



ARRL Standard



Pray for our
Troops



God Bless America!

QUA/HAMnews

September
2019



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Richmond Hamfest 9-14-19

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Published and Distributed Monthly by the



Glenn E. Welman/KF4NB
Memorial BBS
145.010 and 145.090

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P.O. Box 4411, Lexington, Kentucky 40544-4411
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MARS Station AAV4CAB

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146.160/.760

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

WA4HBM
147.765/.165

"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 August program will be a discussion on our upcoming "Hamfest" and will be presented by David Richardson.



Reports of the RECORD OF THE BY LAWS COMMITTEE MEETINGS will not be published in the newsletter due to length. Contact Secretary Bruce Campbell to obtain a copy of the reports.

CENTRAL KENTUCKY AMATEUR RADIO SOCIETY HAMFEST, RICHMOND, KY, MADISON COUNTY FAIRGROUNDS, SATURDAY SEPTEMBER 14, 2019

QUA/HAMnews

September 2019

Meeting Notice

Bart Breeding/KB4FEE,
Chair, Newsletter Committee
Bluegrass ARS, Lexington, Kentucky

The Bluegrass Amateur Radio Society, Inc., will have it's Annual Family Picnic on Monday, September 9 2019, at 6:00 PM, at Shelter #4 at Shillito Park.

No program is scheduled,

Do you have a topic you would like a program on or a program you would like to present? Do you have a home brewed project you have built? Bring it and show it off! Question? Ask it! Maybe your question isn't one about a Club activity or function, maybe you are having a problem getting some newly acquired equipment set up and operating correctly, or you have an antenna with radiation problems. Regardless of your question, problem, or suggestion, bring it to the Club meeting.

The Club shack is open most Saturday mornings for anyone to operate the Club's stations, or to bring pieces of equipment out to be tuned or checked, or to learn about Amateur Radio, or to just sit around and talk just drop in, no appointment necessary. Bluegrass Amateur Radio Society's ham shack is located in the basement of the Red Cross building at 1450 Newtown Pike Lexington, KY 40511. Entrance is down the steps (look for the BARS banner hung on the railing) at the North Side of the building.

**DUE TO CONSTRUCTION
ON THE PLAYGROUND
NEAR SHELTER #2, OUR
ANNUAL PICNIC WILL BE
HELD AT SHELTER # 4 AT
SHILITO PARK IN
SEPTEMBER**

**"Those who dare to fail miserably
can achieve greatly."
- John F. Kennedy**

Fayette County ARES Coordinator - Sandy Gragg

The Fayette County ARES net has resumed. Remember the Fayette County ARES net every Tuesday at 8:30 pm on the 146.94 repeater. We are looking for more folks that would help share in the net control. If you would like to Help, contact Sandy KM4PJU, at 859-699-0035

Hamming it Up on the ISS

http://nasaexplores.nasa.gov/show2_article.php?id=01-018

Amateur radio, also called ham radio, has become a fun way for average folks to communicate with International Space Station astronauts. Anyone with a scanner can listen to the communications that take place between Earth and space, and if you have a transmitter, you can take part in the conversations.

Amateur Radio On The International Space Station (ARISS) is a program that offers an opportunity for students to experience the excitement of Amateur Radio by talking directly with crew members of the ISS.

Image to right: Logo image for the Amateur Radio On The International Space Station program. Credit: ARISS

"To talk with the astronauts, you'll need to know several important bits of information," says Paul Dumbacher, a propulsion test engineer at Marshall Space Flight Center in Alabama, who also enjoys ham radio.

"The important things to know are when the Space Station will be over your location, what frequency the astronauts transmit on, and what the crew's schedule is," Dumbacher says. "It doesn't matter if the ISS is passing overhead during daylight hours because you don't need to see the craft. The important thing is to take advantage of the small window of opportunity you have to communicate with them. The ISS is overhead for only about 10 minutes at a time in any given area, so you have to be on the ball."

While individuals can monitor Space Station transmissions from home, school groups can make it a class project and work closely with ham radio operators and NASA staff members to schedule a conversation with the astronauts. The ARISS project was started with that goal in mind: classes of students interacting directly with astronauts through ham radio linkups.

Making sure a school is ready to communicate with the ISS can be a challenge. There is a 10-minute window for communication and it's important to make sure the students and equipment are prepared when the Station passes overhead.

Image to right: Students at DuBose Middle School, Summerville, South Carolina had a

successful contact with Mike Foale on board the ISS via amateur radio. Credit: ARISS

It's a living example of why mathematics and science are important. "It shows practical use of formulas," Dumbacher says. "Students learn about complex ideas like Doppler Shift and trajectory paths. It shows that even addition and subtraction get you to important points. Science matters. Without science, we wouldn't have the ISS, we wouldn't understand weather and we wouldn't understand basic functions of everyday life. And there's no better way to learn it than by doing it."

If you get the opportunity to make contact with Shuttle or Space Station astronauts, Dumbacher has one bit of advice. "Be sure to get a QSL card. That's a card NASA will send you, proving that you talked to an astronaut. There's information about getting it on the ARISS Web site. You'll want to be able to put that up on your bulletin board and tell everyone."

Visit <http://spaceflight.nasa.gov/station/reference/radio/> to learn more about ham radio on the International Space Station.

Visit <http://www.rac.ca/ariss/> to learn more about the Amateur Radio On The International Space Station Program.

To read the full text of the article, visit: http://nasaexplores.nasa.gov/show2_article.php?id=01-018



Communicating in Space

<https://www.nasa.gov/topics/moonmars/features/hatsman.html>

When astronauts venture outside of a spaceship or the International Space Station, they must wear protective space suits to keep them safe from the harsh environment of space. While inside these pressurized suits, it's essential that they remain in constant communication with the rest of the crew in space as well as Mission Control Center on Earth.

While wearing the current space suits, astronauts wear a Communications Carrier Assembly (CCA), or "Snoopy Cap" — a fabric hat fitted with microphones in the ear area for listening and boom microphones in front of the mouth for speaking. These caps are worn under the helmet and visor that surround an astronaut's head.

A new Integrated Audio system, which enables astronauts to communicate in space, is being tested at NASA's Glenn Research Center in Cleveland in a test rig. Image Credit: NASA NASA is in the process of completely redesigning their space suits, with the goal of creating a brand new space suit to be used starting in 2020. Redesigned and reinvented communications equipment will be an important facet of the new suit.

Integrated Audio

NASA's Glenn Research Center in Cleveland is working on different parts of the new space suit, including communications equipment. The Exploration Technology Development Program (ETDP) is involved with testing various proposed solutions to the communications requirements within the suit.

The Communications Carrier Assembly (CCA), while effective, has some logistical drawbacks. Multiple cap sizes must be available due to the difference in astronauts' head sizes. The caps cannot be adjusted once the visor of the helmet is in place and the astronaut is in space, which means that if the microphones shift, communication quality can decrease. The boom microphones can also interfere with feeding and drinking mechanisms during long-duration spacewalks. An additional problem is that astronaut sweat can negatively interfere with the performance of the electrical and mechanical parts in the CCA.

For several years, Glenn has performed research and development on a variety of communications technologies. About six years ago, teams at Glenn began working on integrated audio solutions to support extravehicular activities, like space walks. In 2008, Glenn signed a Small Business Innovation Research (SBIR) agreement with WeVoice Inc. of Bridgewater, N.J. Together, they began developing and testing an integrated audio system that is built directly into a space helmet.

"The integrated audio system is where the microphones and earphones are removed from the Communications Carrier Assembly and integrated into the structure of the space suit itself," says Obed "Scott" Sands, an electronics engineer at Glenn, lead for Configuration II Audio under Constellation and lead for integrated audio development for the Exploration Technology Development Program (ETDP).

The test rig for testing the Integrated Audio system includes a HATSMAN—Head and Torso Simulator. The HATSMAN has an electronic 'mouth' and 'ears.' Image Credit: NASA The new integrated audio system solves many of the issues the CCA presents. As the integrated audio system is part of the actual space suit, there are no additional parts to worry about maintaining. The microphones and earphones are built into the suit, which means there are no moving parts to disrupt an astronaut's movements or become dislodged during activity. And the integrated audio system is a universal size — no separate caps are needed for individual crew members.

Rather than one boom microphone, the new integrated audio system uses an array of microphones — currently four, but the number could increase — that are located in front of where an astronaut's mouth is while inside the helmet. The integrated audio system features cutting-edge digital signal processing which helps the microphones overcome loss of fidelity on the outbound (speaking) part of the system.

Channel Noise Reduction. This new filtering approach features technology adapted from video conferencing systems. Advanced filters are used for each of the array's channels, and additional noise reduction is used to isolate the sound of

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speech.

Several speakers are installed in the helmet, which are designed to focus the sound towards the astronaut's ears. These speakers also isolate other sounds so that crew members can effectively hear. This solves the issue of occasional unclear inbound communications (listening). The microphone array and associated signal processing are needed in the integrated audio system to overcome decreased sound quality. Sound quality can be negatively impacted because the microphones of the integrated audio system are positioned on the inside of the helmet — farther from an astronaut's mouth. This makes the microphones more susceptible to interference from noise created inside of the suit as well as noise from vibrations of the spacesuit structure.

The current technology development approach to solving these problems involves processing signals from each element in the array, known as Multi-

The test rig is fitted with acoustic panels, to isolate noise. It is also pressurized to the same level as NASA space suits. Image Credit: NASA "This new system will provide the crew member with more freedom and increased reliability," says Terry O'Malley, an aerospace engineer and the EVA lead at Glenn. "It also provides the system designers with increased flexibility in designing the system."

Testing with a Torso

In order to assess the effectiveness of the new system, the conditions inside a space suit must be replicated. Then the integrated audio is tested by using a specialized piece of equipment that creates human speech. This equipment, shaped like a human torso, is called HATSMAN — Head and Torso Simulator. It is manufactured by Brüel & Kjær, a company based in Denmark.

"It listens like a person and talks like a person," Sands says. "It's got microphones in its ears and a speaker in its mouth, and the radiation patterns conform to international standards for mannequins that emulate human speech and hearing."

The testing involves taking advanced measurements of the noise produced by HATSMAN

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and received by the integrated audio system and vice versa. This anthropometric measuring helps Glenn researchers refine their design, using data created by machines that accurately represent the needs of the humans who will eventually use the completed system.

The HATSMAN at Glenn is installed in a testing tank that is carefully designed to mimic the environment inside a space suit. It is lined with acoustic absorbing foam that isolates extra noise that the tank itself might create. Then a noise source simulates the sound created by space suits, which is generated from a recording taken inside an actual space suit. Special microphones that do not create their own static pressure are installed, which take measurements without affecting the readings.

"The biggest reason we're in the tank is that we can create a static pressure environment that simulates the inside of the actual suit," says Dave Pleva (DB Consulting Group, Inc.), an IT Project Analyst at Glenn who supports audio development work for ETDP.

The HATSMAN creates and receives vocal sounds. This determines the effectiveness of the Integrated Audio system. Image Credit: NASA The tank recreates the pressure inside of the suit, not the pressure of the entirety of space — because the integrated audio system is made for use inside a helmet. The positive pressure inside a space suit is about 4.3 PSI (equivalent to about 35,000 feet altitude) so the team tests with this as its base.

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They also explore other variations in barometric pressure. The test rig also includes an acrylic dome to simulate the helmet. The team explores how speech and sound bounce off of the surface of the helmet.

A specialized device, called Digital Speech Level Analyzer (DSL), provides vocal tracks for use in testing. Various utterances comprise the test speech to make it phonetically balanced — including all of the patterns and pairs that, statistically speaking, would show up in the English language. Both male and female voices are used.

"We generate a signal, it goes through an amplifier that powers the speaker in the HATSMAN, and then the array picks up the speech. The array then processes the speech and sends out the process signal to the DSL. The DSL then does a comparison of what it sent and what it receives," Pleva says.

The primary performance concern is speech intelligibility. Although quality of sound is also important, the main interest is that as many words as possible be successfully transmitted both ways. This can be effectively measured using the equipment in place.

"The next step would be to build an even higher fidelity version of this integrated audio system. Then we'll do another round of these tests. Eventually, we'll have a human being tested inside a pressure chamber," says Dave Irimies, a computer engineer and ETDP lead at Glenn.

Advancing Technology

The ongoing research, development and testing of this integrated audio system is part of the Space Audio Development and Evaluation Laboratory at Glenn.

"Our direction is replacing the current suit on the space station and shuttle. The current certification runs out in ten years, in 2020, so... this is an opportunity to use even more advanced technology," Irimies says. "This work is pressing forward."

The team hopes that the integrated audio system can commence testing on the space station in 2016. The technology may also be useful for communicating inside the station as well as during space walks. There may also be the potential that the technology can help on Earth. WeVoice Inc. is currently working with the University of Pittsburgh on one potential spin-off: developing a teleconferencing system using microphone arrays for operating rooms in hospitals.

The team looks forward to working together to continue testing and evolving their integrated audio system, with the goal of significantly influencing how the next generation space suit will work.

"We all challenge each other in different ways, all the time," Sands says. "It's a lot of fun, getting new concepts infused into space systems. That's what NASA is all about."

Tori Woods, SGT Inc.
NASA's Glenn Research Center

The Space Network: Cell Towers for Astronauts

<https://www.nasa.gov/audience/foreducators/stem-on-station/downloads-scan.html>

On Nov. 2, 2000, the first crew to live on the International Space Station arrived. Humans have continued to live and work there ever since. Reliable communications between the crew on the space station and the support team on Earth helps make it possible. Space communications is crucial for most astronaut activities, from performing spacewalks to conducting experiments to calling friends and family. NASA stays in contact with astronauts orbiting more than 250 miles above Earth with a network of communications satellites and ground-based antennas. Together, they make up NASA's Space Network.

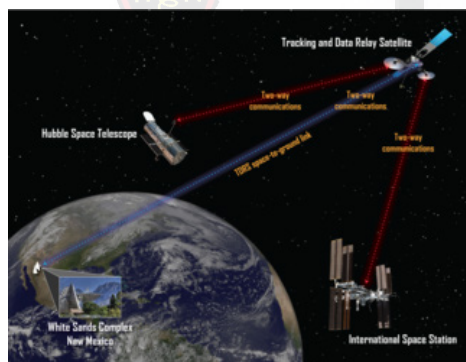
A constellation of Tracking and Data Relay Satellites (TDRS) form the space-based portion of the network. They work like cell phone towers in space. TDRS are located in geosynchronous orbit more than 22,000 miles above Earth, which lets the space station contact one of the satellites from anywhere in its orbit.

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As the communications satellites travel around Earth, they stay above the same relative point on the ground as the planet rotates.

TDRS handles voice, video and science data in real time. If an astronaut on the space station wants to transmit data to Mission Control at NASA's Johnson Space Center in Houston, Texas, the station's on-board computer first converts the data into a radio frequency signal. An antenna on the station transmits the signal to a TDRS. The TDRS then routes the signal to NASA's White Sands Complex in White Sands, New Mexico. Landlines send the signal to Houston, and computer systems on the ground turn the radio signal back into readable data. If Mission Control wants to send data back, the process repeats in the other direction, transmitting from White Sands to TDRS to the space station. All of this happens in milliseconds so that there is no noticeable delay in communication.



communications less than 15 minutes every hour and a half. Imagine if our cell phones worked that way. It would be difficult to stay in contact with family and friends or respond to important messages. The Space Network provides near continuous communications coverage every single day.

NASA's Goddard Space Flight Center in Greenbelt, Maryland, manages and operates the Space Network. NASA's Space Communications and Navigation (SCaN) program office, part of the Human Exploration and Operations Mission Directorate at the agency's headquarters in Washington, provides strategic and programmatic oversight for the network.



National Aeronautics and Space Administration-
Page Last Updated: Sept. 13, 2018Page Editor: Flint
WildNASA Official: Brian Dunbar

NASA uses this same communications system for in-flight education downlinks. TDRS and the Space Network allow astronauts in space to answer questions from students across the United States through video and voice calls.

The space station plays an important role in furthering our knowledge about a variety of subjects. The unique environment of low-Earth orbit allows astronauts to conduct experiments, which provide valuable insight in the fields of physics, biology, astronomy, meteorology and more. The Space Network delivers this one-of-a-kind science data back to Earth.

Before the Space Network, NASA astronauts and spacecraft could only communicate with the support team on Earth when they were in view of an antenna on the ground. That allowed only for

"We choose to go to the moon in this decade and do the other things, not because they are easy, but because they are hard, because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one which we intend to win."

— John F. Kennedy

Bluegrass Amateur Radio Society (BARS)
 Directors' Meeting Minutes of July 15, 2019
 Red Cross Building, Lexington, Ky.

The July, 2019, Directors' Meeting was called to order at 7:33pm by President Andrew Cook, KF4OWP.

In attendance were:

1st Vice President – Bill Fuqua, WA4LAV.
 2nd Vice President – David Richardson, W9KHZ;
 Treasurer – John Barnes, KS4GL;
 Secretary – Bruce Campbell, KM4EHU;
 Directors-at- Large – Tim Kunkel, KM4MPM,
 Mark Elliott, KN4HVV;
 plus MARS Representatives Barry Jackson, WB4N,
 and Harvey Frye, AA4HF, and also Bart Breeding,
 KB4FEE, and Bill Weaver, WE5P.

Treasurer's Report – John Barnes, KS4GL.

1. One(1) new Family Membership Applications was received for Don Stoutenberg and Sherry Brock who are interested in attaining their Amateur Radio Licenses. David Richardson, W9KHZ, moved, and Tim Kunkel, KM4MPM, seconded for acceptance of the applications to be presented to the membership at the August Open General Meeting. The motion was accepted without objections.

2. Summary Treasurer's Report as of June 30, 2019:

Checking account:

General fund: \$7,865.28

Coax/repeater: 804.98

Education: 1,815.25

\$10,485.51

PayPal account:

3,360.36

Savings account:

201.10

Total balance of accounts: \$14,046.97

Tim Kunkel, KM4MPM, moved, and David Richardson, W9KHZ, seconded that the treasurer's report be accepted which was approved without objection.

Secretary's Report – Bruce A. Campbell, KM4EHU
 Nothing to report.

Committee Reports.

Contest: Pete Kragh, K2UPD. (no report)

Education: Bill Fuqua, WA4LAV. Bart Breeding, KB4FEE, and David Richardson, W9KHZ,

will be conducting a Technician Class License study session beginning August 14th at the Red Cross Building.

Emergency Preparedness: Sandy Gragg, KM4PJU. (no report)

Hamfest: David Richardson, W9KHZ. Three(3) vendors are planning to attend the Hamfest on August 10th.

Newsletter: Bart Breeding, WB4FEE. Nothing to report.

Program: David Richardson, W9KHZ. The August Program will be "Hamfest".

Public Relations and Membership: Bart Breeding, KB4FEE.

Nothing to report.

Repeater: Andrew Cook, KF4OWP.

1. The antenna and coax the WKYT-TV station will require inspection and testing in order to analyze and isolate the degraded performance 146.76-mhz repeater operations.

2. An antenna replacement is being studied for the 147.125 repeater at the University of Kentucky campus.

Shack: David Richardson, W9KHZ.

Antenna maintenance and replacements activities are continuing.

HF Liaison: David Richardson, W9KHZ. Nothing to report.

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

Volunteer Examinations: Fernie Williams, KE4MEI. Nothing to report.

Historian: Bill DeVore, N4DIT. Nothing to report.

Library: John Barnes, KS4GL. Nothing to report.

MARS: Harvey Frye, AA4HF, and Barry Jackson, WB4N. The MARS station is operating successfully on its network.

Trustee: Andrew Cook, KF4OWP. Nothing to report.

Bylaws: Andrew Cook, KF4OWP. Secretary Bruce Campbell, KM4EHU,

1. Reported that the revisions to the Bylaws are being proof-read and will soon be ready to submit to the Directors' for preliminary approval before they are presented to a general membership vote for adoption. The Bylaws committee meeting is open to any interested BARS member.

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(continued from page 7, Director's Meeting 07-15-19)

2. A set of BARS Standard Operating Procedures is being formulated at the Bylaws Committee meetings, and input is welcome from members.

Old Business:

The disposition and disposal of the donated equipment was discussed.

New Business:

A motion for up to \$350 the purchase of new ARRL Technician Class License Study Guides which will be sold at cost to students participating in the license exam study sessions begin was proposed by John Barnes, KS4GL, and seconded by Tim Kunkel, KM4MPM, and approved unanimously.

Upcoming BARS Schedule:

August 5th, 6:00pm - Bylaws Committee Meeting.

August 5th, 7:30pm - BARS General Meeting.

Program: Hamfest.

August 10th, 7:30pm - Hamfest.

August 19th, 6:00pm - Bylaws Committee Meeting.

August 19th, 7:30pm - Directors' Meeting.

September 9th, 6:00pm - Picnic at Shillito Park.

No formal Meeting.

September 16th, 6:00pm - Bylaws Committee Meeting.

September 16th, 7:30pm - Directors' Meeting.

October 7th, 6:00pm - Bylaws Committee Meeting.

October 7th, 7:30pm - BARS General Meeting. Program: Bylaws.

October 21st, 6:00pm - Bylaws Committee Meeting.

October 21st, 7:30pm - Directors' Meeting.

November 4th, 6:00pm - Bylaws Committee Meeting.

November 4th, 7:30pm - BARS General Meeting.

Program: Nominations for 2020 Officers.

With no other business at 8:32pm, President Andrew Cook, KF4OWP, asked for a motion to adjourn the meeting which was moved by Tim Kunkel, KM4MPM, and accepted by general consent without objection.

Recorded and submitted by:

Bruce Campbell, KM4EHU

Secretary

Program Schedule for 2019

David Richardson/W9KHZ, Chair, Program Committee
Bluegrass ARS, Lexington, Kentucky

The following programs are scheduled for 2019. Your input and suggestions for programs for 2019 are needed. Call David Richardson, W9KHZ at 869-983-1380 or e-mail at daveinlex3@gmail.com/.

Month	Topic	Presenter(s)	Comments
✓ January	"Winter Field Day" January 26-27, 2019	David Richardson/W9KHZ	
✓ February	CERT Program	Shelly Bendall LFUCG	
✓ March	SkyWarn National Weather Service, Louisville, KY	Joe Sullivan	
✓ April	Portable Go-Kit	David Richardson/W9KHZ	
✓ May	Antenna Theory and Design	Bill Fuqua/WA4LAV	
✓ June	"ARRL Field Day" June 22-23, 2019	David Richardson/W9KHZ	
✓ July	Lightening Protection	Jim Bacher	
✓ August	"Hamfest" August 10, 2019	David Richardson/W9KHZ	
September	Annual Family Picnic	Bill DeVore	Shelter#4, Shillito Park, LEX
October	Discussion of By-Laws and SOP changes		
November	Report of Nominating Committee	Additional discussion on By-Laws and SOP	
December	"Annual Auction"/Election	Andrew Cook	

Meeting Schedules for Area Clubs, Exam Sessions, etc.

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 10 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, 7:00PM in Meeting Room "A" in the Red Cross Building, 1450 Newtown Pike, Lexington. Contact Margie/KE4MAJ at 859-489-6274 or email to ke4maj@arrrl.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 2019 schedule (10:00AM): Saturday, January, 12, Saturday, April 13, Saturday, July 13, and Saturday, October 12. Contact Liaison Darrell Epperson/AC4YD, AC4YD@arrrl.net, 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@arrrl.net, 502-542-8252, Georgetown Police Dept, 550 Bourbon St., Georgetown (for dates see schedule on page 4 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@arrrl.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 (38°3'34" N 84°43'11"W). 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 - Tuesday, 8:30 PM, 146.940 (-600 Tone 88.5) 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/KI4AWZnet control; and, Daily Six-Meter FM Ragchew net 7:00-9:00 PM on 52.525MHz (vertically polarized). James Peel/KG4VAR net control.

KY-QRP - Temporarily canceled.

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 26 meet at Christview Christian Church (SkyWarn). Talk-in/info on 145.430 (-600, T-203.5).

Jessamine Amateur Wireless Society (Nicholasville) - Meet 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 at the light.) Talk-in on the 145.490 (T-123.0).

The Jessamine County ARES Net - Tuesdays at 7:30 PM, 145.490 Repeater, Gary Britten W4GNB net control.

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 for 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 to my attention, Bart Breeding/KB4FEE, in care of Bluegrass ARS, Inc., PO Box 4411, Lexington, KY 40544-4411, or e-mail to aratat291@twc.com.

"Associate yourself with men of good quality if you esteem your own reputation; for 'tis better to be alone than in bad company."
-George Washington

Schedule for Volunteer Examinations in 2019

Harry Spark/KN4S,*
Bluegrass Volunteer Examiners
kn4s@kn4s.com

The exam schedule for 2019 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 [Ferne Williams/KE4MAI](mailto:ke4mai@arrrl.net), ke4mai@arrrl.net, 859-652-3393

(www.bluegrassars.org)

Danville - Liaison [John Wulf/K4FT](mailto:johnk4ft@gmail.com), johnk4ft@gmail.com, 563-

505-0339, Wilderness Road ARC, <http://www.wrarc.com>

Georgetown - Liaison [Ron Malinowski/WX4GPS](mailto:wx4gps@arrrl.net),

wx4gps@arrrl.net, 502-542-8252

WCARS VEC: Lexington - Liaison [Marguerite Williams/KE4MAJ](mailto:ke4maj@arrrl.net),

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

W5YI VEC: Winchester - Liaison [Darrell Epperson/AC4YD](mailto:AC4YD@arrrl.net),

AC4YD@arrrl.net, 859-771-1834

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

HAMFEST/CONVENTION

09/07/2019 | Greater Louisville Hamfest 2019

Location: Shepherdsville, KY

Type: ARRL Hamfest

Sponsor: Greater Louisville

Hamfest Association

Website: <http://Louisville-Hamfest.com>

09/14/2019 | Richmond Hamfest

Location: Richmond, KY

Type: ARRL Hamfest

Sponsor: Central Kentucky

Amateur Radio Society

Website: <http://www.ckars.org/hamfest>

09/28/2019 | ARCS Hamfest

Location: Paintsville, KY

Type: ARRL Hamfest

Sponsor: Amateur Radio

Community Services Club

Website: <http://ky4arc.com>

10/05/2019 | 8th Annual

Vette City Hamfest

Location: Bowling Green, KY

Type: ARRL Hamfest

Sponsor: Kentucky Colonels

Amateur Radio Club

Website: <http://vettcity-hamfest.com>

10/26/2019 | Hazard Hamfest

Location: Hazard, KY

Type: ARRL Hamfest

Sponsor: Kentucky Mountains

Amateur Radio Club, Inc.

Website: <http://kymarc.org>

Date and Time

VEC

Location

Saturday, September 14, 2019	12:30 pm	W5YI	Richmond (Hamfest)
Tuesday, September 17, 2019	7:00 pm	WCARS	Lexington

Bluegrass Amateur Radio Society (BARS)
General Meeting Minutes of August 5, 2019
Red Cross Building, Lexington, Ky.

The August, 2019, BARS General Meeting was called to order at 7:35pm by First Vice President Bill Fuqua, WA4LAV.

Self-introductions were made by thirteen(13) licensed members in attendance, which did not composed a required quorum of fifteen(15)members to conduct BARS business. The assembly proceeded in order to provide current information for those in attendance.

Program: David Richardson, W9KHZ, provided the plans for the our Central

K4KJQ Kentucky Hamfest on Saturday, August 10th, at the Jackpot Bingo Hall in the Eastland Shopping Center. Preliminary set-up will be at 12:00 midnight on Friday and final setup will start at 6:00am Saturday morning in preparation for opening at 8:00am. Clean-up will start at 2:00pm after the Hamfest.

Club and Members' News.

1. Four(4) members in attendance admitted to having birthdays in August: Mark Elliott, KN4HVX; Blaine Early, KM4ZFY; David Richardson, W9KHZ, and John Frost, AK2T.

(continued on page 11)

(continued from page 10, General Meeting
08-05-19)

2. Nominations for the 2019 Ernie Farmer Award are due to David Richardson, W9KHZ, in the beginning of August for presentation at the September picnic.

3. The September picnic will be held on at 6:00pm on Monday, September 9th, at Shillito Park Shelter #4.

Treasurer's Report – John Barnes, KS4GL.

One new "Family" membership application was accepted by the Board of Directors at their July meeting for Don Stoutenberg and Sherry Brock who are not yet licensed. David Richardson, W9KHZ, and Sandy Gragg, KM4PHU, jointly suggested that the applicants be admitted to BARS in absence of objections, which was allowed by the general consensus of those members present:

The summary treasurer's report of amounts in bank accounts statements as of July 31, 2019, are:

Checking account:

General fund:	\$7,752.65	
Coax/repeater:	804.98	
Education:	1,839.25	\$10,396.88
PayPal account:	3,636.32	
Savings account:	201.14	
Total balance of accounts:	\$14,234.34	

Without objections, the treasure's report was acknowledged as read.

Committee Announcements.

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

Education – Bill Fuqua, WA4LAV: Bart Breeding, KB4FEE, and David

Richardson, W9KHZ, will be conducting Technician Class License study sessions for seven(7)-to-eight(8) weeks on Wednesday evenings at 7:00pm at the Red Cross building. The classes are in response to the "Ham Radio 101" presentations in July at the Fayette County Emergency Operations Center and at the public library. The classes are open to any person interested in attaining at Technician Class Amateur Radio License. The ARRL license study-guide manuals are available for purchase at cost from BARS. BARS is authorized to procure additional study books as needed for the attendees. Any attendee who purchases the license study manual from BARS and subsequently

attains their Amateur Radio License after completion of the class is eligible for membership in BARS with membership dues waived for that year.

Emergency Preparedness - Sandy Gragg, KM4P-JU.

1) The new ARES Net schedule is Tuesday evenings at 8:30pm utilizing the Lexington 146.940 repeater. A total of eighty-four(84) check-in's were logged for the month of July from Fayette, Scott, Anderson, Jessamine, Madison, and Clark Counties.

2) Seventeen(17) amateur radio operators from inside and outside of BARS provided the Wellness Communications Net during the Bluegrass 10k on July 4th.

3) A simplex net exercise is being tentatively planned for the future pending schedule and coordination resolutions.

Hamfest – David Richardson, W9KHZ: August 10th at the Jack-Pot

Bingo Hall in the Eastland Shopping Center. Volunteers are needed for set-up before and clean-up after the Hamfest.

Newsletter – Bart Breeding, KB4FEE: Nothing to announce.

Program – David Richardson, W9KHZ: The October program will be "Proposed Bylaws".

Public Relations and Membership – Bart Breeding, KB4FEE: Nothing to announce.

Repeater – Andrew Cook, KF4OWP: Bill Fuqua, WA4LAV, reported that tests of the antenna system for the repeater at the WKYT-TV station have shown no problems. The mounting bracket for one of the antennas has broken. The duplexers seem to have been de-tuned after the radio equipment cabinet was opened.

Shack – David Richardson, W9KHZ: Antenna maintenance activities are continuing on Saturday mornings as weather permits.

Volunteer Examinations – Fernie Williams, KE6MAI: Licenses examinations will be held at the Hamfest on Saturday, August 10th .

Historian - Bill DeVore, N4DIT: Nothing to announce.

Librarian – John Barnes, KS4GL: Nothing to announce.

(continued on page 12)

TREASURER'S REPORT

Respectfully submitted by John Barnes/KS4GL, Treasurer
BLUEGRASS AMATEUR RADIO SOCIETY, INC.
INCOME, EXPENSES, AND ACCOUNT BALANCES
as of July 31, 2019

	Checking Account	PayPal Account	Savings Account	Total
INCOME:				
ARRL Dues	0.00	0.00	0.00	0.00
BARS Dues	21.00	275.96	0.00	296.96
Coax/Repeater	0.00	0.00	0.00	0.00
Donations	0.00	0.00	0.00	0.00
Education	24.00	0.00	0.00	24.00
Hamfest	10.00	0.00	0.00	10.00
Interest	2.30	0.00	0.04	2.34
Sales Tax	0.00	0.00	0.00	0.00
Miscellaneous	0.00	0.00	0.00	0.00
Total	57.30	275.96	0.04	333.30

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	117.21		117.21
Hamfest	0.00		0.00
Insurance	0.00		0.00
Miscellaneous	25.00		25.00
Newsletter	0.00		0.00
Picnic	0.00		0.00
P O Box	0.00		0.00
Sales Tax	3.72		3.72
Telephone	0.00		0.00
Total	145.93		145.93

ACCOUNT BALANCES

	June 30, 2019	July 31, 2019
Checking Balance*	10485.51	10396.88
PayPal Balance	3360.36	3636.32
Savings Balance	201.10	201.14
Total Balance	14046.97	14234.34

* Fund-specific balances in Checking Account

General	7865.28	7752.65
Coax/Repeater	804.98	804.98
Education	1815.25	1839.25
Total Checking	10485.51	10396.88

(continued from page 11, General Meeting, 08-05-19)

MARS – Harvey Fry, AA4HF, and Barry Jackson, WB4N:

(no announcements).

Trustee: Shack – Andrew Cook, KF4OWP: Nothing to announce.

VHF Repeater – Andrew Cook, KF4OWP: Nothing to announce.

Bylaws – Andrew Cook, KF4OWP: The Bylaws committee lead by Secretary Bruce Campbell, KM4EHU, is meeting each month at 6:00pm before the General Meetings and the Directors' Meetings to revise the current Bylaws.

The committee meeting is open to all BARS members for input and discussion. The proposed Bylaws revisions are scheduled to be presented to the club membership at the October meeting pending recommendation by the Board of Directors.

Special Interest Groups News (none)

Old Business. (none)

New Business. (none)

With no other discussions at 8:35pm, Bart Breeding, KB4FEE, suggested that the assembly ought to close for the evening, which followed by action of those present.

The next BARS scheduled meetings and activities:

Bylaws Committee Meeting: Monday, August 19th, 6:00pm.

Directors' Meeting: Monday, August 19th, 7:30pm.

Picnic: Monday, September 9th, Shillito Park Shelter#4.

Bylaws Committee Meeting: Monday, September 16th, 6:00pm.

Directors' Meeting: Monday, September 16th, 7:30pm.

Bylaws Committee Meeting: Monday, October 7th, 6:00pm

BARS General Meeting: Monday, October 7th, 7:30pm.

Program: Proposed Bylaws.

Recorded and submitted by:

Bruce A. Campbell, KM4EHU Secretary

Richmond Hamfest

Sponsored by the

Central Kentucky Amateur Radio Society

September 14, 2019

8:00 AM – 1:00 PM (Eastern time)

Indoor Climate Controlled Event; Plus free outdoor tailgating space (with ticket purchase.)

Ham Exams (W5YI-VEC) (testing begins 12:30 ET)

Food Truck

VENDORS: TAW

Main & door prizes: HamCall DVD

Forums (Topic Pending)

Silent Auction

All Proceeds help support CKARS, it's repeaters and other community support events.

Must be present to win Door and Main Prizes; Drawing at 12:00

Extra chance tickets available at the door.

Lexington, Kentucky

At the MADISON COUNTY FAIRGROUNDS

K4KJQ

3237 Old KY 52, Richmond, KY

(Turn East at traffic light 13. Only 6 easy miles from I-75, Exit 90. Talk-in 145.370, pl 192.8)



Mmmm! A light snack is in order after a long night chasing DX



Oops! Forgot to ground all pieces of equipment to one common ground!

Contest Corral

September 2019

Check for updates and a downloadable PDF version online at www.arrl.org/contests.

Refer to the contest websites for full rules, scoring information, operating periods or time limits, and log submission information.

QST www.arrl.org

Start - Finish Date-Time	Date-Time	Bands	Contest Name	Mode	Exchange	Sponsor's Website
1 1800	2 0300	1.8-UHF	Tennessee QSO Party	CW Ph Dig	RS(T), county or SPC	tnqp.org/rules
2 2300	3 0300	1.8-50	MI QRP Labor Day CW Sprint	CW	RST, SPC, mbr or power	www.miqrp.net/contest
3 0100	3 0300	3.5-28	ARS Spartan Sprint	CW	RST, SPC, power	arsqrp.blogspot.com
4 2000	4 2100	3.5	UKEICC 80-Meter Contest	Ph	4-char grid square	www.ukeicc.com
5 1700	5 2100	28	NRAU 10-Meter Activity Contest	CW Ph Dig	RS(T), 6-char grid square	nrau.net/activity-contests
5 1900	5 2100	1.8-50	SKCC Sprint Europe	CW	RST, SPC, name, mbr or power	www.skccgroup.com
7 0000	7 2359	3.5-28	Russian RTTY WW Contest	Dig	RST, 2-letter oblast or CQ zone	www.qrz.ru/contest/detail/93
7 0000	8 2359	3.5-28	All Asian DX Contest, Phone	Ph	RS, 2-digit age	www.jarl.org/English
7 0600	7 0800	7,14	Wake-Up! QRP Sprint	CW	RST, serial, suffix of previous QSO	qrp.ru/contest/wakeup
7 1200	8 2359	1.8-50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
7 1300	8 0100	1.8-UHF	Nebraska QSO Party	CW Ph	County or SPC (FT8: grid square)	qcwa.org/2019-ne-qso-party-rules.pdf
7 1300	8 1259	1.8-28	IARU Region 1 Field Day, SSB	Ph	RST, serial	darc.de/der-club/referate/conteste/iaru-region-1-fieldday/en
7 1300	8 1300	3.5-28	RSGB SSB Field Day	Ph	RS, serial	www.rsgbcc.org/hf
7 1400	7 2200	3.5-28	Ohio State Parks on the Air	Ph	OH park abbreviation or "OH" or SPC	ospota.org
7 1600	7 1900	3.5	AGCW Straight Key Party	CW	RST, serial, class, name, age	www.agcw.org/index.php/en
7 2000	8 2000	3.5	PODXS 070 Club Jay Hudak Memorial 80-Meter Sprint	Dig	RST, SPC	www.podxs070.com
8 0000	8 0400	3.5-14	North American Sprint, CW	CW	Other station's call, your call, serial, name, SPC	ncjweb.com
8 1000	8 1400	144	WAB 144 MHz QRO Phone	Ph	RS, serial, WAB square or country	wab.internip.net
9 0000	9 0200	1.8-28	4 States QRP Group Second Sunday Sprint	CW Ph	RS(T), SPC, mbr or power	www.4sqrp.com
9 1900	9 2030	3.5	RSGB 80-Meter Autumn Series, SSB	Ph	Other station's call, your call, serial, name	www.rsgbcc.org/hf
14 0000	14 2359	1.8-VHF	FOC QSO Party	CW	RST, name, mbr (if any)	g4foc.org/qsoparty
14 0000	15 2359	3.5-28	WAE DX Contest, SSB	Ph	RS, serial	darc.de/der-club/referate/referat-conteste/worked-all-europe-dx-contest/en
14 1000	15 1000	1.8-28	SARL Field Day Contest	CW Ph Dig	RS(T), # of transmitter, category, province or "DX"	www.sarl.org.za
14 1400	15 2000	All	Texas QSO Party	CW Ph Dig	RS(T), county or SPC	www.txqp.net
14 1500	15 0300	3.5-28	Alabama QSO Party	CW Ph	RS(T), county or SPC	www.alabamاقsoparty.org
14 1500	15 0959	3.5-28	Russian Cup Digital Contest	Dig	Serial, 4-char grid square	qrz.ru/contest/detail/86.html
14 1800	16 0259	50 and up	ARRL September VHF Contest	CW Ph Dig	4-char grid square	www.arrl.org/september-vhf
15 0000	15 0400	3.5-14	North American Sprint, RTTY	Dig	Other station's call, your call, serial, name, SPC	ncjweb.com
15 1300	18 0700	1.8-144	Classic Exchange, CW	CW	Name, RST, SPC, rcvr/xmtr model	www.classicexchange.org
15 1700	15 2059	3.5-28	BARTG Sprint 75	Dig	Serial	bartg.org.uk
16 0100	16 0300	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	qrpcontest.com/pigrun
18 1900	18 2030	3.5	RSGB 80-Meter Autumn Series, CW	CW	Other station's call, your call, serial, name	www.rsgbcc.org/hf
19 0030	19 0230	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqcc.info
20 2100	20 2359	3.5	AGB NEMIGA Contest	CW Ph Dig	RST, serial, mbr (if any)	www.ev5agb.com
21 0000	22 2359	2.3 GHz and Up	ARRL EME Contest	CW Ph Dig	Signal report	www.arrl.org/eme-contest
21 0000	22 2359	All	Collegiate QSO Party	CW Ph Dig	School name, school mascot, operating class	collegiateqsoparty.com
21 0600	22 2359	10 GHz to light	ARRL 10 GHz and Up Contest	CW Ph Dig	6-char Maidenhead locator	www.arrl.org/10-ghz-up
21 1000	22 1000	144, 432, 1296	SARL VHF/UHF Digital Contest	Dig	RST, 6-char grid locator	www.sarl.org.za
21 1200	22 1200	3.5-28	Scandinavian Activity Contest, CW	CW	RST, serial	www.sactest.net
21 1200	22 1200	1.8-28	All Africa International DX Contest	CW Ph Dig	RS(T), serial	www.sarl.org.za
21 1400	21 1800	144, 432	AGCW VHF/UHF Contest	CW	RST, serial, power class, 6-char grid	www.agcw.org/index.php/en
21 1400	22 0200	All	Iowa QSO Party	CW Ph Dig	RS(T), county or SPC	www.w0yl.com/IAQP
21 1500	21 2100	1.8-28	QRP Afield	CW Ph Dig	RS(T), SPC, mbr or power	www.newenglandqrp.org
21 1600	22 0359	3.5-28	New Jersey QSO Party	CW Ph Dig	RS(T), county or SPC	www.k2td-bcrrc.org/njqp
21 1600	22 2200	All	New Hampshire QSO Party	CW Ph Dig	RS(T), county or SPC	www.w1wqm.org/nhqso
21 1600	22 2359	1.8-144	Washington State Salmon Run	CW Ph Dig	RS(T), county or SPC	www.wwdxc.org/salmonrun
21 1800	21 1959	1.8-50	Feld Hell Sprint	Dig	RST, mbr, SPC, grid	sites.google.com/site/feldhellclub
22 1300	25 0700	1.8-144	Classic Exchange, Phone	Ph	Name, RS, SPC, rcvr/xmtr model	www.classicexchange.org
23 1900	23 2300	144	144 MHz Fall Sprint	CW Ph Dig	4-char grid square	svhfs.org
25 0000	25 0200	1.8-28	SKCC Sprint	CW	RST, SPC, name, mbr or power	www.skccgroup.com
25 2000	25 2100	3.5	UKEICC 80-Meter Contest	CW	4-char grid square	www.ukeicc.com
26 1900	26 2030	3.5	RSGB 80-Meter Autumn Series, Data	Dig	Other station's call, your call, serial, name	www.rsgbcc.org/hf
28 0000	29 2359	3.5-28	CQ Worldwide DX Contest, RTTY	Dig	RST, CQ zone, SP (if US/VE)	www.cqwwrtty.com
28 1200	29 1200	1.8-28	Maine QSO Party	CW Ph	RS(T), county or SPC	ws1sm.com/MEQP.html
30 1300	1 0400	1.8-28	CQC Challenge	CW	RST, name, SPC, rig	qrp-labs.com/party.html

All dates refer to UTC and may be different from calendar dates in North America. Contests are not conducted on the 60-, 30-, 17-, or 12-meter bands. Mbr = Membership number. Serial = Sequential number of the contact. SPC = State, Province, DXCC Entity. XE = Mexican state. Listings in blue indicate contests sponsored by ARRL or NCJ. The latest time to make a valid contest QSO is the minute listed in the "Finish Time" column. Data for Contest Corral is maintained on the WA7BNM Contest Calendar at www.contestcalendar.com and is extracted for publication in QST 2 months prior to the month of the contest. ARRL gratefully acknowledges the support of Bruce Horn, WA7BNM, in providing this service.

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 non-commercial 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.

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mellio72@yahoo.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 September 2019

- Sun 1 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 2 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; Fayette County ARES Net 8:30 pm It is on the LEX 94 machine ,146.940 MHZ, A NEGATIVE OFFSET, AND A PL TONE OF 88.5.; "Casual Communicators Net," 9:00 PM Eastern, 443.325+ MHz.
- Wed 4 Six Shooters Net, 9:00 PM on 52.525 MHz FM (vertically polarized);
- Thu 5 Meeting of Bluegrass ARS Technical Group, 6:30 PM, Education Ctr, basement, Red Cross Building, 1450 Newtown Pike, Lexington; Jessamine Cty ARES Net, 7:30 PM, 145.490 Repeater, Gary Britten W4GNB net control.
- Sat 7 Shack open 9:00-Noon; Radio Theory and Construction Workshop, 1:00-3:00 PM,
- 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)
- Mon 9 Bluegrass Amateur Radio Society's Annal Family Picnic, Shillito Park, Shelter #4, at 6:00 pm, (No formal Meeting); 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 10 Amateur Swap Net 145.370 (T-192.8) 8:00 PM; Fayette County ARES Net 8:30 pm It is on the LEX 94 machine ,146.940 MHZ, A NEGATIVE OFFSET, AND A PL TONE OF 88.5.; "Casual Communicators Net," 9:00 PM Eastern, 443.325+ MHz;
- Wed 11 Six Shooters Net, 9:00 PM on 52.525 MHz FM (vertically polarized);
- Thu 12 Meeting of Bluegrass ARS Technical Group, 6:30 PM, Education Ctr, basement, Red Cross Building, 1450 Newtown Pike, Lexington; Jessamine Cty ARES Net, 7:30 PM, 145.490 Repeater, Gary Britten W4GNB net control.
- Sat 14 Shack open 9:00-Noon; Radio Theory and Construc-
Hamfest, tion Workshop, 1:00-3:00 PM; Central Kentucky Radio Society, Richmond
doors open at 8:00 am, License Exam Session , W5YI VEC, contact Darrell Epperson/AC4YD.859-771-1834(go to <http://ckars.org/>)
- hamfest)
- 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) linked to 147.180 (PL-74.4) and other repeaters in the area
- Mon 16 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 WCARS License Test Session 7:00 PM , Red Cross Building, 1450 Newtown Pike, Lexington, KY, Further information contact Margie Williams/KE4MAJ, 859-489-6274; Amateur Swap Net 145.370 (T-192.8) 8:00 PM; Fayette County ARES Net 8:30 pm It is on the LEX 94 machine ,146.940 MHZ, A NEGATIVE OFFSET, AND A PL TONE OF 88.5. , "Casual Communicators Net," 9:00 PM Eastern, 443.325+ MHz;
- Wed 18 Six Shooters Net, 9:00 PM on 52.525 MHz FM (vertically polarized);
- Thu 19 Meeting of Bluegrass ARS Technical Group, 6:30 PM, Education Ctr, basement, Red Cross Building, 1450 Newtown Pike, Lexington; Jessamine Cty ARES Net, 7:30 PM, 145.490 Repeater, Gary Britten W4GNB net control.
- SAT 21 Shack open 9:00-Noon; Radio Theory and Construction Workshop, 1:00-3:00 PM,
- 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 Bylaws Committee Meeting, 6:00 pm ; Directors' Meeting: 7:30 pm; 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 24 Amateur Swap Net 145.370 (T-192.8) 8:00 PM; Fayette County ARES Net 8:30 pm It is on the LEX 94 machine ,146.940 MHZ, A NEGATIVE OFFSET, AND A PL TONE OF 88.5.; "Casual Communicators Net," 9:00 PM Eastern, 443.325+ MHz;
- Wed 25 Six Shooters Net, 9:00 PM on 52.525 MHz FM (vertically polarized);
- Thu 26 Meeting of Bluegrass ARS Technical Group, 6:30 PM, Education Ctr, basement, Red Cross Building, 1450, Newtown Pike, Lexington; Jessamine Cty ARES Net, 7:30 PM, 145.490 Repeater; Gary Britten W4GNB net control.
- Sat 28 Shack open 9:00-Noon; Radio Theory & Construction Workshop, 1:00-3:00 PM, basement, Red Cross Bldg, 1450 Newtown Pike;
- 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)
- Mon 30 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.