday, 9:00 PM, 147.120 (Tone 141.3) repeater.

Amateur Television and Specialized Communications Net
– An informal meeting is held every Sunday evening at 9:00 PM (local

time) on the 146.760 (-600 offset) repeater in Lexington.

Kentucky Six-Shooters Net – Wednesday evenings at 8:00 PM six meters FM on 52.525 MHz (vertically polarized). **David Jordan/KI4AWZ** net control; and, Daily Six-Meter FM Ragchew net 7:00-9:00 PM on 52.525 MHz (vertically polarized). **James Peel/KG4VAR** net control.

KY-QRP – Meetings are the same schedule as Blugrass ARS, first Monday each month, but at 7:00 PM, in Meeting Room "B", second floor of the Red Cross Building, 1450 Newtown Pike, Lexington.

Scott County Amateur Radio and Emergency Service Club (SCARES) – Meetings are the third Saturday each month, 9:00 AM in the Solarium room at Georgetown Community Hospital, 1140 Lexington Road, Georgetown. Check in to their weekly simplex net Tuesdays at 7:00 PM on 146.685 (PL 141.3).

Central Kentucky ARS (Richmond-Berea) – Meet the Third Thursday each month in the Madison County EOC, Richmond, Kentucky, at 7:00 PM. Talk-in on 146.865 (-600, PL-192.8 Hz) and 145.370 (-600, PL-192.8 Hz) repeater for location, directions to meeting site, or other information.

Greater Mason County ARA meeting, 7:00 PM, second Tuesday each month, Maysville Community College Science Building.

Pioneer ARC (Winchester) – Fourth Tuesday each month, Golden Corral Restaurant, 7:00 PM (eat at 6:00), except March 24 meet at City Hall (SkyWarn). Talk-in/info on 145.430 (T-103.5).

Jessamine Amateur Wireless Society (Nicholasville) – Second Monday each month, 7:00 PM, St. Joseph/R.J. Corman Ambulatory Care Center, 1250 Keene Road. (U.S. 27 Bypass south to intersection with 169; turn left at the light.) Talk-in/info on the 145.490 (T-123.0).

The Jessamine County ARES Net – Tuesdays at 7:30 PM, 145.490. Byron Smith Sr./KA3WOD EC, byronllx@aol.com.

The Madison County ARES Net, Monday at:7:00 PM, 146.865 (pl 192.8). Everyone is invited to check in. . . Wilderness Trail Emergency Net, Wednesdays, 8:30 PM, 146.715 (pl 100.0). . . .Glenn/KO4OL.

The Southeast Kentucky ARC – meet at the Laurel County EOC, 168 Substation St, London. Meetings on odd number months (Jan, Mar, etc.) are on the Second Tuesday at 6:00 PM; meetings on even number months (Feb, Apr, etc.) are the Second Saturday at 11:00 AM. Talk-in on 147.180 (PL-74.4) for directions tor other information. District 11 Skywarn Net meets Sundays at 8:00 PM on 146.925 (-PL-79.7) and is linked to 147.180 (PL-74.4) and other repeaters in and close to the area. District 11 ARES Net meets Mondays at 9:00 PM on 146.925 (PL-79.7) and is linked to 147.180 (PL-74.4) and other repeaters in and close to the area.

Please send any changes or corrections to these notices, or notices not listed here, to my attention, **Bill DeVore/N4DIT**, in care of Bluegrass Amateur Radio Society, Inc., PO Box 4411, Lexington, KY 40544-4411, or e-mail to billdit@twc.com.

Minutes of the Bluegrass Amateur Radio Society, Inc., Board of Directors' Meeting, February 19, 2018

Recorded and submitted by **Bruce A. Campbell, KM4EHU**Secretary

The February, 2018, directors' meeting was called to order at 7:33pm by First Vice President William Fuqua, WA4LAV. In attendance were: Second Vice President – James Schlesser, WA9MED; Treasurer – John Barnes, KS4GL; Secretary – Bruce Campbell, KM4EHU; Directorsat- Large – Tim Kunkel, KF4MPM, and David Richardson, W9KHZ; Historian and Newsletter Chairman Bill DeVore, N4DIT, and MARS Representatives Barry Jackson, WB4N, and Harvey Frye, AA4HF.

Treasurer John Barnes, KS4GL, presented an application for new membership from Mark Elliot, KN4HVX. David Richardson, W9KHZ, moved and Tim Kunkel, KF4MPM, seconded that the application be accepted and presented at the next general membership meeting on March 5th, 2018. The motion was approved unanimously.

Treasurer John Barnes, KS4GL, submitted the summary treasurer's report of amounts available in deposits as of February 28, 2018. (See table at the right.)

The treasurer's report was accepted by general consent without objection since there was no change in the financial records since reported and approved at the General Meeting on February 5, 2018.

Secretary **Bruce Campbell**, **KM4EHU**, reported that copies of the current Bylaws were sent to new members **John Frost W8CDS**, and **Sandy Gragg**, **KM4PJU**, on February 5th and 17th respectively.

Committee Reports

Contest: Pete Kragh, K2UPD – (no report).

Education: Bill Fuqua, WA4LAV – There is little attendance (as expected) during the winter months at the Thursday evening technical sessions and the Saturday afternoon workshops. Bill invites more volunteers to attend these sessions and assist with the various topics and activities.

Emergency Preparedness: The committee's chairman position is currently vacant, and volunteers for the committee will be considered.

Hamfest - David Richardson, W9KHZ: A commercial vendor invitation and application is forthcoming and

Treasurer's Report

Respectfully submitted, John Barnes/KS4GL, Treasurer

BLUEGRASS AMATEUR RADIO SOCIETY, INC. INCOME, EXPENSES, AND ACCOUNT BALANCES February 28, 2018

	Checking	Pay Pal	Savings	m . 1
	Account	Account	Account	Total
Income:				
ARRL Dues	0.00	0.00	0.00	0.00
BARS Dues	41.00	30.47	0.00	71.47
Coax/Repeater	0.00	0.00	0.00	0.00
Donations	0.00	96.80	0.00	96.80
Education	0.00	0.00	0.00	0.00
Hamfest	0.00	0.00	0.00	0.00
Interest	1.42	0.00	0.03	1.45
Miscellaneous	0.00	0.00	0.00	0.00
Total	42.42	127.27	0.03	169.72
Expenses:				
ARRL Dues	0.00			0.00
Coax/Repeaters	0.00			0.00
Donations	0.00			0.00
Education	0.00			0.00
Election	0.00			0.00
Equipment	0.00			0.00
Field Day	0.00			0.00
Hamfest	0.00			0.00
Insurance	0.00			0.00
Miscellaneous	60.00			60.00
Newsletter	0.00			0.00
Picnic	0.00			0.00
P.O. Box/Postage	0.00			0.00
Subscriptions	0.00			0.00
Telephone	0.00			0.00
Total	60.00			60.00

Account Balances

Checking*	\$11886.89	\$11869.31
Pay Pal Balance	\$ 2719.94	\$ 2842.21
Savings Balance	\$ 200.50	\$ 200.53
Total Balance	\$14802.33	\$14912.05

*Fund Specific Balances

(Checking)

Total	\$11886.89	\$11869.31
Education	\$ 1909.29	\$ 1909.29
Coax/Repeater	\$ 1164.64	\$ 1164.64
General	\$ 8812,96	\$ 8795,38

*Reference made to "BARS" refers to Bluegrass Amateur Radio Society, Inc., wherever it occurs.

will be available for comment and suggestions before being sent to prospective vendors.

Newsletter - Bill DeVore, N4DIT: Articles are welcome for consideration for inclusion in the Newsletter. Any member interested in taking over and editing the newsletter beginning in 2019 should contact Bill DeVore, N4DIT (billdit@twc.com).

Program – James Schlesser, WA9MED: The March program will be National Weather Service Severe Weather Spotting and Reporting. Volunteers will be appreciated to help set up the meeting room early before the 7:00pm meeting and presentation.

Public Relations and Membership: The committee's chairman position is currently vacant and volunteers for the committee will be considered.

Repeater – Andrew Cook, KF4OWP): Bill Fuqua, WA4LAV, reported that Southern Communications will be configuring a temporary replacement repeater to compare noise performance of the existing repeater equipment arrangement.

Shack - David Richardson, W9KHZ:

HF Liaison David Richardson, W9KHZ):

- 1) The high frequency dipole wire antenna is back in operation
- 2) **Bill DeVore**, **N4DIT**, donated two high frequency dipole wire antennas.

3) The purchase of a high frequency vertical antenna will be studied for future consideration.

VHF Liaison: **Tim Kunkel, KF4MPM.** Nothing to report.

Volunteer Examinations – (Fernie Williams, KE4MAI): Bill DeVore, N4DIT, reported that eleven(11) examinations were successfully completed at the February 4th test session, and that nine(9) of those were new technician licenses.

Historian – Bill DeVore, N4DIT: Old files are slowly being replaced. He said he has many old pictures with no dates or notes associated with them. Anybody who may recognize the times, places, and people in the pictures should contact Bill.

KYQRP (ad hoc) - (no report)

Library – John Barnes, KS4GL: No new activities in the library since the new bookcases have been rearranged. David Richardson, W9KHZ, will be studying the feasibility of employing a barcode reader for the book inventory. Bill Fuqua, WA4LAV, has received books that were donated and will be added the club library.

MARS - Harvey Frye, AA4HF, and Barry Jackson, WB4N: The MARS station is now in full operation.

Trustee – Andrew Cook, KF4OWP). (no report).

Bylaws - Andrew Cook, KF4OWP: (no report).

Old Business:

Digital mode software and Field Day logging software have been donated by **David Richardson**, **W9KHZ**, and has been installed on the donated desktop computers.

New Business

John Barnes, KS4GL, suggested that surplus club gear and equipment be slowly disposed of by way of a silent auction held during the regular general meetings. A method for this process will be considered and reported in the future.

David Richardson, W9KHZ, suggested that the locking arrangement for both the shack and multi-use room be a common and uniformed system of locks. James Schlesser, WA9MED, moved, and Bill DeVore, N4DIT, seconded, that the door locks be changed. The motion passed unanimously.

Upcoming BARS Schedule

March 5th, 7:00pm. KY-QRP Meeting - CANCELED.

March 5th, 7:00pm. BARS General Meeting.

Program: National Weather Service – Severe Weather Spotting and reporting.

March 19th, 7:30pm. BARS Directors' Meeting.

With no other business at 9:05pm, **Bill DeVore**, **N4DIT**, moved and **James Schlesser**, **WA9MED** seconded, that the meeting be adjourned, which was approved unanimously. •

Minutes of the General Meeting of the Bluegrass Amateur Radio Society, Inc., March 5, 2018

Recorded and submitted by **Bruce A. Campbell, KM4EHU**Secretary

The March BARS general meeting was called to order at 7:02pm by Secretary **Bruce A. Campbell, KM4EHU.**

Program

The annual Severe Weather SkyWarn program was presented by **Joe Sullivan** from the National Weather Service (NWS) Louisville office. The forty-six(46) attendees included twenty-one(21) licensed amateur radio operator BARS members, thirteen(13) nonmember licensed ham operators, plus twelve(12) additional participants in the NWS 2018 Spotter registration.

An abbreviated General meeting was held after the SkyWarn program.

Treasurer's Report: Treasurer John Barnes, KS4GL, presented one new

membership application for **Mark Elliot**, **KN4HVX**, which was accepted at the Directors' Meeting on February 19, 2018. **David Richardson**, **W9KHZ**, moved for acceptance, **Martin Weaver**, **KM4HPK**, seconded, and the membership application was approved unanimously.

Treasurer **John Barnes**, **KS4GL**, submitted the summary treasurer's report of amounts available in deposits as of February 28, 2018. **David Richardson**, **W9KHZ**, moved, and **Bart Breeding**, **KB4FEE**, seconded to accept the treasurer's report, which was approved unanimously.

Old Business

A portion of the radio Equipment donated to the club by the estate of **Don** Brooks, WA2ELD (SK), was moved to a storage facility by Andrew Cook, KF4OWP, Terry Layman, N6OKG, Roger Weller, KE4ZNI, Kyle Cravens, W4KCX, Allan Hess,KK4LBO, Glenn Williams, KF4EBB, and Bill Fuqua, WA4LAV. Bill DeVore, N4DIT, John Barnes, KS4GL, and David Richardson, W9KHZ, built shelves for the equipment at the storage facility.

New Business

(None)

The next formal BARS scheduled meetings in April and May are:

- 1. April 2nd, 6:00pm Bylaws Committee Meeting.
- 2. April 2nd, 7:00pm KY QRP. (NCAA

Newsletter of the Bluegrass Amateur Radio Society, Inc.

Lexington, Kentucky

Tournament)

- 3. April 2, 7:30pm General Meeting. Program: (to be announced) (NCAA Tournament).
- 4. April 7, Elizabethtown Hamfest.
- 5. April 16, 6:00pm Bylaws Committee Meeting.
- 6. April 16, 7:30pm Directors' Meeting.
- 7. May 7, 6:00pm Bylaws Committee Meeting.
- 8. May 7, 7:00pm KY QRP.
- 9. May 7, 7:30pm General Meeting. Program: (to be announced).
- 10. May 21, 6:00pm Bylaws Commit-

tee Meeting.

11. May 21, 7:30pm - Directors' Meeting With no other business at 9:10pm, Bill DeVore, N4DIT, moved and Tim Kunkel, KF4MPM, seconded that the meeting be adjourned, which was approved unanimously. •

Looking Back. . . From "QUA/HAMnews," April 2006, Page 4



Mike/KA4MKG showed off his 900 MHz re peater during the Club meeting December 6, 2005. Inspecting the components were, Wells/N4ZQT, Mike, and Chris Gay/KU4A.

Cover Story - SERA Repeater Journal, February 2006 KB8QLC/KA4MKG Repeaters Blanket Lexington

"SERA Journal," February 2006, pg. 10

It all started when Mike's job as a two-way radio salesman moved him from Ashland to Lexington in August 2000. The following January, Jeanie took a job at the University of Kentucky Medical Center and moved to Lexington also. They both missed using the 440 repeater that Mike had owned in Ashland, and set out to put another one on the air in Lexington. Because of Mike's connection with the local Motorola shop, he had as a customer the company that owns the tallest building in Lexington. While making a visit to the customer, Mike asked the building property manager if the owners of the building would ever entertain hosting an amateur radio repeater. Following some negotiations, a deal was struck to allow a repeater to be placed there.

In July 2001, Mike and Jeanie tuned up the KB8QLC repeater on 444.125. Initial range checks showed that the repeater would have coverage beyond their wildest expectations. Over the following months, it would be determined that the repeater from left, Tim Kunkel/KF4MPM, Wilson would cover more than 25 percent of the counties in Kentucky-40 to 50 miles from the antenna 435 feet above the average, and nearly flat central Kentucky terrain! Needless to say, Jeanie was very proud to have this repeater bear her call sign!

The repeater soon became one of the most heavily used repeaters in Central Kentucky. Located on the roof of the Lexington Financial Center, it's coverage soon proved itself to the "doubting Thomas."

Sometime around that same time, one of the local Lexington hams, **Jimmy Fennell/AG4CM**, who worked for a local contractor, mentioned on the air that his company was being forced off a local 900 MHz trunking system that was being closed by Nextel, and that they had given him a box full of Motorola GTX 900 MHz handhelds. He was wondering what could be done with them. Mike spoke up, and said, "Why don't we put a 900 MHz repeater on the air?"

The others had no idea that Mike had been given a Tait 900 MHz paging transmitter, a 150 Watt amplifier, and a 35 amp Astron power supply by his employer, who got the equipment in exchange for removing it from a tower site. Mike said, "Hey, how about all you guys pitching \$20 each into a pot and let's see if we can make something happen with this stuff." And so, armed with a little over \$200, he set out to build a 900 MHz repeater.

Jeanie was a bit skeptical, so it was hard at first to spend any household money on the project. But he kept at it and soon Mike found the matching Tait receiver on the Internet. After shipping it to a friend in Arizona to program and align the transmitter and receiver, eventually he had a five Watt 900 MHz repeater working in his workshop in the shed. That fueled the interest even more. A few more donations, and a lot of scrounging and horse trading later, Mike had a six-foot base station cabinet, and had built both Jeanie's 440 repeater and his 900 MHz repeater into the same cabinet. Jeanie became more interested, and soon the cabinet sported two new sets of matching TX/RX duplexers, and two rack mount Astron power supplies. Then it was time to take the "monster," as it had come to be called, to the building.

On the workday, several local hams showed up and brought all of their muscle. The building is 35 stories tall, but the elevator only goes to the 31st floor! So all of the muscle was put to use and the cabinet found its new home. Unfortunately, the story does not end here.

In order to accommodate the new cabinet, it was necessary to move from one end of the room to the other. In doing so, the repeaters picked up loads of paging interference, and other associated site crud. It was necessary to trash every jumper in the cabinet, and replace them with all new, professionally made double shielded jumpers. This seemed to make the paging transmitters go away, and calmed the stations down considerably.

But when they fired the 900 MHz repeater back up, they discovered an almost 3:1 SWR on the antenna that was less than a year old! So, it was back to Jeanie's cash reserve for a new Decibel Products antenna.

Following this last infusion of money into the hobby, Mike and Jeanie are proud to be able to tell you about Kentucky's first operating 900 MHz repeater. It has been on the air full time since November of 2005, currently on 927.725 MHz (PL 156.7), It's still in testing mode, and local hams are learning all about the propagation of 900 MHz, which so far seems to be about 70 to 80 percent of the UHF machine. It's a little hard to tell-all the users are running handheld radios, and Mike has the only mobile-but preliminary tests indicate that they have another winner on their hands.

Future additions to this system include a multiport controller, allowing both repeaters to use the two meter/70 centimeter dual band remote base, and to be linked together. Also, coming soon is a full-time Echolink node for this fine system.

That is, as soon as Jeanie's credit card catches its breath!

QUA/HAMnews

QUA/HAMnews is published monthly by the Newsletter Committee of the Bluegrass Amateur Radio Society, Inc., and is distributed by e-mail only.

Letters to the editor, technical articles, items of interest to the Ham community and guest editorials are invited and will be published at the discretion of the editor. Items for sale by members of the Society will be advertised without charge for one issue, and may be resubmitted as often as desired. These ads must be noncommercial in nature.

Articles published in QUA/HAMnews do not necessarily represent the views of the Officers, Board of Directors, editor, or Society membership, nor does publication thereof represent concurrence by the Officers, Board of Directors, editor, or Society membership of the contents of the article. No article will be published unless it is accompanied by the name(s) of the person(s) submitting the material.

R. William (Bill) DeVore/N4DIT, 112 Brigadoon Pkwy, Lexington, Kentucky 40517-1305 (859) 273-8345 billdit@twc.com

Standing Committee Chairs:

David Richardson/W9KHZ (859) 983-1380) (daveinlex3@gmail.com)
Hamfest.....David Richardson/W9KHZ (859) 983-1380) (daveinlex3@gmail.com)
Newsletter...., Bill DeVore/N4DIT (859) 273-8345 (billdit@twc.com)
Program....James Schlesser/WA9MED (757) 478-2186 (wa9med@jschlesser.com)
Public Relations and Membership....Need Chair

Trustees, Ex Officio Committee Chairs, and Contacts for Special Activities:

VHF Liaison to Shack Committee . . . Tim Kunkle/KF4MPM

President:

Andrew Cook/KF40WP 320 Given Avenue Lexington, Kentucky 40502 859/396-9930 kf4owp@gmail.com

Second Vice-President:

James Schlesser/WA9MED 1492 Elizabeth Street Lexington, Kentucky 40503 757/478-2186 wa9med@jschlesser.com

Treasurer:

John Barnes/KS4GL 216 Hillsboro Avenue Lexington, Kentucky 40511-2105 859/253-1178 jrbarnes@iglou.com

First Vice-President:

Bill Fuqua/WA4LAV 3395 Greentree Drive Lexington, Kentucky 40517 859/272-9523 Wfuqu00@uky.edu

Secretary:

Bruce Campbell/KM4EHU 169 Millwood Drive Winchester, Kentucky 40391 859/744-7608 bruce_campbell@mymail.eku.edu

Directors-at-Large:

Tim Kunkle/KF4MPM
426 Blueberry Lane
Lexington, Kentucky 40503
859/279-6307, and
David Richardson/W9KHZ
1809 Wayland Drive
Lexington, Kentucky 40505
859/983-1380
daveinlex3@gmail.com

Annual Dues (January 1 - December 31)

Payable using Pay Pal – Go to http://www.BluegrassARS.org, click on "Membership," click on the option for your preference as below: Regular Membership: One year – \$20.00; two years – \$38.00; three years \$55.00 (Additional family member(s) at the same address \$1.00 each per year) Associate Membership – \$15.00 (for those who reside farther than 50 miles from Lexington)

Full-Time Student Membership - \$12.00 (for those 21 and under, and no other Club member in the family)

Shack telephone: (859) 231-0974 web page: http://www.BluegrassARS.org/



Calendar of Ham Radio Activities for April 2018



- Mon 2 KY-QRP meeting (Open discussion), 7:00 PM, Meeting Room "B," Red Cross Bldg, 1450 Newtown Pike, Lexington.
- Mon 2 Bluegrass ARS Club meeting, 7:30 PM, Meeting Room "B," Red Cross Bldg, 1450 Newtown Pike; District 11 ARES Net 9:00 PM 146.925 (PL-79.7) linked to 147.180 (PL-74.4) and other repeaters in the area.
- Tue 3 Amateur Swap Net 145.370 (T-192.8) 8:00 PM; "Casual Communicators Net," 9:00 PM Eastern, 443.325+ MHz.; Greater Mason County Amateur Radio Association (ARA) meeting, Maysville Community College Science Building, 7PM.
- Wed 4 Six Shooters Net, 8:00 PM on 52.525 MHz FM (vertically polarized); Fayette County ARES Net, 9:00 PM, 146.760 repeater.
- Thu 5 Meeting of Bluegrass ARS Technical Group, 6:30 PM, Education Ctr, basement, Red Cross Building, 1450 Newtown Pike, Lexington; Ragchew Net, 7:30 PM, 145.490 Repeater, Malcolm/KY4MJW net control.
- Sat 7 Shack open 9:00-Noon; Radio Theory and Construction Workshop, 1:00-3:00 PM, basement, Red Cross Bldg, 1450 Newtown Pike; License Exam Session, 10:00 AM Georgetown ARRL VEC, Liaison Ron Malinowski/WX4GPS, wx4gps@arrl.net, 502-542-8252.
- Sun 8 Amateur Television & Specialized Communications Net, 9:00 PM (146.760 Repeater); District 11 Skywarn Net, 8:00 PM, 146.925 (PL-79.7 Hz) linked to 147.180 (PL-74.4 Hz); Daylight Savings Time Set Clocks Forward one Hour!
- Mon 9 **Jessamine Amateur Wireless Society meeting,** 7;00 PM, St. Joseph/R.J. Corman Ambulatory Care Center, 1250 Keene Road, Nicholasville; **District 11 ARES Net** 9:00 PM 146.925 (PL-79.7) linked to 147.180 (PL-74.4).
- Tue 10 Amateur Swap Net 145.370 (T-192.8) 8:00 PM; "Casual Communicators Net," 9:00 PM Eastern, 443.325+ MHz.
- Wed 11 Six Shooters Net, 8:00 PM on 52.525 MHz FM (vertically polarized); Fayette County ARES Net, 9:00 PM, 146.760 repeater.
- Thu 12 Meeting of Bluegrass ARS Technical Group, 6:30 PM, Education Ctr, basement, Red Cross Building, 1450 Newtown Pike, Lexington; Ragchew Net, 7:30 PM, 145.490 Repeater, Malcolm/KY4MJW net control.
- Sat 14 Shack open 9:00-Noon; Radio Theory and Construction Workshop, 1:00-3:00 PM, basement, Red Cross Bldg, 1450 Newtown Pike; License Exam Sessionn, Winchester— W5YI, Liaison Darrell Epperson/AC4YD, epperson@aol.com, 859-771-1834
- Sun 15 Amateur Television & Specialized Communications Net, 9:00 PM (146.760 Repeater); District 11 Skywarn Net, 8:00 PM, 146.925 (PL-79.7 Hz) linked to 147.180 (PL-74.4 Hz).
- Mon 16 Bluegrass ARS Board of Directors' Meeting, 7:30 PM, Education Center in basement of Red Cross Building; District 11 ARES Net 9:00 PM 146.925 (PL-79.7) linked to 147.180 (PL-74.4) and other repeaters in the area.
- Tue 17 Amateur Swap Net, 145.370 (T-192.8) 8:00 PM; "Casual Communicators Net," 9:00 PM Eastern, 443.325+ MHz.
- Wed 18 Six Shooters Net, 8:00 PM on 52.525 MHz FM (vertically polarized); Fayette County ARES Net, 9:00 PM, 146.760 repeater.
- Thu 19 Meeting of Bluegrass ARS Technical Group, 6:30 PM, Education Ctr, basement, Red Cross Building, 1450 Newtown Pike, Lexington; Ragchew Net, 7:30 PM, 145.490 Repeater, Malcolm/KY4MJW net control.
- Sat 21 Shack open 9:00-Noon; Radio Theory and Construction Workshop, 1:00-3:00 PM, basement, Red Cross Bldg, 1450 Newtown Pike.
- Sun 22 Amateur Television & Specialized Communications Net, 9:00 PM (146.760 Repeater); District 11 Skywarn Net, 8:00 PM, 146.925 (PL-79.7 Hz) linked to 147.180 (PL-74.4 Hz).
- Mon 23 District 11 ARES Net 9:00 PM 146.925 (PL-79.7) linked to 147.180 (PL-74.4) and other repeaters in the area.
- Tue 24 Amateur Swap Net 145.370 (T-192.8) 8:00 PM; "Casual Communicators Net," 9:00 PM Eastern, 443.325+ MHz.
- Wed 25 Six Shooters Net, 8:00 PM on 52.525 MHz FM (vertically polarized); Fayette County ARES Net, 9:00 PM, 146.760 repeater.
- Thu 26 Meeting of Bluegrass ARS Technical Group, 6:30 PM, Education Ctr, basement, Red Cross Building, 1450 Newtown Pike, Lexington; Ragchew Net, 7:30 PM, 145.490 Repeater, Malcolm/KY4MJW net control.
- Sat 28 Shack open 9:00-Noon; Radio Theory and Construction Workshop, 1:00-3:00 PM, basement, Red Cross Bldg, 1450 Newtown Pike; License Exam Session, Danville ARRL, Liaison John Wulf/K4FT, johnk4ft@gmail.com, 563-505-0339.
- Sun 29 Amateur Television & Specialized Communications Net, 9:00 PM (146.760 Repeater); District 11 Skywarn Net, 8:00 PM, 146.925 (PL-79.7 Hz) linked to 147.180 (PL-74.4 Hz).