



Pray for our
Troops



God Bless America!

Q
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A

HAMnews

February
2017

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MARS Station AAV4CAB



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"Ham News" was first published by **Bobby Foster, WA4ZSQ**, in
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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): 859-402-8208

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

Post notes to the Club
ListServ: bars@lsv.uky.edu

-- MANY THANKS TO FERNIE/KE4MAI --

Anyone who has paid their dues for 2017 using the Club's web page should have noticed that there have been changes made to the appearance and link sources. **Fernie Williams/KE4MAI** spent a few nights during the holidays to redesign the site, and make changes to the source. If anyone tried to pay dues, donate to the Repeater/Coax Fund, or to gather information about the Club in December may have thought the site was down or had been hacked (yes, there were a few reports of that). This wasn't the case, you probably just tried to access it while Fernie was working on it. Try again, you'll find that everything is working nicely. Again, thanks Fernie.

-- WEATHER SPOTTER TRAINING --

There will be a weather spotting/Skywarn training session held in Lexington Monday, March 6, 2017. Time of the meeting is 7:00 PM, and location is Meeting Room B in the American Red Cross Building, 1450 Newtown Pike, Lexington. For information contact **Smokey Wallace** at ke6ivk@arrl.net, or (859) 536-8257. Also, there will be a SKYWARN training session 10:00 AM, March 4, 2017 at the Garrard County EOC, 278 Precision Court, Lancaster, KY. **Joe Sullivan** from NWS Louisville will be the instructor. Contact person is **Rev. Jim Boyd/KM4KGN**, ARES Emergency Coordinator, Garrard County, KY (859) 339-6591 or jboyd@gcskywarn.com.



"Live simply, love generously, care deeply, speak kindly, leave the rest to God."

~Ronald Reagan

QUA/HAMnews

February 2017

Meeting Notice

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

The regular meeting of the Bluegrass Amateur Radio Society, Inc., will be held Monday, February 6, 7:30 PM, Meeting Room B, second floor of the Red Cross Building, 1450 Newtown Pike, Lexington.

The program will be presented by Club member **David Richardson/W9KHZ**. David's topic will be "BOB' Personal Emergency Preparedness."

This promises to be an interesting discussion and suggestions for what we all should be considering about preparing our homes, offices, vehicles for an unexpected emergency situation. I know I'm not properly prepared. . . Are You?

We welcome your suggestions of how we can make a difference in the Club in 2017 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 **Joseph "Smokey" Wallace/KE6IVK** at 859/402-8208, or e-mail to ke6ivk@arrl.net (see the schedule on page 2). ♦

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 **Joseph "Smokey" Wallace/KE6IVK**, during a Club meeting, or contact him at 859/402-8208, or e-mail to ke6ivk@arrl.net.

Note that we need volunteers to chair various committees (Contest, Program, Public Relations and Membership), due to those chairpersons having retired or relocating from the Lexington/Fayette County Area. Contact Smokey Wallace/KE6IVK at ke6ivk@arrl.net or (859) 402-8208.

For 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 shack. ♦

Need A Worthwhile Donation for Your Taxes?

Andrew Cook/KF4OWP
Chair, Repeater Committee,
Bluegrass ARS, Lexington Kentucky

Do you need or want a worthwhile donation to report on your 2016 taxes? The Bluegrass ARS Coax/Repeater Fund needs your consideration and help. Here is the request for donations sent out by Repeater Committee Chair **Andrew Cook/KF4OWP**.

As we continue to do testing to investigate noise issues on the 146.760 repeater located at the broadcast studio of WKYT-TV (Channel 27), it is increasingly likely that work will need to be performed on the antenna and coax located at about 730 feet on their tower. Due to changes in the insurance requirements at Channel 27 it will cost us significantly more in the future when repairs need to be made (they have contracted with a tower/

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, February 20, 2017, at 7:30 PM in 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

antenna maintenance firm in North Carolina), unless we can be proactive in replacing problem components when other work is already being performed on the tower. If we can raise the money far in advance it will allow us to take advantage of better deals, especially for the coax. I would like to set a goal of \$5000 for replacement of the antenna and an upgrade to 1-5/8" hardline. If we can get more than that it will be left in the account for emergency tower work (which could cost us up to \$3000) per climb by the maintenance crew), or for future repeater projects. To make it easier to donate we have added a Pay Pal button to the Bluegrass ARS homepage <<http://bluegrassars.org>>. Checks can also be brought to monthly meetings or mailed to the club: Bluegrass ARS, P.O. Box 4411, Lexington KY 40544-4411. ♦



January Club Meeting

New President's First Monthly Meeting

Newly elected president **Joseph (Smokey) Wallace/KE6IVK** took the podium at 7:30 PM, Monday, January 9, 2017, and let everyone get acquainted with him and his plans for the coming year. As the picture above shows we had a good turnout for the meeting, in spite of the cold and dreary January weather. (Editor's note: The fellow sitting at the right of the picture is member/visitor **Dale Covington/K4GSX** who lives in Marietta, Georgia. Dale travels to Lexington to visit family a couple times each year and faithfully attends our meetings. It's always good to see and talk with Dale.)

The most important task that must be done is to fill vacancies in the Club's most prominent committees. As the listing shows on the inside cover of this newsletter chairs are needed for the Contest Committee, Emergency Preparedness, and Program. Anyone who would like to volunteer to chair one of these important committees should contact Smokey at (859) 402-8208, or e-mail to <ke6ivk@arrl.net>. ♦

The Central Kentucky ARRL Hamfest Has Moved, Changed Date

*Hamfest Committee,
Bluegrass ARS,
Lexington, Kentucky*

The Hamfest Committee members, and Board of Directors, have located a new site
(Continued on Page 3)

Program Schedule for 2017

*Program Committee
Bluegrass ARS, Lexington, Kentucky*

The following programs are scheduled for 2017. Your input and suggestions for programs for 2017 are needed. Call **Smokey Wallace/KE6IVK**, at (859) 402-8208, or e-mail to <ke6ivk@arrl.net>.

Month	Topic	Presenter(s)	Comments
✓ January	Open		
February	"BOB"	David Richardson/W9KHZ	Personal Emergency Preparedness
March			Severe Weather Identification and Reporting tentatively by John Gordon of the NWS, Louisville
April		Stephen Bishop and Tim Brandewie	Lexington/Fayette Emergency Management
May			Chemical Weapons Removal – Bluegrass Ordinance Depot, Madison County, Kentucky.
June	"Field Day"	Smokey Wallace/KE6IVK	Site location, preparation, operating stations, etc.
July	Open		
August	Hamfest	David Richardson/W9KHZ and Fest Committee	Location, preparation, tickets, tables, work crews, etc.
September	Annual Family Picnic	Fun, Food, Conversation	Picnic Shelter #2, Shillito Park, Lexington
October	Open		
November	Open		
December	Auction	J.B. Young	will serve as auctioneer to see if he can get you some cash – Bring your items

New Hamfest Site and Date

for our hamfest. It will be held in the lower level of Eastland Shopping Center, Winchester Road, Lexington. The site is a bingo hall and is a lot larger than the site we have been using in Lawrenceburg, Kentucky, the past few years.

The committee/board of directors have decided on charging the same for entry tickets (\$5.00 in advance/\$6.00 at the gate), but the cost for tables will be reduced to \$10.00 in advance and \$15.00 at the gate.

The suggested date will be the second weekend of August (as always), but on the Saturday rather than Sunday.

More details will be sent out during the coming weeks/months so watch your e-mail box. Questions/comments may be sent to **David Richardson/W9KHZ**, chair Hamfest Committee, via <daveinlex3@gmail.com>. ♦

Hamvention 2017 Theme

Bill Fuqua/WA4LAV,
Member, Bluegrass ARS,
Lexington, Kentucky
via hamvention@yahoo.com

When Hamvention opens May 19 at the Greene County Fairgrounds and Exposition Center in Xenia, Ohio, its theme, "Hamvention + Same Friends, New Home" says it all, according to **Ron Cramer, KD8ENJ**, General Chairman for the event. "Hamvention gives amateurs from all over the world a chance to get together with old friends. We welcome them to our new home," Cramer said.

Cramer, who served as assistant general chairman last year, noted that many hams return each year to Hamvention to meet other attendees that they have talked to on the radio. That camaraderie will remain the same, only the location has changed.

The committee, of all volunteers, has been dealing with the monumental task of defining new inside exhibits and flea market spaces and all the other aspects of the Hamvention move. Cramer noted that website updates are being made almost daily, mail order ticket sales are underway, and that ticket, flea market, and inside exhibit purchases will be available on-line soon.

Some important changes this year include free on-site parking for attendees, a greater variety of food choices, and the availability of overnight camping on the

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.

fairgrounds property. Camping arrangements are available from the Greene County Fair Board at 937-372-8621 or email <esther@greencountyfairgrounds.com>.

Cramer said he and Assistant General Chairman **Jack Gerbs, WB8SCT**, wanted to thank the committee chairs and their assistants for the tremendous effort they have put forth. "We couldn't do it without them and their volunteers," he said.

Hamvention®, the world's largest amateur radio gathering, brings about 25,000 people to the greater Dayton area. The three-day event includes exhibits, a flea market, forums, education sessions, and license exams.

For more information about Hamvention 2017 (scheduled for May 19-21), visit <<http://www.hamvention.org/>> or e-mail <info@hamvention.org>. ♦

Military Laser Turns Earth's Atmosphere Into a Giant Magnifying Glass

Malcolm Walters/KY4MJW
<chuckles.mookie@GMAIL.COM>
via WB4CWF@LSV.UKY.EDU
<http://www.mirror.co.uk/tech/military-laser-system-uses-earths-9631202#ICID=ios>
[TMNewsApp_AppShare_Click_Email](#)

A new "directed energy" laser system could allow battlefield commanders to spy on enemy activities from space, using the Earth's atmosphere as a giant lens.

The system, developed by British defence company BAE Systems, uses lasers to temporarily change the Earth's atmosphere into lens-like structures, to magnify or change the path of electromagnetic waves such as light and radio signals.

The Laser Developed Atmospheric Lens (LDAL) concept simulates two existing effects in nature – the reflective properties of the ionosphere, and desert mirages. LDAL uses lasers to heat a small region of atmo-

sphere and create a refractive lens.

Reflective Properties

The ionosphere occurs at a very high altitude and is a naturally occurring layer of the Earth's atmosphere which can be reflective to radio waves – for example it results in listeners being able to tune into radio stations that are many thousands of miles away. The radio signals bounce off the ionosphere allowing them to travel very long distances through the air and over the Earth's surface.

Desert Image

Desert mirages provide the illusion of a distant lake in the hot desert. This is because light from the blue sky is "bent," or refracted, by the hot air near the surface and into the vision of the person looking into the distance.

LDAL simulates both of these effects, using a high pulsed power laser system to temporarily heat a small region of atmosphere in a structured way, ionizing the atmosphere and creating a refractive lens.

This makes it possible for the aircraft's imaging sensor to collect much more light from the area underneath the lens, delivering a much better image.

BAE systems claims the lens could also be used as a form of "deflector shield," to protect aircraft from incoming attacks by high-power laser weapons on the ground.

By creating small pockets of ionized atmosphere, the LDAL system can create a "reflective" or mirrorlike structure that will disrupt the adversary laser beam, stopping it reaching the aircraft.

Professor **Bryan Edwards** from the Science and Technology Facilities Council (STFC) at Rutherford Appleton Laboratory, which evaluated the concept, praised the new system.

"By harnessing our collective expertise and capabilities we have been able to identify new ways in which cutting edge technology, and our understanding of fundamental physical processes and phenomena, has the potential to contribute to enhancing the safety and security of the UK," he said. ♦

Diamond Batteries Could Use Nuclear Waste to Generate Electricity for Millennia

December 29, 2016 by **Steve Arar**,
<http://www.allaboutcircuits.com/news/>

Nuclear waste takes thousands of years to decay. But that long-lived radioactivity

could be exactly what makes these nuclear waste diamond batteries last for millennia.

Researchers at the University of Bristol have used graphite, the waste product of nuclear reactors, to develop a man-made diamond that produces electricity when placed in close proximity to a radioactive source. Although these batteries produce only a small amount of current, they offer an incredibly long battery life of thousands of years.

Making Use of Nuclear Waste

Nuclear reactors need graphite blocks to control heat flow and nuclear reactions. When exposed to radioactive uranium rods, the graphite blocks gradually become radioactive, as well. When a nuclear plant gets decommissioned, graphite blocks are one of the main radioactive waste products which need to be handled.

Carbon-14 is the radioactive version of carbon which is found at the surface of graphite blocks. The radiation of this carbon isotope cannot penetrate even a few centimeters of air, but it is still not safe to be allowed into the environment. The UK currently has almost 95,000 tonnes of radioactive graphite blocks. Researchers believe that, by extracting carbon-14, the majority of the graphite's radioactive material can be removed. As a result, the cost and danger of storing graphite would be significantly reduced.

Researchers have found a method to reuse these graphite blocks to generate electricity using the radioactive waste. First, they heat the graphite blocks and turn them into a gas. Then, the radioactive gas is compressed to grow a diamond.

The beta particles emitted by the radioactive material interact with the crystal lattice and throw off electrons. The result? A radioactive diamond that can generate electricity for thousands of years.

To prove the feasibility of the technique, the research team has designed a prototype nuclear battery using a nickel isotope, nickel-63, as the radioactive source. However, they are planning to use carbon-14 in their future designs.

No Emissions, No Maintenance!

Unlike many conventional methods of producing electricity which rely on moving a magnet inside a coil of wires, the nuclear-powered batteries have no moving parts and the electricity is generated by simply placing the man-made diamond in close proximity to a radioactive source.

To shield the radioactive diamonds and make them safe to handle, a nonradioac-

"Our greatest glory is not in never falling, but in rising every time we fall."

~ Confucius

tive diamond coating is also grown. **Dr. Neil Fox**, from Bristol's School of Chemistry, explains that these nuclear batteries have no radioactive threats to the user. He notes that carbon-14 has short-range radiation which can be completely confined within the world's hardest material: diamond. This nonradioactive diamond coating means that someone in close proximity to a nuclear battery would receive as much radiation as they would sitting next to a banana!

According to Professor **Tom Scott** of the university's Interface Analysis Centre, the nuclear batteries not only have negligible emissions, but they also do not require any maintenance. This fact alone means that nuclear diamonds could be used in areas that are dangerous—or downright impossible—for maintenance workers to reach.

Potential Applications of a Diamond Battery

The bad news is that the current produced is not high enough to power a smart phone. However, the long battery life makes the technology appealing, especially for applications where it is not easy or even possible to recharge the battery or replace it with a new one. The longevity of these batteries, which is connected to the half-life of the nuclear waste's radiation, can be crucially important in applications such as designing pacemakers, satellites, spacecraft, and high-altitude drones.

Researchers estimate that nuclear batteries based on carbon-14 will generate above 50 percent of their maximum power for as long as 5,730 years – equal to the whole time the human civilization has existed. Hence, with this technology, it would be possible to power interstellar probes long after they lose solar power.

Lithium-Ion, Nuclear Battery, or Another Alternative?

Unfortunately, over the last few years, the battery industry has been cruel to many promising solutions. Researchers in this field need not only to solve many technical problems, but also take the technology into the commercial realm. This is not at all easy because even a small battery manufacturer needs to invest nearly \$500 million. In fact, according to MIT's *Technology Review*, one of the main reasons that new battery technologies do not get commercialized is the

lack of funding and focus.

Many manufacturers prefer to rely on the incremental improvement of lithium-ion batteries—which has been exceedingly slow, despite some recent, promising research into increased Li-ion capacity—rather than accept the initial huge investment of a new battery which would offer a dramatic improvement over conventional batteries. In October 2015, Lux Research published a report in which they predicted the lithium-ion battery as the main choice of energy storage for the years ahead.

The nuclear-powered batteries can simultaneously solve a few of today's serious problems, such as nuclear waste disposal, clean electricity generation, and battery life. However, is there a clear path to seeing this technology commercialized? We face some serious questions: Is it economical to convert nuclear wastes into diamond batteries? Or are there only some particular applications that these batteries really lend themselves to? ♦

New "Amateur Radio Parity Act" Introduced, Speeds Through House

ARRL Bulletin ARLB005
January 17, 2017

Just 10 days after being introduced, the 2017 Amateur Radio Parity Act legislation, H.R. 555, passed the U.S. House of Representatives on unanimous consent under a suspension of House rules. The bill's language is identical to that of the 2015 measure, H.R. 1301, which won House approval late last summer after attracting 126 cosponsors, but failed to clear the U.S. Senate last fall as the 114th Congress closed. The new bill, again sponsored by **Rep. Adam Kinzinger** (R-IL), was introduced on January 13 with initial cosponsorship by **Rep. Joe Courtney** (D-CT) and **Rep. Greg Walden, W7EQI** (R-OR), who chairs the influential House Committee on Energy and Commerce.

H.R. 555 can be found on the web at, <<https://www.congress.gov/bill/115th-congress/house-bill/555?r=27>>.

"The grassroots effort of Amateur Radio operators across this nation in support of the Amateur Radio Parity Act has been remarkable, nothing like we have ever seen before," ARRL President **Rick Roderick, K5UR**, said. "To all hams, keep going! Now is the time to charge forward with that same momentum to the Senate. We can do it!"

"Rep. Kinzinger has again stepped forward to introduce this important legisla-

tion," said ARRL CEO **Tom Gallagher, NY2RF**.

"Kinzinger's commitment stems from exposure to what the Amateur Radio

community brings to the service of all communities.

The ARRL and radio amateurs nationwide owe Rep. Kinzinger a resounding

"Courage is resistance to fear, mastery of fear, not absence of fear."

~ **Mark Twain**

Schedule for Volunteer Examinations in 2017

Harry Sparks/KN4S,
Bluegrass Volunteer Examiners,
kn4s@kn4s.com

The exam schedule for 2017 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 1450 Newtown Pike Lexington KY 40509	Clark County EOC 200 Maryland Ave Winchester KY 40391	Danville Red Cross 3rd St Methodist Church S. 3rd Street Danville KY 40442	Georgetown Police Dept 550 Bourbon Street Georgetown KY 40324

* August, Bluegrass ARS Hamfest, Eastland Shopping Center, Lexington, Kentucky

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

Contact Information

ARRL VEC: Lexington and BARS ARRL Hamfest test sessions – Liaison **Fernie Williams/KE4MAI**, ke4mai@arrrl.net, 859-652-3393
(www.bluegrassars.org)

Danville – Liaison **John Wulf/K4FT**, k4ft@bellsouth.net, 563-505-0339, Wilderness Road Amateur Radio Club

Georgetown – Liaison **Ron Malinowski/WX4GPS**, wx4gps@arrrl.net, 502-542-8252

WCARS VEC: Lexington – Liaison **Margueritte Williams/KE4MAJ**, ke4maj@arrrl.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, February 11 , 2017 10:00 AM	ARRL	Lexington
Saturday, March 11 , 2017 10:00 AM	ARRL	Georgetown
Tuesday, March 21 , 2017 07:00 PM	WCARS	Lexington
Saturday, April 8 , 2017 10:00 AM	W5YI	Winchester
Saturday, April 22 , 2017 10:00 AM	ARRL	Danville
Saturday, May 13 , 2017 10:00 AM	ARRL	Lexington
Saturday, June 10 , 2017 10:00 AM	ARRL	Georgetown
Tuesday, June 13 , 2017 07:00 PM	WCARS	Lexington
Saturday, July 8 , 2017 10:00 AM	W5YI	Winchester
Saturday, July 22 , 2017 10:00 AM	ARRL	Danville
Saturday, August 12 , 2017 11:00 AM	ARRL	BARS Hamfest
Saturday, September 9 , 2017 10:00 AM	ARRL	Georgetown
Saturday, September 16 , 2017 12:30 PM	W5YI	**Richmond
Tuesday, September 19 , 2017 07:00 PM	WCARS	Lexington
Saturday, October 14 , 2017 10:00 AM	W5YI	Winchester
Saturday, October 28 , 2017 10:00 AM	ARRL	Danville
Thursday, November 2 , 2017 06:30 PM	ARRL	Georgetown
Saturday, November 11 , 2017 10:00 AM	ARRL	Lexington
Saturday, December 9 , 2017 10:00 AM	ARRL	Georgetown
Tuesday, December 12 , 2017 7:00 PM	WCARS	Lexington

"Thank You!" for his efforts on their behalf."

H.R. 555 calls on the FCC to establish rules prohibiting the application of deed restrictions that preclude Amateur Radio communications on their face or as applied. Deed restrictions would have to impose the minimum practicable restriction on Amateur Radio communications to accomplish the lawful purposes of homeowners associations seeking to enforce the restriction. ♦

Illegal Drone Transmitters Could Interfere with Air Traffic Control

ARRL Bulletin 3, ARLB003
January 12, 2017

In what it calls an "extremely urgent complaint" to the FCC, ARRL has targeted the interference potential of a series of audio/video transmitters used on unmanned aircraft and marketed as Amateur Radio equipment. In a January 10 letter to the FCC Spectrum Enforcement Division, ARRL General Counsel **Chris Imlay, W3KD**, said the transmitters use frequencies intended for navigational aids, air traffic control radar, air route surveillance radars, and global positioning systems.

"This is, in ARRL's view, a potentially very serious interference problem, and it is respectfully requested that the products referenced...be investigated and removed from the marketplace immediately and that the importers be subjected to normal sanctions," ARRL's letter said.

Some of the transmitters operate on frequencies between 1010 and 1280 MHz. "These video transmitters are being marketed ostensibly as Amateur Radio equipment," the League said, "but of the listed frequencies on which the devices operate, only one, 1280 MHz, would be within the Amateur Radio allocation at 1240-1300 MHz." Even then, ARRL said, operation there would conflict with a channel used for radio location.

ARRL said the use of 1040 and 1080 MHz, which would directly conflict with air traffic control transponder frequencies, represented the greatest threat to the safety of flight. The use of 1010 MHz, employed for

aeronautical guidance, could also be problematic.

ARRL cited the Lawmate transmitter and companion 6 W amplifier as examples of problematic devices being marketed in the U.S. Each costs less than \$100 via the Internet. The device carries no FCC identification number.

"[T]he target market for these devices is the drone hobbyist, not licensed radio amateurs. The device, due to the channel configuration, has no valid Amateur Radio application," ARRL told the FCC. "While these transmitters are marked as appropriate for amateur use, they cannot be used legally for Amateur Radio communications." In the hands of unlicensed individuals, the transmitters could also cause interference to Amateur Radio communication in the 1.2 GHz band, ARRL contended.

The League said it's obvious that the devices at issue lack proper FCC equipment authorization under FCC Part 15 rules, which require such low-power intentional radiators to be certified.

"Of most concern is the capability of the devices to cripple the operation of the [air traffic control] secondary target/transponder systems," ARRL said. "These illegal transmitters represent a significant hazard to public safety in general and the safety of flight specifically."

The surge in sales of drones has been dramatic. The FAA has predicted that combined commercial and hobby sales will increase from 2.5 million in 2016 to 7 million by 2020.

In Exhibit A of the January 10 letter, "Illegal Drones Threaten Public Safety," the League noted that some of the drones and associated equipment it has come across "are blatantly illegal at multiple levels," with some drone TV transmitters described as "particularly alarming."

"Rated at 6 times over the legal power limit, and on critical air navigation transponder frequencies, these devices represent a real and dangerous threat to the safety of flight, especially when operated from a drone platform that can be hundreds of feet in the air," the exhibit narrative asserted. ♦

Noise in the EOC

*ARES E-Letter,
Rick Palm/K1CE, Editor,
January 18, 2017*

I'm in Clark County, Nevada (Las Vegas valley), and a member of ARES and Air Force MARS. The issue of noise in the EOC came to light for us in 2014 when four

Andy Rooney wrote that . . .

" . . . The closing of a door can bring blessed privacy and comfort – the opening, terror. Conversely, the closing of a door can be a sad and final thing – the opening a wonderfully joyous moment."

MARS operators, including myself, were invited to Nye County, Nevada, to participate in a statewide, multi-agency earthquake disaster drill. The first problem was the RF noise created by all of the public safety radio systems' antennas mounted on the roof of the EOC within a few feet of the two HF antennas, making it impossible to hear any incoming HF signal less than 20 dB over S9. It rendered impossible communications from Pahrump [west of Las Vegas] to the Carson City area. The solution was to use VHF Winlink packet peer-to-peer, and VHF voice from the EOC to the training center two miles away. The center operators would then take the traffic and relay it on HF to Carson City. Traffic followed the reverse path, of course, back to the EOC.

Expediting written traffic handling was accomplished using thumb drives. We provided ICS-213 and Radiogram templates on a thumb drive to the ICS scribe, who filled in the blanks and brought the thumb drive from the EOC command room to the EOC radio room. We simply copied and pasted messages from the thumb drive to Winlink for packet transmission to the training center site. It was received via VHF then copied and pasted to their thumb drive. The VHF operator handed the thumb drive to the HF operator where it was copied and pasted into Winlink for PACTOR HF relay on a MARS or state authorized frequency. When the PACTOR link failed, they switched to HF WINMOR.

Having had the above experience in 2014 has proved valuable as we have since deployed for numerous exercises and actual events where we have had the same RF noise problem at all of the half dozen EOCs in our area. For in-house ambient noise, we have opted for headsets on each radio.

Our Multiple Agency Coordination Center (MACC) is currently located in a high electrical noise environment and is treated the same. We do have, however, an Incident Command Post vehicle that is parked outside the MACC in the parking lot that can be used for packet, voice, and sound card digital modes. This is a former fire department command post and has five operator positions built in.

On another point, advance-of-incident coordination with agencies is critically important: We have about a dozen organizations that now work together and know what ARES/RACES/MARS can do. MARS

and ARES work hand in hand in our state. Also, we have about a dozen operators with deployable go-boxes that include VHF/UHF/HF capability for voice, packet, and sound card modes. We are currently training on Winlink modes to allow faster/easier interface with the National Traffic System, after experience in Cascadia Rising 2016.

– **Jim Bassett, W1RO,**
ARRL Nevada Section Traffic Manager

ARRL Asks FCC to Expand 5 MHz Band

*ARRL Bulletin 4, ARLB004
January 13, 2017*

ARRL has asked the FCC to allocate a new, secondary contiguous band at 5 MHz to the Amateur Service, while also retaining four of the current five 60-meter channels and current operating rules, including the 100 W PEP effective radiated power (ERP) limit. The proposed action would implement a portion of the Final Acts of World Radiocommunication Conference 2015 (WRC-15) that provided for a secondary international allocation of 5,351.5 to 5,366.5 kHz to the Amateur Service.

"Such implementation will allow radio amateurs engaged in emergency and disaster relief communications, and especially those between the United States and the Caribbean basin, to more reliably, more flexibly, and more capably conduct those communications [and preparedness exercises], before the next hurricane season," ARRL said in a January 12 Petition for Rule Making.

The FCC has not yet acted to implement other portions of the WRC-15 Final Acts.

The Petition for Rule Making can be found on the web in PDF format at, <<http://www.arrl.org/attachments/view/News/87580>>.

The League said that 14 years of Amateur Radio experience using the five discrete 5-MHz channels have shown that hams can get along well with primary users at 5 MHz, while complying with the regulations established for their use. "Neither ARRL, nor, apparently, NTIA is aware of a single reported instance of interference to a federal user by a radio amateur operating at 5 MHz to date," ARRL said in its petition.

NTIA – the National Telecommunications and Information Administration, which regulates federal spectrum – initially proposed the five channels for Amateur Radio use. In recent years, Amateur Radio has cooperated with federal users such as FEMA in conducting communication

interoperability exercises.

"While the Amateur Radio community is grateful to the Commission and to NTIA for the accommodation over the past 14 years of some access to the 5-MHz band, the five channels are, simply stated, completely inadequate to accommodate the emergency preparedness needs of the Amateur Service in this HF frequency range," ARRL said, adding that the five 2.8-kHz wide channels "have not provided sufficient capacity to enable competent emergency preparedness and disaster relief capability."

In its Petition, ARRL also called upon the FCC to retain the same service rules now governing the five channels for the new band. The WRC-15 Final Acts stipulated a power limit of 15 W effective isotropic radiated power (EIRP), which the League said "completely defeats the entire premise for the allocation in the first place."

"For precisely the same reasons that the Commission consented to a power increase on the five channels as recently as 2011 [from 50 W PEP ERP to 100 W PEP ERP], the Commission should permit a power

"Each king in a deck of playing cards represents a great king from history: Spades – King David; Hearts – Charlemagne; Clubs – Alexander, the Great; Diamonds – Julius Caesar"

level of 100 W PEP ERP, assuming use of a 0 dBd gain antenna, in the contiguous 60-meter band," ARRL said. "To impose the power limit adopted at WRC-15 for the contiguous band would render the band unsuitable for emergency and public service communications."

ARRL pointed out that the ITU Radio Regulations permit assignments that are at variance with the International Table of Allocations, provided a noninterference condition is attached, limiting the use of such an assignment relative to stations operating in accordance with the Table.

The League asked that General class or higher licensees be permitted to use the band. The FCC will not invite comments on the League's Petition until it puts it on public notice and assigns a Rule Making (RM) number. ♦

The 60 Meter Community Grows

John Williams VK4JJW,
For Amateur Radio Newsline

The world community of amateurs transmitting on 60 meters just expanded again by two more nations. Slovenia's telecommunications regulator has approved use of the band in that nation, beginning with a temporary three-month license. That license extends from January 11, 2017, through April 11, 2017, and covers 5351.5 kHz to 5366.5 kHz with a 15 W EIRP.

Meanwhile, Niger's telecommunications regulator has approved the use of 60 meters just in time for the upcoming 5U5R DXpedition in March. Their operation, which covers CW and SSB, is expected to be around 5360 kHz. Slovenia and Niger join Kazakhstan, which also recently gained access to the band. The United States has no widespread 60 meter privileges beyond five frequency channels on upper side-band, with each channel having a bandwidth of 2.8 kHz. ♦



It's the Rule

FCC Dismisses Two Petitions from Radio Amateurs

ARRL Bulletin 2, ARLB002
January 6, 2017

The FCC has turned down two petitions filed in 2016, each seeking similar changes in the Part 97 Amateur Service rules. **James Edwin Whedbee, N0ECN**, of Gladstone, Missouri, had asked the Commission to amend the rules to reduce the number of Amateur Radio operator classes to Technician, General, and Amateur Extra by merging remaining Novice class licensees into the Technician class and all Advanced class licensees into the Amateur Extra class.

In a somewhat related petition, **Jeffrey H. Siegell, WB2YRL**, of Burke, Virginia, had requested that the FCC grant Advanced Class license holders Morse code operating privileges equivalent to those enjoyed by Amateur Extra class licensees.

"Thus, Mr. Siegell's proposed rule change is subsumed within the changes Mr. Whedbee requests, so our analysis is the same for both proposals," the FCC said in dismissing the two petitions on January 5.

The FCC streamlined the Amateur Radio licensing system into three classes – Technician, General, and Amateur Extra –

in 1999. While it no longer issues new Novice or Advanced class licenses, existing licenses can be renewed, and Novice and Advanced licensees retained their operating privileges.

"The Commission concluded that the three-class structure would streamline the licensing process, while still providing an incentive for licensees to advance their communication and technical skills," the FCC recounted in its dismissal letter to Whedbee and Siegell. It specifically rejected suggestions that Novice and Advanced class licensees be automatically upgraded to a higher class, concluding that it would be inappropriate for these licensees to "receive additional privileges without passing the required examination elements." The FCC cited the same reason in 2005, when it denied requests to automatically upgrade Technician licensees to General Class and Advanced licensees to Amateur Extra Class, as part of a wide-ranging proceeding.

The FCC said the two petitions "do not demonstrate, or even suggest, that any rel-

evant circumstances have changed that would merit reconsideration of those decisions."

Whedbee had argued that automatically upgrading current Novice and Advanced Classes would simplify the rules and reduce the Commission's costs and administrative burden, but the FCC said Whedbee provided no evidence that an administrative problem exists.

"Moreover, such benefits would not outweigh the public interest in ensuring that amateur operators have the requisite incentive to advance their skill and technical knowledge in order to contribute to the advancement of the radio art and improvement of the Amateur Radio Service," the FCC said.

"The Commission has already concluded that it will not automatically grant additional privileges to the discontinued license classes," the FCC said. "Consequently, we conclude that the above-referenced petitions for rulemaking do not warrant further consideration at this time."

Where's the Rare DX?

"OPDX Bulletin 1301"

January 23, 2017

<http://www.papays.com/opdx1301.html>

AFRICAN TOUR – Peter/HA3AUI will be active from two W African countries til Mar 5 signing 6W2SC from Senegal, and J5UAP from Guinea-Bissau. Specific dates were not provided. <<http://cqafrika.net/en/welcome/index.html>> QSL via LoTW or direct via his home CBA.

ALGERIA (7V7) – Vlad/UA4WHX continues his African tour signing 7V7V on 80m CW and possibly be on 40/30m using CW, SSB and RTTY. Length of stay unknown. QSL via his home CBA.

ARUBA (P4) (IOTA SA-036) – John/W2GD will sign P4ØW (SA-036) Feb 12-30 (and ARRL Intl DX CW Test), mostly on 160/80m and 30/17/12m. QSL via LoTW or direct to N2MM, Buro cards not accepted. Logs loaded on LoTW.

AUSTRAL ISLANDS (TX5) – The CanAm DX Group will sign TX5T from Raijavae Is (OC-114) Feb 20-Mar 3 on 160-6m using CW, SSB and Digi. <<http://www.Australis2017.com>>

BELIZE (V3) – Victor/WBØTEV will sign V31VP Febr 8-14 on HF plus entry in the CQWW WPX RTTY Test (Feb 11-12). QSL via his home CBA, direct or by the Buro.

BELIZE (V3) – Art/NN7A will sign V31JZ/p from South Water Caye (NA-180) Feb 15-21 using mostly CW on 160-10m plus 30/17/12m (also in the ARRL Intl DX CW Contest, Feb 18-19). QSL direct via NN7A (Art Phillips, P.O. Box 73, Eckert, CO 81418 USA), or via the Buro. There is no active V3 bureau).

CAYMAN ISLANDS (ZF9) – Stan/K5GO will sign ZF9CW from Cayman Brac Is (NA-016) til Feb 23 (in the ARRL DX CW Test).

CAYMAN ISLANDS (ZF) – Ops will sign ZF1A from Grand Cayman Is (NA-016, WLOTA LH-1042) during the ARRL Intl DX CW Contest (Feb 18-19). QSL via K6AM, direct, by the W6 Buro or LoTW.

Feb 18-19). QSL via his home CBA direct.

COSTA RICA (TI) – Nathan/N4YDU will sign TI5W during the ARRL Intl DX CW Test Feb 18-19 on all-bands. QSL via N3YIM direct. Listen for TI5/N4YDU before and after the contest. QSL TI5/N4YDU via LoTW. QSL TI5W via W4FS and LoTW.

DEM REP OF THE CONGO (9Q) – Fernando/EA4BB will sign 9Q6BB for 3 years, on HF (usually 80-10m), mainly SSB. QSL via W3HNK.

DJIBOUTI (J28) – Jean-Philippe/F1TMY will sign J28PJ for at least 3 years on 160-6m. QSL via F1TMY.

FERNANDO DE NORONHA (PYØF) (IOTA SA-003) – Erwin/PY2QI will sign PY2QI/PYØF Feb 15-21 on 40-10m using CW only. QSL via his home CBA direct.

Upcoming Contests

Sean Kutzko/KX9X,
QST, <<http://www.arrl.org/contest-calendar>>,
scroll down, click on "Contest Corral"

- Feb 1 UKEICC 80-M Contest, Phn, www.ukeicc.com
- Feb 4 Triathlon DX Contest, 80-10m, CW/Digi/Phn, www.triathlon-dx-contest.gr
- Feb 4 Minnesota QSO Party, 160-10m, CW/Phn, www.w0aa.org
- Feb 4 FYBO Winter QRP Sprint, 160-10m, CW/Digi/Phn, www.azscqrptions.com
- Feb 4 AGCW Straight Key Party, 80m, CW, www.agcw.org/index.php/en
- Feb 4 FISTS Winter Slow Speed Sprint, 80-10m, CW, www.fistsna.org
- Feb 4-5 Vermont QSO Party, All Bands, CW/Digi/Phn, www.ranv.org/vtqso.html
- Feb 4-5 10-10 International Winter Contest, SSB, 10m, www.ten-ten.org
- Feb 4-5 Black Sea Cup International, 160-10m, CW/Phn, www.bscc.ucoz.ru/index/0-21
- Feb 4-5 F9AA Cup, 80-2m, CW, www.site.urf.asso.fr
- Feb 4-5 Brit Columbia QSO Pty, 160-10m, CW/Digi/Phn, www.orcadxcc.org/bcqp_rules.html
- Feb 4-5 Mexico RTTY International Contest, 80- 10m, Digi, www.rtty.fmre.mx
- Feb 5 North American Sprint, 80-20m, CW, www.ncjweb.com/Sprint-Rules.pdf
- Feb 7 ARS Spartan Sprint, 80-10m, CW, www.arsqr.blogspot.com
- Feb 11 FISTS Winter Unlimited Sprint, 80-10m, CW, www.fistsna.org
- Feb 11 Asia-Pacific Spring Sprint, 40/20m, CW, www.jsfc.org/apsprint/aprule.txt
- Feb 11-12 CQ WW RTTY WPX Contest, 80-10m, Digi, www.cqwpwxrtty.com/rules.htm
- Feb 11-12 SARL Field Day Contest, 160-10m, CW/Digi/Phn, www.sarl.org.za
- Feb 11-12 SKCC Weekend Sprintathon, 160-6m, CW, www.skccgroup.com
- Feb 11-12 KCJ Topband Contest, 160m, CW, www.kcj-cw.com
- Feb 11-12 Dutch PACC Contest, 160-10m, CW/Phn, www.pacc.veron.nl
- Feb 11-12 OMIS QSO Party, 160-10m, Phn, www.omiss.net
- Feb 11-12 AWA AM QSO Party, 80-20m, Phn, www.antiquewireless.org
- Feb 12 Balkan HF Contest, 80/40m, CW/Phn, www.balkan-hf.hamradio.ro/rules
- Feb 13 CQC Winter QSO Party, 80-20m, CW, www.coloradoqrclub.org
- Feb 13-17 ARRL School Club Rndup, All Bands, CW/Phn, www.arrl.org/school-club-roundup
- Feb 14 PODXS 070 Club Valentine Sprint, 160-40m, Digi, www.podxs070.com
- Feb 15 AGCW Semi-Automatic Key, 80m, CW, www.agcw.org/index.php/en
- Feb 18-19 ARRL International DX Contest, 160-10m, CW, www.arrl.org/arrl-dx
- Feb 18-26 Novice Rig Roundup, 3.5/7/21/28/144m, CW, www.novicerigroundup.com
- Feb 18 SARL Youth Day Sprint, 40m, Phn, www.sarl.org.za
- Feb 18-19 Russian PSK WW Contest, 160-10m, Digi, www.rdrclub.ru
- Feb 18 Feld Hell Sprint, 160-6m, Digi, www.sites.google.com/site/feldhellclub
- Feb 20 Run for the Bacon QRP Contest, 160-10m, CW, www.qrpcontest.com/pigrun
- Feb 22 SKCC Sprint, 160-10m, CW, www.skccgroup.com
- Feb 22 NAQCC CW Sprint, 160m, CW, www.naqcc.info
- Feb 22 UKEICC 80-Meter Contest, CW, www.ukeicc.com
- Feb 24-26 CQ 160-Meter Contest, Phn, www.cq160.com/rules.htm
- Feb 25-26 REF Contest, 80-10m, Phn, www.concours.r-e-f.org/contest/
- Feb 25-26 UBA DX Contest, 80-10m, CW, www.uba.be/en/traffic-news
- Feb 25-26 South Carolina QSO Party, 160-6m, CW/Digi/Phn, www.scqso.com/rules
- Feb 25-26 North American QSO Party, RTTY, 80-10m, Digi, www.ncjweb.com
- Feb 26 High Speed Club CW Contest, 80-10m, CW, www.highspeedclub.org
- Feb 26 SARL Digital Contest, 80-20m, Digi, www.sarl.org.za
- Feb 26-27 North Carolina QSO Party, 80-2m, CW/Digi/Phn, www.rars.org/ncqsoparty

FIJI (3D2) – Jim/WB2TJO will sign 3D2JS from Taveuni Is (OC-016) til Mar on HF using CW, SSB and Digi. QSL via his home CBA.

GREENLAND (OV9Ø/OX9Ø/OZ9Ø/5P9Ø) – Members of the Experimenterende Danske Radioamatører (EDR) will sign OZ9ØEDR, OX9ØEDR and 5P9ØEDR from Greenland (NA-018) durint 2017 on all bands and all modes. The call sign OZ7D will be used for the JT modes. ONLY QSOs with OZ7D in JT modes are valid for the EDR award. QSL to OZ1ACB. NO BURO QSLs. <<http://oz90edr.oz5bir.dk>>

MADAGASCAR (5R) – Andy/OE7AJH

signing 5R8UP from Antananarivo. Length of stay not known. CW and SSB ctivity have been on 40/20m. QSL via his home CBA.

MARION ISLAND (ZS8) – A report has circulated that David/ZS1BCE will return to Marion Is and be active as ZS8Z through May 2018 on various HF bands using SSB and Digi. QSL via ZS1LS.

MICRONESIA (V6) – Sho/JA7HMZ, will sign V63DX from Pohnpei Is (OC-010) Feb 17-24 on 160-6m, all modes and including the ARRL Intl DX CW Test signing V6A. QSL via his home CBA. No Buro QSLs.

NAMIBIA (V5) – Tev/TA1HZ (pending) will

operate during the CQWW WPX SSB Test (Mar 25-26). QSL via LoTW and LZ3HI.

NEPAL (9N) – The EIDX Group will sign 9N7EI Mar 8-20 for 9 days on all bands and modes (80-10m). QSL via MØOXO (OQRS, log search, Buro). QSL direct (w/\$2.00 and SAE) to: Charles Wilmot, 60 Church Hill, Royston, Barnsley, South Yorks, S71 4NG, England, U.K. <<https://9n7ei.com>>.

NEW ZEALAND (ZL) – Ops will sign ZL3X in the ARRL Intl CW Contest (Feb 18-19). QSL via LoTW or direct to ZL3PAH.

PANAMA (HP) – Ops Mike/W1USN and Bob/AA1M will sign HP/W1USN and HP/AA1M, respectively, Feb 10-22 on various HF

bands using CW, SSB and Digi. QSL HP/W1USN via W1USN direct or LoTW; QSL HP/AA1M via AA1M direct or LoTW.

POLAND (HP800) (Special Event) – a Polish Amateur Radio Club will sign HF8000 til Mar 31 to celebrate the 800th anniversary of Opole City. QSL via the Buro or direct.

PULAU BABI TENGAH IS (IOTA AS-046) (9M2) – Victor/R6AF is signing 9M2/R6AF/P on 20/17m CW. QSL via his home CBA or ClubLog's OQRS.

RWANDA (9XB954) – Harald/DF2WO will sign the very unusual call 9XB954 Feb/Mar on various HF bands. QSL via MØOXO's OQRS.

SENEGAL (6W) – Ronald/VE3REV signing

6W1SU for 2-3 years on 80-6m, currently SSB only, CW later. QSL via MØURX direct or the OQRS (direct or Buro).

SVALBARD (JW) – Erik/LA2US will sign JW2US from Hopen Is (IOTA EU-063) for 6 months on HF using mostly CW. QSL via OQRS ClubLog, LoTW, eQSL.

TONGA (A3) – Hiro/JA6WFM is now signing A31MM from Nuku 'alofa til the end of 2017 on 160-6m. QSL via EA5GL or LoTW.

VANUATU (YJ) – Geoff/ZL3GA will sign YJØGA from Efate Is (OC-035) Jul 6-13 on 40-10m. QSL via his home CBA, direct, by the Buro, ClubLog's OQRS or LoTW (preferred). ♦

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 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 (W5YI) and **John/K4FT** in Danville (ARRL), have a schedule to offer an exam monthly in Lexington/central Kentucky. Sessions scheduled are: Fernie in Feb, May, Aug, and Nov (ARRL affiliated) (859-652-3393), and Margie in March, Jun, Sep, and Dec (WCARS affiliated). 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 Sunday of the second full 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 “B” 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) – Test sessions are the second Saturday of January, April, July, and October at 10:00 AM. They are located in the Clark County EOC, 200 Maryland Avenue, Winchester, Kentucky. Their 2016 schedule: 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**, 563-505-0339, Wilderness Road Amateur Radio Club, Red Cross Building, 454 South Third Street, Danville.

Georgetown (ARRL VEC) – Liaison **Ron Malinowski/WX4GPS**, wx4gps@arrl.net, 502-542-8252, Georgetown Police Dept, 550 Bourbon St., Georgetown.

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, 146.760 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 – Contact **Chris Gay/KU4A**, ku4a@arrl.net. Meetings are the same schedule as Bluegrass 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) – 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 6:00 PM on 147.490.

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.

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

Jessamine Amateur Wireless Society (Nicholasville) – Second Monday each month at 7:00 PM in the 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 and information 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 meets 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.

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 General Meeting of the Bluegrass Amateur Radio Society, Inc., January 9, 2017



The first general meeting of the new year 2017 was called to order by new President **Joseph "Smokey" Wallace, KE6IVK**, at 7:30 PM. Note: The regular scheduled meeting on the first Monday of January was postponed due to the January 2nd New Year's holiday.

In attendance were twenty-two (22) members and one (1) guest, **Blaine Early, KM4ZFQ**. All introduced themselves.

Longtime club member **Dale Covington, K4GSX**, who is currently residing in Marietta, Georgia, was recognized and welcomed by the president.

January birthday wishes were extended to **Linda Dawson, AK4GZ**.

Linda Dawson, AK4GZ, and **Glen Dawson, AK4GZ**, reported that members **Loretta** and **Roger Colvin, KJ4YSY**, were ill at home. A get-well card from the club will be mailed to them.

Treasurer **John Barnes, KS4GL**, submitted the summary treasurer's report (rounded to the nearest \$10) of a total amount of \$14,630 in available deposits, representing current balances of: \$2,200 in the PayPal account, \$200 in the savings account, and \$12,230 in the checking account which consisted of; \$9,670 in the general fund, \$560 in the coax/repeater fund, and \$2,000 in the education fund. **J.B.Young, WA4WWH**, moved and **Andrew Cook, KF4OWP**, seconded that the treasurer's report be accepted, which was approved unanimously.

Three applications for Bluegrass ARS membership was presented by treasurer **John Barnes, KS4GL**: **Jonathon Aynes, KM4YOS**, **Kyle Cravens, W4KCX**, and **Geoff Lowe, K4GDL**. The applications had been reviewed and accepted by the directors at the past December director's meeting. **J.B.Young, WA4WWH**, moved, and **Andrew Cook, KF4OWP**, seconded that all the applications be accepted, which was approved unanimously.

President **Smokey Wallace, KE6IVK**, called for current standing committee comments and announcements.

Contesting: A volunteer for chairperson is needed.

Editorial: **Bill DeVore, N4DIT**, is accepting suggestions and submissions for content and inclusion in the Newsletter.

Education: **Bill Fuqua, WA4LAV**, is

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

TREASURER'S FINANCIAL SUMMARY

Respectfully submitted, **John Barnes/KS4GL**, Treasurer

BLUEGRASS AMATEUR RADIO SOCIETY, INC. INCOME, EXPENSES, AND ACCOUNT BALANCES December 31, 2016

	Checking Account	Pay Pal Account	Savings Account	Total
Income:				
ARRL Dues	0.00	0.00	0.00	0.00
BARS Dues	247.50	20.09	0.00	267.59
Coax/Repeater	0.00	0.00	0.00	0.00
Donations	0.00	0.00	0.00	0.00
Education	0.00	0.00	0.00	0.00
Hamfest	0.00	0.00	0.00	0.00
Interest	0.75	0.00	0.01	0.76
Miscellaneous	0.00	0.00	0.00	0.00
Total	248.25	20.09	0.01	268.35

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	43.91			43.91
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	43.91			43.91

Account Balances

	November 30, 2016	December 31, 2016
Checking*	\$12029.67	\$12234.01
Pay Pal Balance	\$ 2176.83	\$ 2196.92
Savings Balance	\$ 200.25	\$ 200.26
Total Balance	\$14406.75	\$14631.19

*Fund Specific Balances (Checking)

General	\$ 94169.73	\$ 9674.07
Coax/Repeater	\$ 564.64	\$ 564.64
Education	\$ 1995.30	\$ 1995.30
Total	\$12029.67	\$12234.01

conducting informal radio electronics lessons on Saturday afternoons, and technical group discussions on Thursday evenings.

Program: A volunteer for chairperson is needed. Tentative meeting programs are; February – Emergency preparedness, go bags, 3-day bags, get-home bags.

March – Severe weather spotting and reporting.

April – Fayette County Emergency Operations Center (EOC).

May – Bluegrass Army Depot Chemical Weapons Disposal, or Kentucky Utilities powerline safety.

June – Field Day.

July – to be determined.

August – Hamfest.

September – Picnic.

October – to be determined.

November – to be determined.

December – Officers and directors elections.

Emergency Preparedness: **David Richardson, W9KHZ**, volunteered as chairperson.

Hamfest: **David Richardson, W9KHZ**, announced that this year's 2017 Central Kentucky Hamfest will be held at the Bingo Hall, lower level of Eastland Shopping Center here in Lexington. It will be either the first or second Saturday in August, the 5th or the 12th, depending on the pending vendors' commitments. Suggestions for soliciting vendors and special interest groups to attend would be appreciated.

Public Relations and Membership: A volunteer for chairperson is needed. It was suggested that a postcard be sent to all nonmember licensed ham operators in Fayette County inviting them to join BARS.

Repeater: **Andrew Cook, KF4OWP**,

received four (4) hardline coax connectors donated by **Bill Cotter, N4LG**. The repeater noise problem investigations are continuing.

Shack: **Smokey Wallace, KE6IVK**, opens the shack on Saturday mornings from 9:00 am to 12:00 noon for visitors and operators. The high frequency (HF) linear amplifier is in operation. The shack needs 12 VDC power supplies for various pieces of equipment. Equipment and supplies in the shack are constantly being arranged and organized.

Historian: **Bill DeVore, N4DIT**, is needing recovery of the hard drive from his computer that died. It contains files of the Club history he is composing.

Ad Hoc QRP: (**Chris Gay, KU4A**). (no current news).

Library: **John Barnes, KS4GL**. (no current news).

Repeater/Shack Trustee: **Andrew Cook, KF4OWP**, has posted the current license in the shack and will do the same next week for the repeater located at the WKYT-TV station. An inventory of all BARS access keys, and all BARS K4KJQ station equipment and gear is planned for this year.

Volunteer Exams: (**Fernie Williams, KE4MAI**). Saturday, January 14th, in Winchester; and Saturday, January 28th, in Danville.

Committee chairpersons are invited and encouraged to attend the directors' meetings on the third Monday of each month, which are also open to all club members and visitors.

Old Business: **Bill Fuqua, WA4LAV**, reported that the Red Cross repaired the basement door that did not need repair, and will again try to have the basement door to

the BARS meeting room and K4KJQ shack repaired.

New Business: **Bill DeVore, N4DIT**, formally acknowledged and confirmed the receipt by the Bluegrass Amateur Radio Society (BARS) of various items of donated electronic radio equipment, test equipment, and gear from members **Bill Cotter, N4LG**; **Wilson Wells, N4ZQT**; and **Patrick Hayden, AI4W**.

Incidents of malicious interference on one of the Frankfort, Kentucky, repeaters, as well as heard on 80-meters and 40-meters were discussed.

Closing comments by president **Wallace, KE6IVK**, included his announcement that the Amateur Radio Parity Act, affecting placements of ham radio antennas and structures in areas restricted by homeowners associations for reasons other than immediate safety and other bona fide government regulations, was not passed by the U.S. Senate in 2016. Also, the president reminded the membership that dues for the current 2017 year are payable.

The next formal Bluegrass ARS scheduled meetings in February are:

Directors' Meeting: Monday, January 16th at 7:30 pm, in the Education Center, basement of the Red Cross Building.

General Meeting: Monday, February 6th at 7:30 pm, in meeting room "B" of the Red Cross Building.

Directors' Meeting: Monday, February 20th at 7:30 pm, in the Education Center, basement of the Red Cross Building.

With no other business at 8:30 pm, **J.B. Young, WA4WWH** moved, and **James Schlessler, WA9MED** seconded that the meeting be adjourned, which was approved unanimously. ♦

Minutes of the Board of Directors Meeting, January 16, 2017

Recorded and submitted by:
Bruce Campbell, KM4EHU
Secretary

The first directors' meeting of the new year 2017 was called to order by new President **Smokey Wallace, KE6IVK**, at 7:30 pm. In attendance were: President – **Smokey Wallace, KE6IVK**; First Vice President – **Bill Fuqua, WA4LAV**; Second Vice President – **James Schlessler, WA9MED**; Treasurer – **John Barnes, KS4GL**; Secretary – **Bruce Campbell, KM4EHU**; Director at Large – **Tim Kunkle, KF4MPM**, and **David Richardson, W9KHZ**. In addition, Newsletter Committee chair **Bill DeVore, N4DIT**, plus **Harvey Frye, AA4HF**, and **Barry Jackson, WB4N**, representing MARS operations, were present.

Treasurer **John Barnes, KS4GL**, presented one new membership application from **Walter Blaine Early, III, KM4ZFQ**. **Bill DeVore, N4DIT**, moved and **Tim Kunkle, KF4MPM**, seconded that the application be accepted, which was approved unanimously. It will be presented to the membership at the next general meeting scheduled for February 6, 2017.

Treasurer Barnes submitted the sum-

mary treasurer's report of amounts in available deposits as of December 31, 2016. (See John's report on Page 10 of this newsletter).

Barry Jackson, WB4N, moved and **James Schlessler, WA9MED**, seconded that the treasurer's report be accepted, which was approved unanimously. In addition, the treasure submitted a report of historical income and expense activities for

the past eleven (11) years, 2006 through 2016, for subsequent review by the officers and directors.

Secretary **Bruce Campbell, KM4EHU**, reported that a get-well card from the club was mailed to **Linda Dawson, AK4GZ**, and **Glenn Dawson, AK4HA**, who did not attend January general meeting due to illness. Also the secretary suggested that a simple log be avail-

able in the K4KJQ shack for member and nonmember visitors to the radio room. The idea was agreed to, and the secretary will design and provide a visitors' log to be kept in the radio room.

Shack committee chairman **Smokey Wallace, KE6IVK**, reported he has a set of ARRL VHS video tapes that he will be copying to DVD's for the club library. Plans to paint the back room are being considered. Old, unused, non-functioning, and obsolete equipment will be sorted out for salvageable parts, sale, and junk in order to clear out the limited storage space in the BARS rooms. The possibilities of re-establishing the packet station, as well as relocating the MARS station equipment and operating position to one of the back rooms were discussed. Recent visitors to the K4KJQ shack were pending member **Blaine Early, KM4ZFQ**, and new member **Kyle Cravens, W4KCX**.

President **Smokey Wallace, KE6IVK**, reviewed the officers and directors respon-

sibilities and duties contained in Article V of the Bylaws. Directors-at-large **Tim Kunkle, KF4MPM**, and **David Richardson, W9KHZ**, will act as shack liaison for VHF operations and HF operations, respectively. Second vice president **James Schlessler, WA9MED**, will coordinate meeting space setups and programs.

Hamfest committee chairman and director-at-large **David Richardson, W9KHZ**, reported that he has established a Facebook page for this year's Central Kentucky ARRL Hamfest which will be hosted by BARS at the Eastland Bingo Hall here in Lexington. The current tentative date will be Saturday, August 12, 2017. The cost for the indoor flea market and swap-meet tables will \$10 in advance and \$15 on the day of the hamfest, with no admission charge. General admission will be \$5 in advance and \$6 at the door.

Under old business president **Smokey Wallace, KE6IVK**, reported that the BARS webpage is undergoing improve-

ments by Fernie Williams, KE6MAI. The enhancements are expected to include ListServe instructions and a link to the KYHAM website.

Under new business director-at-large **David Richardson, W9KHZ**, suggested that consideration be given to rearranging the club meeting space to better accommodate the library and classroom functions. This idea will likely be included in the overall clean-out activities associated with disposal of the old equipment.

The next formal BARS scheduled meetings in February are: General Meeting, Monday, February 6 at 7:30 pm, in the meeting room "B" of the Red Cross Building; Directors' Meeting, Monday, February 20 at 7:30 pm, in the Education Center, basement of the Red Cross Building.

With no other business at 8:30 pm, **James Schlessler, WA9MED**, moved, and **Tim Kunkle, KF4MPM**, seconded, that the meeting be adjourned, which was approved unanimously. ♦

Looking Back. . . From Page 2, HAM NEWS, February 1978
Published monthly by the Bluegrass Amateur Radio Club, Inc.,
Lexington, Kentucky
Tom Fitzpatrick, WB4FOT, Editor

IN DAYS OF OLD

We were looking through some old Callbooks the other day and dug up some stuff that might be considered nostalgia. First of all, how many of you remember what the BGARC Club call sign was before we got Dix Newton's call? Well, it was WA4MBD and the address was given as 103 Devine Avenue.

Anyone know who the trustee was then?

In the 1965 Callbook there were only 265,067 U.S. hams listed as opposed to the 325,000 plus hams today. Also, at this printing there were no WB calls listed at all. That surely did change in a hurry though.

Another curiosity was, with all the WA4, etc., calls being reissued to Novices we find that some of you are using second-hand call signs.

We found that WA4KKV used to be Leonard Kanner of Woodbridge, Va.

WB4LSG was Melvin Silveria, Hunter Air Force Base, Ga.

WB4LSH was Lee B. Phillips of Birmingham, Ala.

WB4PRU was Julian H. Hunter, Virginia Beach, Va.

K4RN was Raymond G. Newman, Babson Park, Fla.

WA4HTM was Ralph Carle of Hopkins, Minn. (?)

WN4UQA was Stephen Rigsby of Greensboro, N.C.

WA4UQI was James D. Hilliard of Bowling Green, Ky.

WA4LSD was James Wilder, Jr., of Marietta, Ga.

The Club should be grateful to these people for losing interest in ham radio so that we can hear these calls around here.

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.

Commercial ads can be arranged, contact the editor.

All copy must be in the hands of the editor by the end of the Board of Directors' meeting on the third Monday of each month. All articles submitted must be accompanied by the author(s) name(s).

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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Hamfest David Richardson/W9KHZ (daveinlex3@gmail.com)
Newsletter Bill DeVore/N4DIT (859) 273-8345 (billdit@twc.com)
Program Need Chair
Public Relations and Membership Need Chair
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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:

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)

FullTime 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 February 2017

Wed 1 Six Shooters Net, 8:00 PM on 52.525 MHz FM (vertically polarized)
Thu 2 Meeting of Bluegrass ARS Technical Group, 6:30 PM, Education Center, basement of the Red Cross Building, 1450 Newtown Pike, Lexington
Sat 4 Shack open 9:00-Noon; Radio Theory and Construction Workshop, 1:00-3:00 PM, Education Center, Basement of the Red Cross Building, 1450 Newtown Pike
Sun 5 Amateur Television & Specialized Communications Net, 9:00 PM (146.760 Repeater)
Mon 6 KY-QRP Group Meeting, 7:00 PM, Meeting Room "B", Red Cross Building, 1450 Newtown Pike, Lexington
Mon 6 Bluegrass ARS Monthly Meeting, 7:30 PM, Meeting Room "B", Red Cross Building, 1450 Newtown Pike, Lexington
Tue 7 Amateur Swap Net 145.370 (T-192.8) 8:00 PM; "Casual Communicators Net," 9:00 PM Eastern, 443.325+ MHz
Wed 8 Six Shooters Net, 8:00 PM on 52.525 MHz FM (vertically polarized)
Thu 9 Meeting of Bluegrass ARS Technical Group, 6:30 PM, Education Center, basement of the Red Cross Building, 1450 Newtown Pike, Lexington
Sat 11 License Examination Session, 10:00 AM (ARRL), Red Cross Bldg, Lexington, contact Fernie/KE4MAI 859-652-3393, ke4mai@arrl.net
Sat 11 Shack open 9:00-Noon; Radio Theory and Construction Workshop, 1:00-3:00 PM, Education Center, Basement of the Red Cross Building, 1450 Newtown Pike
Sun 12 Amateur Television & Specialized Communications Net, 9:00 PM (146.760 Repeater)
Mon 13 Jessamine AWS monthly meeting, 7:00 PM, St. Joseph/R.J. Corman Ambulatory Care Center, 1250 Keene Road, Nicholasville
Tue 14 Amateur Swap Net 145.370 (T-192.8) 8:00 PM; "Casual Communicators Net," 9:00 PM Eastern, 443.325+ MHz
Tue 14 Valentines Day
Wed 15 Six Shooters Net, 8:00 PM on 52.525 MHz FM (vertically polarized)
Thu 16 Meeting of Bluegrass ARS Technical Group, 6:30 PM, Education Center, basement of the Red Cross Building, 1450 Newtown Pike, Lexington
Sat 18 Shack open 9:00-Noon; Radio Theory and Construction Workshop, 1:00-3:00 PM, Education Center, Basement of the Red Cross Building, 1450 Newtown Pike
Sun 19 Amateur Television & Specialized Communications Net, 9:00 PM (146.760 Repeater)
Mon 20 Bluegrass ARS Board of Directors' Meeting, 7:30 PM, Education Center, Basement of the Red Cross Bldg, 1450 Newtown Pike, Lexington
Tue 21 Amateur Swap Net 145.370 (T-192.8) 8:00 PM; "Casual Communicators Net," 9:00 PM Eastern, 443.325+ MHz
Wed 22 Six Shooters Net, 8:00 PM on 52.525 MHz FM (vertically polarized)
Thu 23 Meeting of Bluegrass ARS Technical Group, 6:30 PM, Education Center, basement of the Red Cross Building, 1450 Newtown Pike, Lexington
Sat 25 Shack open 9:00-Noon; Radio Theory and Construction Workshop, 1:00-3:00 PM, Education Center, Basement of the Red Cross Building, 1450 Newtown Pike
Sun 26 Amateur Television & Specialized Communications Net, 9:00 PM (146.760 Repeater)
Tue 28 Amateur Swap Net 145.370 (T-192.8) 8:00 PM; "Casual Communicators Net," 9:00 PM Eastern, 443.325+ MHz