ARRL Standard


Pray for our Troops

God Bless America!

# QUA/HAM news

**DECEMBER 2020**

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## MERRY CHRISTMAS




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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>.

**Decembers General Membership meeting has been cancelled.**

Below you will find the Club's Ebay account for the sale of the surplus equipment. Copy the URL into your browser and take a look at the items we have up for auction.

https://www.ebay.com/sch/bluegrassars/m.html

QUA/HAMnews DECEMBER 2020

### Meeting Notice

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

The general meeting of the Bluegrass Amateur Radio Society, Inc., scheduled for December has been cancelled.

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 currently closed due to the Covid-19. 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.

REMEMBER TO SEND IN YOUR BALLOTS

**Fayette County ARES Coordinator - Sandy Gragg**

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 859-699-9934

**NOTICE TO MEMBERS**

**The Treasurer's Report or any financial reports will not appear in the Newsletter. The Treasurer's reports are available to any BARS members in good standing. You will need to request the report that you would like to have. Send email to: KB4FEE@ARRL.net**

**A new net has started, Wednesday evening at 8 pm and Saturday mornings at 8:45 am. This is a rag chew net and open for all amateurs. The NET is located on the 146.760 repeater. There is no PL tone. See you on the net.**

NEW MEMBERS
Dale Shafer, KA9AGQ

# Bluegrass Amateur Radio Society, Inc. slate of candidates for 2021

President: Brad James

First Vice President: Robert Brown

Second Vice President: David Richardson

Secretary: Chris Gay

Treasurer: Jodie Wells

Directors- at - Large: Tim Kunkle

Sandy Gragg

Darrell Bennett

Bart Breeding

Ballots for the election will be mailed to all current, paid up members by the secretary.

"The most important office, and the one which all of us can and should fill, is that of private citizen."

---Louis Brandeis

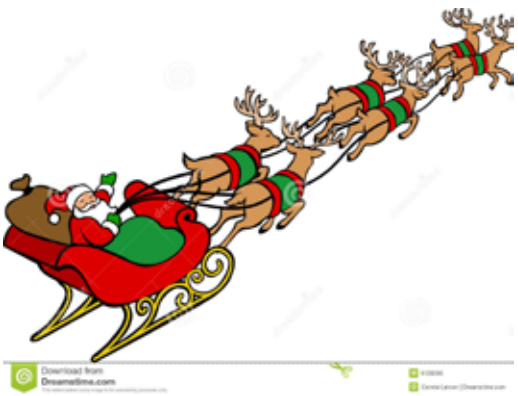
# THE HISTORY OF AMATEUR RADIO

The history of amateur radio, dates from the dawn of radio communications, with published instructions for building simple wireless sets appearing at the beginning of the twentieth century.[1] Throughout its history, amateur radio enthusiasts have made significant contributions to science, engineering, industry, and social services. Research by amateur radio operators has founded new industries,[2] built economies, empowered nations, and saved lives in times of emergency.

## Beginnings

Amateur radio came into being after radio waves (proved to exist by Heinrich Rudolf Hertz in 1888) were adapted into a communication system in the 1890s by the Italian inventor Guglielmo Marconi. In the late 19th century there had been amateur wired telegraphers setting up their own interconnected telegraphic systems. Following Marconi's success many people began experimenting with this new form of "wireless telegraphy". Information on "Hertzian wave" based wireless telegraphy systems (the name "radio" would not come into common use until several years later) was sketchy, with magazines such as the November, 1901 issue of Amateur Work showing how to build a simple system based on Hertz' early experiments. Magazines show a continued progress by amateurs including a 1904 story on two Boston, Massachusetts 8th graders constructing a transmitter and receiver with a range of eight miles and a 1906 story about two Rhode Island teenagers building a wireless station in a chicken coop. In the US the first commercially produced wireless telegraphy transmitter / receiver systems became available to experimenters and amateurs in 1905. In 1908, students at Columbia University formed the Wireless Telegraph Club of Columbia University, now the Columbia University Amateur Radio Club. This is the earliest recorded formation of an amateur radio club, collegiate or otherwise. In 1910, the Amateurs of Australia formed, now the Wireless Institute of Australia.

The rapid expansion and even "mania" for amateur radio, with many thousands of transmitters set up by 1910, led to a wide spread problem of inadvertent and even malicious radio interference with commercial and military radio systems. Some of the problem came from amateurs using crude spark-transmitters that spread signals across a wide part of the radio spectrum. In 1912 after the RMS Titanic sank, the United States Congress passed the Radio Act of 1912 which restricted private stations to wavelengths of 200 meters or shorter (1500 kHz or higher). These "short wave" frequencies were generally considered useless at the time, and the number of radio hobbyists in the U.S. is estimated to have dropped by as much as 88%.] Other countries followed suit and by 1913 the International Convention for the Safety of Life at Sea was convened and produced a treaty requiring shipboard radio stations to be manned 24 hours a day. The Radio Act of 1912 also marked the beginning of U.S. federal licensing of amateur radio operators and stations. The origin of the term "ham", as a synonym for an amateur radio operator, was apparently a taunt by professional telegraphers.



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## World War I

By 1917, World War I had put a stop to amateur radio. In the United States, Congress ordered all amateur radio operators to cease operation and even dismantle their equipment. These restrictions were lifted after World War I ended, and the amateur radio service restarted on October 1, 1919.

## Between the wars

In 1921, a challenge was issued by American hams to their counterparts in the United Kingdom to receive radio contacts from across the Atlantic. Soon, many American stations were beginning to be heard in the UK, shortly followed by a UK amateur being heard in the US in December 1922. November 27, 1923 marked the first transatlantic two-way contact between American amateur Fred Schnell and French amateur Léon Deloy. Shortly after, the first two way contact between the UK and USA was in December 1923, between London and West Hartford, Connecticut. In the following months 17 American and 13 European amateur stations were communicating. Within the next year, communications between North and South America; South America and New Zealand; North America and New Zealand; and London and New Zealand were being made. These international Amateur contacts helped prompt the first International Radiotelegraph Conference, held in Washington, DC, USA in 1927–28 At the conference, standard international amateur radio bands of 80/75, 40, 20 and 10 meters and radio call sign prefixes were established by treaty. In 1933 Robert Moore, W6DEI, begins single-sideband voice experiments on 75 meter lower sideband. By 1934, there were several ham stations on the air using single-sideband.

## World War II

During the German occupation of Poland, the priest Fr. Maximilian Kolbe, SP3RN was arrested by the Germans. The Germans believed his amateur radio activities were somehow involved in espionage and he was transferred to Auschwitz on May 28, 1941. After some prisoners escaped in 1941, the Germans ordered that 10 prisoners be killed in retribution. Fr. Kolbe was martyred when he volunteered to take the place of one of the condemned men. On October 10, 1982 he was canonized by Pope John Paul II as Saint Maximilian Kolbe, Apostle of Consecration to Mary and declared a Martyr of charity. He is considered the Patron saint of Amateur radio operators. Two radios in the ARC-5 series. Unit on the left is a BC-453-B, covering 190-550 kHz; the one on the right is a BC-454-E, covering 3-6 MHz. Both have been modified for Amateur Radio use by replacing the front connector with a small control panel.
Again during World War II, as it had done during the first World War, the United States Congress suspended all amateur radio operations.[9] With most of the American amateur radio operators in the armed forces at this time, the US government created the War emergency radio service which would remain active through 1945. After the War the amateur radio service began operating again, with many hams converting war surplus radios, such as the ARC-5, to amateur use.

## Post war era

A U.S. Postage Stamp from 1964, commemorating amateur radio.
In 1947 the uppermost 300 kHz segment of the world allocation of the 10 meter band from 29.700 MHz to 30.000 MHz was taken away from amateur radio.

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During the 1950s, hams helped pioneer the use of single-sideband modulation for HF voice communication. In 1961 the first orbital amateur radio satellite was launched. OSCAR I would be the first of a series of amateur radio satellites created throughout the world. Ham radio enthusiasts were instrumental in keeping U.S. Navy personnel stationed in Antarctica in contact with loved ones back home during the International Geophysical Year during the late 1950s.

## Late 20th century

At the 1979 World administrative radio conference in Geneva, Switzerland, three new amateur radio bands were established: 30 meters, 17 meters and 12 meters.[21] Today, these three bands are often referred to as the WARC bands by hams.

During the Falklands War in 1982, Argentine forces seized control of the phones and radio network on the islands and had cut off communications with London. Scottish amateur radio operator Les Hamilton, GM3ITN was able to relay crucial information from fellow hams Bob McLeod and Tony Pole-Evans on the islands to British military intelligence in London, including the details of troop deployment, bombing raids, radar bases and military activities.

During 1999 NATO bombing of Yugoslavia, Yugoslav amateur radio operators exchanged information from posts in public shelters. However, owing to an informal code of conduct, radio hams usually avoid controversial subjects and political discussions.

Major contributions to communications in the fields of automated message systems and packet radio were made by amateur radio operators throughout the 1980s. These computer controlled systems were

used for the first time to distribute communications during and after disasters. American entry-level Novice and Technician class licensees were granted CW and SSB segments on the 10 Meter Band in 1987. The frequency ranges allocated to them are still known today throughout much of the world as the Novice Sub Bands even though it is no longer possible to obtain a Novice class license in the US. Further advances in digital communications occurred in the 1990s as Amateurs used the power of PCs and sound cards to introduce such modes as PSK31 and began to incorporate Digital Signal Processing and Software-defined radio into their activities.

## 21st century

For many years, amateur radio operators were required by international agreement to demonstrate Morse code proficiency in order to use frequencies below 30 MHz. In 2003 the World radio communications conference (WRC) met in Geneva, Switzerland, and voted to allow member countries of the International Telecommunications Union to eliminate Morse code testing if they so wished .

On December 15, 2006, the United States Federal Communications Commission (FCC) issued a Report and Order eliminating all Morse code testing requirements for all American Amateur Radio License applicants, which took effect February 23, 2007. The relaxing of Morse code tests has also occurred in most other countries, resulting in a boosting in the number of radio amateurs worldwide.

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While there is no longer a requirement for hams to learn "the Code", it remains a popular communications mode.

Most of Europe allows licensed operators from other countries to obtain permits to transmit in Europe during visits. Residential permits are available in many countries globally whereby a valid license from one country will be honored by other countries under international treaties.

In early 2010, only North Korea had an absolute ban on ham radio operator licenses, although many countries still maintain careful records of ham licensees, and limit their activities and frequency bands and transmit power output.
Amateur radio emergency communications assisted in disaster relief activities for events such as the September 11 attacks in 2001,[29] Hurricane Katrina in 2005,[30] and the Sichuan earthquake in 2008. In 2017, the Red Cross requested 50 amateur radio operators be dispatched to Puerto Rico to provide communications services in the wake of Hurricane Maria

https://en.wikipedia.org/wiki/History_of_amateur_radio

## Etymology of ham radio

At the turn of the 20th century, the terms "ham" and "plug" were used by landline telegraphers to describe an operator "who lacks ability"[2] or who had poor or "ham fisted" skills.[3][4][5][6] By 1881, it had been alleged by telegrapher unions and trade groups that companies were employing "ham" operators who were negligent or incompetent.[7] These unskilled operators were described as either drinking alcohol while working, irresponsible teenage boys, or merely having very little ability. Their miscommunication was blamed for causing severe train wrecks.[8] Railroad executives during this era were also accused of hiring unskilled operators to save money and were said to be accepting bribes from telegraph schools to hire unqualified students.[9] These disreputable telegraph schools were referred to as "ham factories.

Early radio (initially known as wireless telegraphy) included many former wire telegraph operators, and within the new service "ham" was employed as a pejorative term by professional radio-telegraph operators to suggest that amateur enthusiasts were unskilled. In "Floods and Wireless" by Hanby Carver, from the August 1915 Technical World Magazine, the author noted "Then someone thought of the 'hams'. This is the name that the commercial wireless service has given to amateur operators..."

This pejorative usage continued into at least 1940, as evidenced in the January 1940 issue of The APCO Bulletin, where it was written "Rumors of citations by the FCC for violation of the superfluous traffic regulation on the part of certain of our radiotelegraph stations have resulted in a sudden decrease in 'hamming' on the police frequencies.

Even among amateur radio operators, the term was used pejoratively at first by serious experimenters. For example, in December 1916 QST magazine, an amateur operator working on long distance message passing describes one way to avoid interference was to send messages "...on Thursday nights, when the children and spark coil 'hams' are tucked up in bed" (a spark coil was an unsophisticated radio transmitter, made from an automobile ignition coil, that produced noisy interference).

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But only a few months later, in an indication of the changing use of the term among amateurs, a QST writer uses it in a clearly complimentary manner, saying that a particular 16-year-old amateur operator "...is the equal of a ham gaining five years of experience by hard luck." Use of "ham" as a slur by professionals continued, however. A letter from a Western Union Telegraph Company employee, printed in the December 1919 edition QST, showed familiarity with the word's negative connotations, expressing concern that "Many unknowing land wire telegraphers, hearing the word 'amateur' applied to men connected with wireless, regard him as a 'ham' or 'lid'". But many other amateurs increasingly adopted the word "ham" to describe their hobby and themselves during this period, embracing the word that was originally an insult, similar to the way Yankee Doodle evolved, as seen, for example, in Thomas F. Hunter's exuberant "I am the wandering Ham" from the January 1920 issue of QST.

## False etymologies

A number of folk etymologies about the supposed origin of “ham” radio evolved over the years since the origination of amateur wireless telegraphy.

“A little station called HAM”[edit]

This widely circulated but fanciful tale claims that, around 1911, an impassioned speech made by Harvard University student Albert Hyman to the United States Congress, in support of amateur radio operators, turned the tide and helped defeat a bill that would have ended amateur radio activity entirely by assigning the entire radio spectrum to the military. An amateur station that Hyman supposedly shared with Bob Almy and Reggie Murray, which was said to be using the self-assigned call sign HAM (short for Hyman-Almy-Murray), thus came to represent all of amateur radio. However, this story seems to have first surfaced in 1948, and practically none of the facts in the account check out, including the existence of “a little station called HAM” at Harvard in the first place. In 1972, Ham Radio (magazine) editor Jim Fisk reported that Albert Hyman confirmed to him that Hyman, Robert Almy and Reginald Murray had put wireless station HAM on the air, however, it was war correspondent Percy Greenwood whose story in a New York medical publication gave the “original HAM story” its start. As told to Fisk, station HAM was not located at Harvard, but at Roxbury High School. After corresponding with Hyman, Fisk concluded that the story had nothing to do with the fact that radio amateurs are called “hams”; rather, the term goes back to the early days of wire telegraphy when unskilled, incompetent operators were pejoratively called hams by their more experienced colleagues. The 1909 Wireless Registry in the May edition of Modern Electrics listed Earl C. Hawkins of Minneapolis, Minnesota, as operating with the unofficial callsign “H.A.M.” according to the Wireless Association of America.[23] According to the 1910 federal census for Minneapolis, Hawkins was then professionally employed as a wireless telegraph operator. However, he does not appear in published listings of licensed amateur radio operators.

## Home Amateur Mechanic magazine

In this version, supposedly HAM was an acronym derived from the initials of a “very popular” magazine which covered radio extensively.[24] However, there is no evidence of such a magazine existing by this, or any similar, name with those initials.

## Hertz-Armstrong-Marconi

It is sometimes claimed that HAM came from the first letter from the last names of three radio pioneers: Heinrich Rudolf Hertz, Edwin Armstrong, and Guglielmo Marconi.[25] However, this cannot be the source of the term as Armstrong was an unknown high school student when the term first appeared

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## Hammarlund legend

Likely an example of corporate wishful thinking, Hammarlund products were supposedly so preeminent in the pioneering era of radio that they became a part of the language of radio. As the story goes, early radio enthusiasts affectionately referred to Hammarlund products as “Ham” products, and called themselves “Ham” operators. In truth, Hammarlund was a minor and barely known company when created in 1910, at the time “ham” was already gaining currency in the radio field. And its first products for use in electronic equipment, variable capacitors, were developed by Hammarlund in 1916, while its first radio products were built in about 1925.

https://en.wikipedia.org/wiki/Etymology_of_ham_radio

# The ghostly radio station that no one claims to run

MDZhB” has been broadcasting since 1982. No one knows why.

BBC Future has brought you in-depth and rigorous stories to help you navigate the current pandemic, but we know that’s not all you want to read. So now we’re dedicating a series to help you escape. We’ll be revisiting our most popular features from the last three years in our Lockdown Longreads.
You’ll find everything from the story about the world’s greatest space mission to the truth about whether our cats really love us, the epic hunt to bring illegal fishermen to justice and the small team which brings long-buried World War Two tanks back to life. What you won’t find is any reference to, well, you-know-what. Enjoy.
In the middle of a Russian swampland, not far from the city of St Petersburg, is a rectangular iron gate. Beyond its rusted bars is a collection of radio towers, abandoned buildings and power lines bordered by a dry-stone wall. This sinister location is the focus of a mystery which stretches back to the height of the Cold War.
It is thought to be the headquarters of a radio station, “MDZhB”, that no-one has ever claimed to run. Twenty-four hours a day, seven days a week, for the last three-and-a-half decades, it’s been broadcasting a dull, monotonous tone. Every few seconds it’s joined by a second sound, like some ghostly ship sounding its foghorn. Then the drone continues.
Once or twice a week, a man or woman will read out some words in Russian, such as “dinghy” or “farming specialist”. And that’s it. Anyone, anywhere in the world can listen in, simply by tuning a radio to the frequency 4625 kHz.
It’s so enigmatic, it’s as if it was designed with conspiracy theorists in mind. Today the station has an online following numbering in the tens of thousands, who know it affectionately as “the Buzzer”. It joins two similar mystery stations, “the Pip” and the “Squeaky Wheel”. As their fans readily admit themselves, they have absolutely no idea what they are listening to. In fact, no-one does. “There’s absolutely no information in the signal,” says David Stupples, an expert in signals intelligence from City University, London.

What’s going on?

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(continued from page 8, The Ghostly station)

The frequency is thought to belong to the Russian military, though they've never actually admitted this. It first began broadcasting at the close of the Cold War, when communism was in decline. Today it's transmitted from two locations – the St Petersburg site and a location near Moscow. Bizarrely, after the collapse of the Soviet Union, rather than shutting down, the station's activity sharply increased.
There's no shortage of theories to explain what the Buzzer might be for – ranging from keeping in touch with submarines to communing with aliens. One such idea is that it's acting as a "Dead Hand" signal; in the event Russia is hit by a nuclear attack, the drone will stop and automatically trigger a retaliation. No questions asked, just total nuclear obliteration on both sides.

## There are clues in the signal itself

This may not be as wacky as it sounds. The system was originally pioneered in the Soviet era, where it took the form of a computer system which scanned the airwaves for signs of life or nuclear fallout. Alarmingly, many experts believe it may still be in use. As Russian president Vladimir Putin pointed out himself earlier this year, "nobody would survive" a nuclear war between Russia and the United States. Could the Buzzer be warding one off?

As it happens, there are clues in the signal itself. Like all international radio, the Buzzer operates at a relatively low frequency known as "shortwave". This means that – compared to local radio, mobile phone and television signals – fewer waves pass through a single point every second. It also means they can travel a lot further.

While you'd be hard pressed to listen to a local station such as BBC Radio London in a neighbouring county, shortwave stations like the BBC World Service are aimed at audiences from Senegal to Singapore. Both stations are broadcast from the same building.
It's all thanks to "skywaves". Higher frequency radio signals can only travel in a straight line, eventually becoming lost as they bump into obstacles or reach the horizon. But shortwave frequencies have an extra trick – they can bounce off charged particles in the upper atmosphere, allowing them to zig-zag between the earth and the sky and travel thousands, rather than tens, of miles.

Which brings us back to the Dead Hand theory. As you might expect, shortwave signals have proved extremely popular. Today they're used by ships, aircraft and the military to send messages across continents, oceans and mountain ranges. But there's a catch.

The lofty layer isn't so much a flat mirror, but a wave, which undulates like the surface of the ocean. During the day it moves steadily higher, while at night, it creeps down towards the Earth. If you want to absolutely guarantee that your station can be heard on the other side of the planet – and if you're using it as a cue for nuclear war, you probably do – it's important to change the frequency depending on the time of day, to catch up. The BBC World Service already does this. The Buzzer doesn't.
Another idea is that the radio station exists to "sound" out how far away the layer of charged particles is. "To get good results from the radar systems the Russians use to spot missiles, you need to know this," says Stupples. The longer the signal takes to get up into the sky and down again, the higher it must be.

## There is a station with some striking similarities

(continued on page 10, The Ghostly station)

# REMINDERS

**It is now time to start thinking about the upcoming election of officers for the Bluegrass Amateur Radio Society, Inc. for the year 2021.**

**If you have not paid your dues for 2020 yet, please do so. You will not be able to vote in the upcoming club officer election. You must be a paid member to participate in the election. It is important that your voice is heard and you have a voice in how the club is operated.**

**The annual dues run during a calender year, January to December. If you join during the year, the dues are pro rated based upon when you join. Also, dues are $20.00 per year , with a 60-day grace period ending on the last day of February. If you pay for multiple years, you get a discount:**

**2yrs. is $38**
**3 yrs. is $55**

**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 859-699-9934

**New Rag chew net on Wednesday evening at 8:00 pm and on Saturday morning at 9 am. The net is located on the 146.760 repeater with a negative offset and no PL tone.**

**SEE YOU THERE!!!**

**Please find below the link to the Club's Ebay Account. Copy it into your browser and check out the items the club has up for auction.**
**https://www.ebay.com/sch/bluegrassars/m.html**

**BARS E-BAY SALES AND AUCTION SALES OF SURPLUSSED EQUIPMENT**

The BARS Board of Directors has adopted a method for the disposal of all items in our donated equipment inventory through the transfer of ownership by making them available for purchase by open public auctions and sales. We have determined that it is to the optimum benefit of BARS that we try to obtain the maximum amount for each item, or related sets of items, by accepting only the highest value received through as fair, and as equitable, and as impartial a public process as reasonably possible. In this way we endeavor to eliminate any impressions of advantage or disadvantage to anyone or group wishing to obtain by purchase any item or items.

Our process in operation now is to periodically, and more-or-less continuously, move a somewhat small and easily manageable group of equipments, selected to some extent at random, from a storage facility to the BARS room at the Red Cross Building. At the BARS room, the equipment is basically evaluated (maybe even "smoke" tested) to determine a reasonably accurate and reliable description of its condition. Any equipments that we envision may be of utility to the Club are retained for use in the shack or the shop. Those items that are marked for sale through E-Bay are weighed and photographed, and then researched in an effort to determine their histories and current comparative values. After that, the equipment's descriptive file, including our asked and reserve price, is up-loaded to the E-Bay sales website under our "*Bluegrassars*" account to make our intentions universally known that the equipment is publically available by timed auction or instant fixed-price purchase. In this way we are trying to keep up a simple uninterrupted cycle of listings, purchases, and shipments which will eventually deplete our inventory of donated and surplus items and eliminate our need and the expense for a rented storage facility.

The current (and previous) BARS Bylaws in its Preamble is specific in its intention that " *No part of the resources, and/or property, and /or net earnings of the corporation, if any, shall inure to the individual benefit of, or be distributed to, any of its members, trustees, directors, officers, or other private persons…*". In order to insure our own compliance with our own rules, no offers for purchase of any Club owned items will be considered that are not conducted in an open public venue or setting by the methods currently adopted by BARS. This prevents any perception of preference to any purchaser, including Club members, and provides an element of assurance that the Club realizes a monetary amount that was determined by as fair a market demand value attainable at the time of the sale. We generally consider this approach is of the overall advantage to BARS, its members, as well as any others involved in these types of financial transactions with the Club. In addition, the Club has established a reputation through E-Bay of reliable and highly-rated service which has allowed us to increase our listings due to our so-far proven credibility. The Club intends to maintain this commendable level of association with E-Bay as our outlet for sales of our major surplus'd electronics equipment.

There is a prior knowledge of the items that will be coming to sale by some of the Club members who assist and help with the moving from the storage unit to the BARS room. During the interim period between transporting, preparation, and posting for sale on E-Bay, the items are normally "on display" in the BARS room except for those of exceptional condition and value that are securely stored away to prevent damage or theft. Also, once an item is posted on E-Bay and before its final sale, it is available by appointment for a hands-on, non-destructive, inspection by anyone interested in attaining the item only through the E-Bay venue. The E-Bay sale amount transaction includes the final accepted item price, plus applicable sales tax and estimated shipping costs based on weight and method, that will all be paid by the buyer. The Club receives a net amount after E-Bay listing fees and financial transaction fees are deducted. The difference between the E-Bay assessed and the Club's actual shipping costs are subsequently reconciled by BARS. A local or nearby buyer can forego the E-Bay determined shipping costs by opting for a local in-person pick-up arrangement scheduled at the BARS room with proper purchase confirmation paperwork.

Minor items and equipments that have been judged and determined to be of relatively low nominal value and demand and that probably will not be successfully sold on E-Bay, have been set aside for simpler disposal but still by fair public sales methods. Various assortments of the Club's recently attained donated and then surplus'd items have been sold at the silent auctions conducted at our Hamfests in 2019 and 2018, where the Club deducted the applicable sales tax from the winning bid price rather than add the sales tax on to the buyers cost. A pleasant situation occurred recently when one, if not two, hamfest attendees offered a one-price, take-it-or-leave-it-right-now, amount for some equipment before the close of the silent auction. We could not in good conscience change the rules in fairness to those who had and would be actively bidding on the same item(s). The prospective purchaser was encouraged to place his bid on the auction sheet (with a contact number) as others had, and then see how the offers proceeded. At the end of the auction, the winning bid was from the "one-price" buyer whose unbeaten offer was less than the on-the-spot price he originally proposed. Should BARS have held him to his first bargain? The Club retained its honor and reputation, and our patron retained the difference in his wallet.

The decision of the Board of Directors to respectfully not accept offers for privately arranged purchases of BARS property reflects our position to consider the best interests of BARS and its members and other stakeholders who rely on the Club as an organization to operate with the knowledge of all concerned constituents in an open and visible, even if less than an expedient and seemingly unaccommodating, unbiased and objective manner.

(continued from page 9, The Ghostly station)

Alas, that can't be it either. To analyse the layer's altitude the signal would usually have a certain sound, like a car alarm going off – the result of varying the waves to get them just right. "They sound nothing like the Buzzer," says Stupples.
Intriguingly, there is a station with some striking similarities. The "Lincolnshire Poacher" ran from the mid-1970s to 2008. Just like the Buzzer, it could be heard on the other side of the planet. Just like the Buzzer, it emanated from an undisclosed location, thought to be somewhere in Cyprus. And just like the Buzzer, its transmissions were just plain creepy.
At the beginning of every hour, the station would play the first two bars of an English folk tune, the Lincolnshire Poacher.
"Oh 'tis my delight on a shining night. In the season of the year. When I was bound apprentice in famous Lincolnshire.

'Twas well I served my master for nigh on seven years…"
After repeating this 12 times, it would move on to messages read by the disembodied voice of a woman reading groups of five numbers – "1-2-0-3-6" – in a clipped, upper-class English accent.

To get to grips with what was going on, it helps to go back to the 1920s. The All-Russian Co-operative Society (Arcos) was an important trade body, responsible for overseeing transactions between the UK and the early Soviet Union. Or at least, that's what they said they did.

In May 1927, years after a British secret agent caught an employee sneaking into a communist news office in London, police officers stormed the Arcos building. The basement had been rigged with anti-intruder devices and they discovered a secret room with no door handle, in which workers were hurriedly burning documents.
It may have been dramatic, but the British didn't discover anything that they didn't already know. Instead the raid was a wake-up call to the Soviets, who discovered that MI5 had been listening in on them for years.
"This was a blunder of the very first order," says Anthony Glees, who directs the Centre for Security and Intelligence Studies at the University of Buckingham. To justify the raid, the prime minister had even read out some of the deciphered telegrams in the House of Commons.

The upshot was that the Russians completely reinvented the way messages are encrypted. Almost overnight, they switched to "one-time pads". In this system, a random key is generated by the person sending the message and shared only with the person receiving it. As long as the key really is perfectly random, the code cannot be cracked. There was no longer any need to worry about who could hear their messages.

Enter the "numbers stations" – radio stations that broadcast coded messages to spies all over the world. Soon even the British were doing it: if you can't beat them, join 'em, as they say. It's quite difficult to generate a completely random number because a system for doing so will, by its very nature, be predictable – exactly what you're trying to avoid. Instead officers in London found an ingenious solution.

They'd hang a microphone out of the window on Oxford Street and record the traffic. "There might be a bus beeping at the same time as a policeman shouting. The sound is unique, it will never happen again," says Stupples. Then they'd convert this into a random code.

(continued on page 13, The Ghostly )

(continued from page 12,The Ghostly station)

Of course, that didn't stop people trying to break them. During World War Two, the British realised that they could, in fact, decipher the messages – but they'd have to get their hands on the one-time pad that was used to encrypt them. "We discovered that the Russians used the out-of-date sheets of one-time pads as substitute toilet paper in Russian army hospitals in East Germany," says Glees. Needless to say, British intelligence officers soon found themselves rifling through the contents of Soviet latrines.

Now North Korea are getting in on the act, too

The new channel of communication was so useful, it didn't take long before the numbers stations had popped up all over the world. There was the colourfully named "Nancy Adam Susan", "Russian Counting Man" and "Cherry Ripe" – the Lincolnshire Poacher's sister station, which also contained bars of an English folk song. In name at least, the Buzzer fits right in.

It also fits with a series of arrests across the United States back in 2010. The FBI announced that it had broken up a "long term, deep cover" network of Russian agents, who were said to have received their instructions via coded messages on shortwave radio – specifically 7887 kHz.

Now North Korea are getting in on the act, too. On 14 April 2017, the broadcaster at Radio Pyongyang began: "I'm giving review works in elementary information technology lessons of the remote education university for No 27 expedition agents." This ill-concealed military message was followed by a series of page numbers – No 69 on page 823, page 957 – which look a lot like code.

It may come as a surprise that numbers stations are still in use – but they hold one major advantage. Though it's possible to guess who is broadcasting, anyone can listen to the messages – so you don't know who they are being sent to. Mobile phones and the internet may be quicker, but open a text or email from a known intelligence agency and you could be rumbled.

## It only becomes a numbers station in moments of crisis, such as if Russia were invaded

It's a compelling idea: the Buzzer has been hiding in plain sight, instructing a network of illicit Russian spies all over the world. There's just one problem. The Buzzer never broadcasts any numbered messages. This doesn't strictly matter, since one-time pads can be used to translate anything – from code words to garbled speech. "If this phone call was encrypted you'd hear "…enejekdhejenw…' but then it would come out the other side sounding like normal speech," says Stupples. But this would leave traces in the signal. To send information over the radio, essentially all you're doing is varying the height or spacing of the waves being transmitted. For example, two low waves in a row means x, or three waves closer together means y. When a signal is carrying information, instead of neat, evenly spaced waves like ripples on the ocean, you're left with a wave like the jagged silhouette of an ECG.

This isn't the Buzzer. Instead, many believe that the station is a hybrid of two things. The constant drone is just a marker, saying "this frequency is mine, this frequency is mine…" to stop people from using it.

It only becomes a numbers station in moments of crisis, such as if Russia were invaded. Then it would function as a way to instruct their worldwide spy network and military forces on standby in remote areas. After all, this is a country around 70 times the size of the UK.

It seems they're already been practicing. "In 2013 they issued a special message, 'COMMAND 135 ISSUED' that was said to be test message for full combat readiness," says Māris Goldmanis, a radio enthusiast who listens to the station from his home in the Baltic states.

The mystery of the Russian radio may have been solved. But if its fans are right, let's just hope that drone never stops.

https://www.bbc.com/future/article/20170801-the-ghostly-radio-station-that-no-one-claims-to-run

# YL 33: The First Female Ham Radio Operators, and their Awesome Legacy

Love, sealed with friendship.

By Ashley HenneferDec 14th, 2014, 11:00 am

Historically, literacy—in its many forms—has given the marginalized a way to speak and participate in a system that previously prevented them from doing so. And while the printing press revolutionized the way writing was exchanged and shared with the world, the invention of radio as entertainment, emergency, and communication technology had a similar effect on oral storytelling. From this, ham radio, also known as amateur radio, was born as a subset of commercial radio. The appeal of communicating independently to others across the globe struck a chord with many people in the early 20th century—including women looking for ways to participate in war efforts, and connect with other women around the world.

Although enthusiasm for ham radio as the medium of choice for hobbyists, veterans, and emergency responders hasn't waned much over the last fifty or so years, the hobby is making a strong resurgence as aspiring makers acknowledge radio's contribution to the movement. Many hams consider amateur radio to be the original maker skill, requiring knowledge of electricity, geography and communication.

And it's one of many mediums that gave women the chance to have a global voice—and they took it.

Calm the ham

For those unfamiliar with the subculture of ham radio, the title "ham" was originally used as a negative name associated with amateur operators who, without proper training, would disrupt professionals. Eventually, though, the name lost its negative stigma and is now used interchangeably with "amateur." Regardless of someone's amateur status, all operators must be licensed and complete a training program, through FCC regulations.

Female hams are called "YLs," which is short for "Young Lady," regardless of the operator's age. While that seems simultaneously antiquated, cute, and patronizing, keep in mind that the ham radio subset of men is referred to as "OMs," or "Old Man." The largest organization for YL ham operators in the world is the Young Ladies' Radio League, Inc. (YLRL), founded in 1939, which exists to encourage and assist YLs throughout the world to become licensed amateur radio operators.

Although amateur and commercial radio was heavily male-dominated, the response to the influx of women operators was—and still is—largely positive. In "The Feminine Wireless Amateur," a 1916 article in The Electrical Experimenter, the writer says:

JUST because a man, Signor Guglielmo Marconi by name, invented commercial wireless telegraphy does not mean for a moment that the fair sex cannot master its mysteries. […]

Women seem to progress excellently in the engineering branches. Primarily this is so because her brain is quick of action, and moreover she usually will be found to have extremely well-balanced ideas as to proportions, so essential in designing. A wonderful imagination coupled to a number of other worthy faculties help to make a really fine combination, so that we find a steadily growing number of women architects, mechanical and electrical experts, radio operators, civil engineers, ad lib. What we need is more of them in the higher positions, where the square root and binomial theorem are everyday quantities. That's quite a positive—and progressive—perspective on women in science and engineering – especially for 1919. A 1931 article in the New York Times also remarked on this trend, saying that

The list of women obtaining licenses as amateur radio operators is increasing rapidly, the Department of Commerce said today, although there were only eight registered women commercial operators in the country. […] There are eighty-six women amateurs, compared with about 18,000 men operators.

This number has changed drastically since the 1930. And while there are now thousands of women worldwide with call signs, several notable women during the early 20th century set the stage for the new generations of girls finding a voice on the airwaves.

(continued on page 16, YL)

# Schedule for Volunteer Examinations in 2019-20

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

The exam schedule for 2020 follows nearly the same format as past years. The scheduling is for Lexington/Fayette County and the sessions in Danville, Georgetown, Winchester, and Richmond hamfest. The Bluegrass Amateur Radio Society-sponsored ARRL exams will continue to be held on the second Saturday of the second month of each quarter (except the August Session will be the date of the Central Kentucky ARRL Hamfest in Lexington), and the WCARS sessions remain as they were last year, Tuesday evenings quarterly.

## Test Session Locations

| Lexington* | Winchester** | Danville | Georgetown |
|---|---|---|---|
| Red Cross Building | Clark County EOC | Amer Legion Post 46 | Georgetown Police Dept |
| 1450 Newtown Pike | 200 Maryland Ave | 45 Spears Lane | 550 Bourbon Street |
| Lexington KY 40509 | Winchester KY 40391 | Danville KY 40422 | Georgetown KY 40324 |

* August, Bluegrass ARS Hamfest, Eastland Shopping Center, Lexington, Kentucky
** September, Richmond Hamfest, Madison County Fairgrounds, Richmond, Kentucky

## Contact Information

ARRL VEC: Lexington and BARS ARRL Hamfest test sessions - Liaison Fernie Williams/KE4MAI, ke4mai@arrl.net, 859-652-3393 (www.bluegrassars.org)
Danville - Liaison John Wulf/K4FT, johnk4ft@gmail.com, 563-505-0339, Wilderness Road ARC, http://www.wrarc.com
Georgetown - Liaison Ron Malinowski/WX4GPS, wx4gps@arrl.net, 502-542-8252
WCARS VEC: Lexington - Liaison Marguerite Williams/KE4MAJ, ke4maj@arrl.net, 859-489-6274 (www.bluegrassars.org)
W5YI VEC: Winchester - Liaison Darrell Epperson/AC4YD, AC4YD@arrl.net, 859-771-1834

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

| Date and Time | VEC | Location |
|---|---|---|
| Saturday, December 12, 2020 10:00 am<br>Further information, contact Ron Malinowski/WX4GPS 502-542-8252 | (ARRL VEC) | Georgetown Police Department<br>550 Bourbon St, Georgetown, KY 40324 |
| Pre-Registration Required by emailing or calling the Contact Person show | | |
| Saturday, January 9,, 2021 10:00 am<br>Further information, contact Darrell Epperson/AC4YD 859-771-1834 | (W5YI VEC) | Clark County EOC<br>200 Maryland Ave<br>Winchester, KY |
| Pre-Registration Required by emailing or calling the Contact Person shown | | |

(continued from page 14, YL)

Gladys Kathleen Parkin

At just fifteen years old, Gladys Kathleen Parkin (1901-1990) received her professional ham radio license. Basically, this makes her a total badass, considering that she'd had her amateur radio license since age nine. She was featured on the cover of The Electrical Experimenter, and at the time was the "youngest successful female applicant for a radio license ever examined by the Government at that time," according to a 1916 article in the San Francisco Chronicle. Parkin began her hobby at age five with her brother, and was the first woman in California to pass the first-class radio license.

Parkin's call sign is 6S0, and she spent her life in the radio industry, developing a reputation for building her own equipment. Here she is, quoted in The Electrical Experimenter:

With reference to my ideas about the wireless profession as a vocation or worthwhile hobby for women, I think wireless telegraphy is a most fascinating study, and one which could very easily be taken up by girls, as it is a great deal more interesting than the telephone and telegraph work, in which so many girls are now employed. I am only fifteen. … But the interest in wireless does not end in the knowledge of the code. You can gradually learn to make all your own instruments, as I have done with my ¼ kilowatt set. There is always more ahead of you, as wireless telegraphy is still in its infancy.

Graynella Packer

At twenty-two, Graynella Packer of Florida became the youngest woman to become a wireless operator "on board an ocean-going steamship," reads a 1914 article in the King Country Chronicle. Her experiences at sea gave her many stories that she later recounted to her friends and family. Although she technically wasn't an amateur, her passion began as a hobby, and Packer had long been interested in the way electricity and communication worked on the open seas. She served on the steamship Mohawk from 1910 to 1911.

Olive Carroll

Canadian-born Olive J. Carroll had a passion for travel and exploration while growing up during the 1930s and 40s – and radio was her gateway to the world. Carroll's interest in amateur radio began in high school, but she eventually turned it into her career and attended the Sprott Shaw School of Radio, where she earned her second class radio certificate in 1944. She was hired by the Canadian Department of Transport as an interceptor operator, and a few years later, when an opportunity opened on the Norwegian passenger freighter M/S Siranger, she accepted the position—having never before traveled farther than 500 miles from her home. Like Packer, Carroll was driven by a desire to explore the world by operating from the ocean.

In 1994, she authored a book about her experiences called Deep Sea 'Sparks': A Canadian Girl in the Norwegian Merchant Navy. The San Francisco Maritime Museum has recreated a ship's radio room with the same equipment Carroll used during her time on the M/S Siranger.

Clara Reger

It's impossible to talk about notable female hams without acknowledging the work of Clara Reger, who received her call sign in 1933 at age thirty-five. Reger had a long career as an operator, and managed disaster communications after WWII. Known for her exceptional Morse code skills, Reger spent much of her life teaching others how to become operators. She also received the Edison Award for teaching a fourteen-year-old boy without arms to send Morse code with his feet.

But Reger is also known for her signature salutation, which she created especially for women communicating with other women—the salutation '33,' which meant love sealed with friendship. Reger knew that to hear another girl's voice on the other end was rare and special. What a gift, to find kinship with women, through the radio, across the ocean, across the globe!

(continued on page 17)

(continued from page 16, YL)

YL 33 is considered sacred by female hams, and there's a poem dedicated to Reger's accomplishments and passion for radio communications. You can read it in full on the Young Ladies Radio League's website, but here's a passage:
There's no real definition
But its meaning is known well.
It's how a YL says good evening
To another friend YL.

Although these are just a few of the many women who used radio as their medium of choice, their stories as operators are fascinating and inspiring. These women are united in their mutual passion for exploration, technology and adventure, and that still holds true today for many female ham operators. If you're interested in becoming a ham radio operator, consider joining YLRL, the Sisterhood of Amateur Radio, or the ARRL.
Ashley Hennefer, M.A., is a writer and researcher based in Reno, Nevada. She's the founder and editor of The New Artemis, and is passionate about technology, travel, and the humanities.

https://www.themarysue.com/female-ham-radio-operators/

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Bluegrass Amateur Radio Society, Inc. (BARS)
Open general meeting report of October 5, 2020
Red Cross Building, Lexington, KY

The October, 2020, BARS Open General Meeting was postposed due to health related precautions in response to disease control measures associated with the current COVID-19 virus situation.

The BARS Picnic at Shillito Park, scheduled for September 14th, was postponed due to gather restrictions imposed by the Lexington Parks and Recreations Department in response to the health concerns associated with the current COVID-19 virus situation.
The BARS Open General Meetings are expected to resume in the future on their regular schedule of the first Monday of each month when the recommended restrictions on group gatherings are ended and the Red Cross is again available for BARS function

Reported and submitted by:
Bruce A. Campbell, KM$EHU
Secretary

Bruce Draper, AA5B, aa5b.corral@gmail.com

# Contest Corral December 2020

Check for updates and a downloadable PDF version online at **www.arrl.org/contest-calendar**.
Refer to the contest websites for full rules, scoring information, operating periods or time limits, and log submission information.

| Start - Finish Date | Time | Date | Time | Bands | Contest Name | Mode | Exchange | Sponsor's Website |
|---|---|---|---|---|---|---|---|---|
| 1 | 0300 | 1 | 0400 | 1.8-28 | QCX Challenge | CW | RST, name, SPC, rig | qrp-labs.com/party.html |
| 2 | 1700 | 2 | 2000 | 144 | VHF-UHF FT8 Activity Contest | Dig | 4-char grid square | ft8activity.eu/index.php/en |
| 3 | 0000 | 3 | 0300 | 1.8 | QRP ARCI Topband Sprint | CW | RST, SPC, mbr or power | qrparci.org/contests |
| 3 | 1800 | 3 | 2200 | 28 | NRAU 10-Meter Activity Contest | CW Ph Dig | RS(T), 6-char grid square | www.nrau.net |
| 3 | 2000 | 3 | 2200 | 1.8-50 | SKCC Sprint Europe | CW | RST, SPC, name, mbr or power | www.skccgroup.com |
| 4 | 2200 | 6 | 1600 | 1.8 | ARRL 160-Meter Contest | CW | W/VE: RST + ARRL/RAC Section. DX: RST | www.arrl.org/160-meter |
| 5 | 0500 | 6 | 1000 | 3.5-28 | UFT Meeting | CW | RST, mbr or "NM" | www.uft.net |
| 5 | 0600 | 5 | 0800 | 7, 14 | Wake-Up! QRP Sprint | CW | RST, serial, suffix of previous QSO | qrp.ru/contest/wakeup |
| 5 | 1200 | 6 | 1159 | 3.5-28 | PRO CW Contest | CW | RST, serial, "M" if member | www.procontestclub.ro |
| 5 | 1800 | 6 | 2359 | 3.5-28 | FT Roundup | Dig | RST, SP or serial | rttycontesting.com |
| 5 | 2000 | 6 | 1959 | 3.5-28 | EPC Ukraine DX Contest | Dig | RSQ, Ukraine region or serial | epc-ukraina.ucoz.com |
| 8 | 0200 | 8 | 0400 | 3.5-28 | ARS Spartan Sprint | CW | RST, SPC, power | arsqrp.blogspot.com |
| 9 | 0130 | 9 | 0330 | 3.5-14 | NAQCC CW Sprint | CW | RST, SPC, mbr or power | naqcc.info |
| 9 | 1700 | 9 | 2000 | 432 | VHF-UHF FT8 Activity Contest | Dg | 4-char grid square | ft8activity.eu/index.php/en |
| 12 | 0000 | 13 | 2359 | 28 | ARRL 10-Meter Contest | CW Ph | W/VE/XE: RS(T), state or province. DX: RS(T), serial. MM: RST, ITU region | www.arrl.org/10-meter |
| 12 | 0000 | 14 | 2359 | 1.8-7 | PODXS 070 Club Triple Play Low Band Sprint | Dig | RST, SPC | www.podxs070.com |
| 12 | 0600 | 13 | 1800 | 3.5-28 | TRC Digi Contest | Dig | RST, serial, "TRC" if member | trcdx.org/rules-trc-digi |
| 12 | 1200 | 13 | 2359 | 1.8-50 | SKCC Weekend Sprintathon | CW | RST, SPC, name, mbr or "none" | www.skccgroup.com |
| 12 | 1600 | 13 | 1559 | 3.5-28 | International Naval Contest | CW Ph | RS(T), Naval club and mbr (or serial for non-members) | www.rnars.org.uk |
| 13 | 2000 | 13 | 2300 | 1.8-28 | QRP ARCI Holiday Spirits Homebrew Sprint | CW | RST, SPC, mbr or power | qrparci.org/contests |
| 13 | 2100 | 13 | 2259 | 14 | CQC Great Colorado Snowshoe Run | CW | RST, SPC | www.coloradoqrpclub.org |
| 14 | 0100 | 14 | 0300 | 1.8-28 | 4 States QRP Group Second Sunday Sprint | CW Ph | RS(T), SPC, mbr or power | www.4sqrp.com |
| 16 | 0130 | 16 | 0330 | 3.5-14 | NAQCC CW Sprint | CW | RST, SPC, mbr or power | naqcc.info |
| 18 | 1600 | 18 | 1700 | 3.5, 7 | AGB-Party Contest | CW Ph Dig | RS(T), serial, mbr (if a member) | ev5agb.com/contest/agb_party.htm |
| 18 | 2000 | 18 | 2359 | 1.8 | Russian 160-Meter Contest | CW Ph | RS(T), oblast code or serial | qrz.ru/contest/detail/90.html |
| 19 | 0000 | 19 | 2359 | 1.8-50 | Feld Hell Sprint | Dig | RST, mbr, SPC, grid | sites.google.com/site/feldhellclub |
| 19 | 0000 | 19 | 2359 | 3.5-28 | OK DX RTTY Contest | Dig | RST, CQ zone | okrtty.crk.cz |
| 19 | 0000 | 19 | 2359 | 1.8-144 | RAC Winter Contest | CW Ph | RS(T), VE province/territory or serial | wp.rac.ca/rac-canada-winter-contest-rules |
| 19 | 1400 | 20 | 1400 | 1.8-28 | Croatian CW Contest | CW | RST, serial | 9acw.org/index.php/rules |
| 20 | 1800 | 20 | 2359 | 3.5-28 | ARRL Rookie Roundup, CW | CW | Name, 2-digit year first licensed, SPC | www.arrl.org/rookie-roundup |
| 20 | 2300 | 21 | 0100 | 1.8-28 | Run for the Bacon QRP Contest | CW | RST, SPC, mbr or power | qrpcontest.com/pigrun |
| 23 | 0000 | 23 | 0200 | 1.8-28 | SKCC Sprint | CW | RST, SPC, name, mbr or power | www.skccgroup.com |
| 26 | 0000 | 26 | 2359 | 3.5-28 | Gedebage CW Contest | CW | RST, serial | olkb.or.id |
| 26 | 0830 | 26 | 1059 | 3.5, 7 | DARC Christmas Contest | CW Ph | RS(T), DOK or serial | darc.de/der-club/referate/conteste/weihnachtswettbewerb/en |
| 26 | 1500 | 27 | 1500 | 1.8 | Stew Perry Topband Challenge | CW | 4-character grid square | www.kkn.net/stew |
| 27 | 0000 | 27 | 1159 | 3.5-28 | RAEM Contest | CW | Serial, latitude, longitude (e.g. 57N 85W) | raem.srr.ru/en/main |
| 31 | 0900 | 31 | 2359 | 3.5, 7 | Bogor Old and New Contest | Ph | RS, operator age | www.orari-bogor.org/rule |

There are a number of weekly contests not included in the table above. For more info, visit: **www.qrpfoxhunt.org**, **www.ncccsprint.com**, and **www.cwops.org**.
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.*

"I was there. I saw your sons and your husbands, your brothers and your sweethearts. I saw how they worked, played, fought, and lived. I saw some of them die. I saw more courage, more good humor in the face of discomfort, more love in an era of hate and more devotion to duty than could exist under tyranny."

Bob Hope

"No one party can fool all of the people all of the time; that's why we have two parties"
Bob Hope

## Program Schedule for 2020

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

The following programs are scheduled for 2020. Your input and suggestions for programs for 2020 are needed. Call David Richardson,W9KHZ at 859-983-1380 or e-mail at daveinlex3@gmail.com/.

| | Month | Topic | Presenter(s) | Comments |
|---|---|---|---|---|
| ✓ | January | "Winter Field Day" January 25-26, 2020 | David Richardson/W9KHZ | |
| ✓ | February | FT8 Digital Mode | Chris Gay | |
| ✓ | March | SkyWarn National Weather Service, | Joe Sullivan, Louisville, KY | start time is 7 pm |
| ✓ | April | **CANCELLED DUE COVID -19** | | |
| ✓ | May | **CANCELLED DUE COVID-19** | | |
| ✓ | June | **CANCELLED DUE COVID-19** | | |
| ✓ | July | **CANCELLED DUE COVID-19** | | |
| ✓ | August | **CANCELLED DUE TO COVID -19** | | |
| ✓ | September | Annual Family Picnic | CANCELLED DUE COVID-19 | |
| ✓ | October | **CANCELLED DUE TO COVID-19** | | |
| ✓ | November | **CANCELLED DUE TO COVID-19** | | |
| ✓ | December | **General Meeting cancelled Election** | Brad James | |

## 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@arrl.net. Go to <http://www.lexkywcars.org> for information.

Winchester (W5YI VEC) - They are located in the Clark County EOC, 200 Maryland Avenue, Winchester, Kentucky. Their 2019 schedule (10:00AM): Saturday, January, 12, Saturday, April 13, Saturday, July 13, and Saturday, October 12. Contact Liaison Darrell Epperson/AC4YD, AC4YD@arrl.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@arrl.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@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 (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 9:00 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 - Suspended for the tim

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 17 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.

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 KB4FEE@arrl.net

**"The most difficult place in the world to get a clear and open perspective of the country as a whole is Washington."**

**Franklin D. Roosevelt**

Bluegrass Amateur Radio Society (BARS)
Open General Meeting Report of November 2, 2020
Red Cross Building, Lexington, Ky.

The November, 2020, BARS Open General Meeting was, postponed due
to health related precautions in response to disease control measures associated with the current COVID-19 virus situation.

The BARS Open General Meetings are expected to resume in the future on their regular schedule of the first Monday of each month when the recommended restrictions on group gatherings are ended and the Red Cross Building is again available for BARS functions.

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

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Bluegrass Amateur Radio Society (BARS)
Directors' Meeting Minutes of October 19, 2020
Red Cross Building, Lexington, Ky.

The October, 2020, Directors' Meeting was called to order at 7:00pm by President Brad James, WA4HBM, in the meeting hall of Arlington Christian Church on North Limestone Street instead of the Building which is currently unavailable due to COVID-19 health concerns.

In attendance were:
1st Vice President Bob Brown, KI4JWK;
2nd Vice President David Richardson, W9KHZ;
Secretary - Bruce Campbell, KM4EHU;
Treasurer - Jodie Wells, WB4LKQ;
Director-at- Large - 1. Tim Kunkel, KF4MPM;
2. Chris Gay, KU4A;
which constituted aquorum.
Bart Breeding, KB4FEE, was also in attendance.

President Brad James, WA4HBM, announced that the meeting shall close around 9:00pm to accommodate the Arlington Christian Church.

Treasurer's Report.
1) An abbreviated Treasurer's Report was read indicating the current balances in BARS owned accounts as of close of business on October 19th , and accepted without objections.
2) A bill for $238.53 from The Mail Room for packing and shipping of BARS- surplus equipment sold on eBay was approved without objection. -
3) One (1) new membership applications for Jeff Tuttle, KO4HQP, was read and accepted directly without objection, in lieu of a second reading at a Open General Membership Meeting.

9continued on page 22)

(continue from page 21, Director's meeting)

Officer's Reports, Committee Reports and Club Activities.
Jodie Wells, WB4LKQ, reported that the sale of the Kenwood transceiver and station equipment netted $996.64.

Brad James, WA4HBM, reported that Bill Cotter, N1L0, has modified the ListServer for restricted use by BARS members and for unrestricted use by any and all within reasonable conduct.
David Richardson, W9KHZ, reported that:
1) The new IC-7300 transceiver has been received and is set-up shack. The final cost was $999.99.

2) The new rotor and controller are on back order. The cost to club will be $999.99.

3) The tools in the shop have been organized in the new tool box. shop is being rearranged. computer and monitor have been anonymously
4) The work bench in the have been organized in the new tool box. shop is being rearranged. computer and monitor have been anonymously
5) A digital microscope, computer and monitor have been anonymously donated for use in the shop.
6) A larger refrigerator and microwave oven will be placed in the BARS room.
7) Personal protective equipment and sanitizer supplies have been placed in the BARS room.
8) The new Treasury computer and bookkeeping software have been purchased for $406.59 and $174.37 respectively.

Old Business
Two proposals for direct internet connection and service in the BARS room were reviewed. Chris Gay, KU4A, moved, and Jodie Wells, WB4LKQ, seconded that the club assume the Spectrum agreement of $64.00/month for the first year and $89.00/month for the second year, if the Club detides to continue with the service for an internet connection on existing telecommunications facilities already in the Red Cross Building. The motion was approved by unanimous vote.

New Business
1) Roger Colvin, KJ4YSY, compiled the slate of nominees for the 2021 officers election:
President - Brad James, WA4HBM;
First Vice President - Bob Brown, KI4JWK;
Second Vice President - David Richardson, W9KHZ;
Secretary - Chris Gay, KU4A;
Treasurer - Jodie Wells, WB4LKQ;
Directors-at-Large - Tim Kunkel, KM4MPM;
Bart Breeding, KB4FEE;
Darryl Bennett, KD4CSW;
Sandy Gragg, KM4PJU.

The roll of candidates was accepted by general consent. The ballots will be mailed on November 17, 2020, to all current voting members of record as of November 16, 2020. Ballots received in the sealed and addressed return envelops by 7:00pm, December 21s t either by mail or hand delivered, will be counted at the scheduled Directors' Meeting at that time.

(continue on page 23)

(continued from page 22, Director's meeting)

2) An additional banking practice was discussed to be adopted as the BARS Standard Operating Procedures. "Any and all on-line banking transactions will require both the prior approval by majority of a quorum of the Board of Directors, and the prior knowledge and agreement of the two officers (president and treasurer) designated with monetary responsibilities." The proposal was approved without objection.

Items of Discussion.

1) The terms of use for the BARS Treasurer's Computer will be adopted at a future time.
2) The format of the Treasurer's report will be determined after the new financial software is setup on the new Treasurer's computer.

3) The need and merit for BARS to establish a bank debit card account for direct purchases instead of the Club's checking account was considered. No changes to the methods of BARS disbursements will be made at this time.

4) Any current BARS member desiring the Club's Fina cjal Reports can request them by e-mail from Bart Breeding, KB4FEE, with "BARS Treasurer's Report" included in the subject line of their email.

5) An overall procedure and schedule for moving the BARS official mailing address from Gardenside Post Office Box to a Nandino Post Office Box will be planne for next year.

6) Time limits for discussions and debates will be at the discretion of the presiding officer unless strict time limits are defined in the Bylaws (which they currently are not).

7) A donation to the Arlington Christian Church in consideration for the use of their meeting room for the Directors' Meetings while the Red Cross Building is unavailable due to the COVID-19 health concerns, will be determined. after additional discussions within the BARS organization.

8) The Secretary .will acknowledge the donation of a collection of amateur radio equipment from George Stokes.

9) The future sales of BARS surplus equipment through e-Bay will be proceeding on a piece-by-piece basis of single large or groups of small items.

10) The procedures for the purchase of new major items of equipment by BARS will be prepared to include the input and acknowledgement of BARS members equipment by BARS will be prepared to include the input and acknowledgement of BARS members.

11) The needs and merits to continue the accounting of designated funds and monetary donations within the BARS financial records was considered. The current method of allocated funds will continue for now.

12) A new "Reserve Fund" amount will be eventually established in the BARS bank accounts.

13) A redesign of the BARS Membership Application will be studied in order to include members' talents that they wish to be considered and catalogued for BARS benefit.

(continued on page 24)

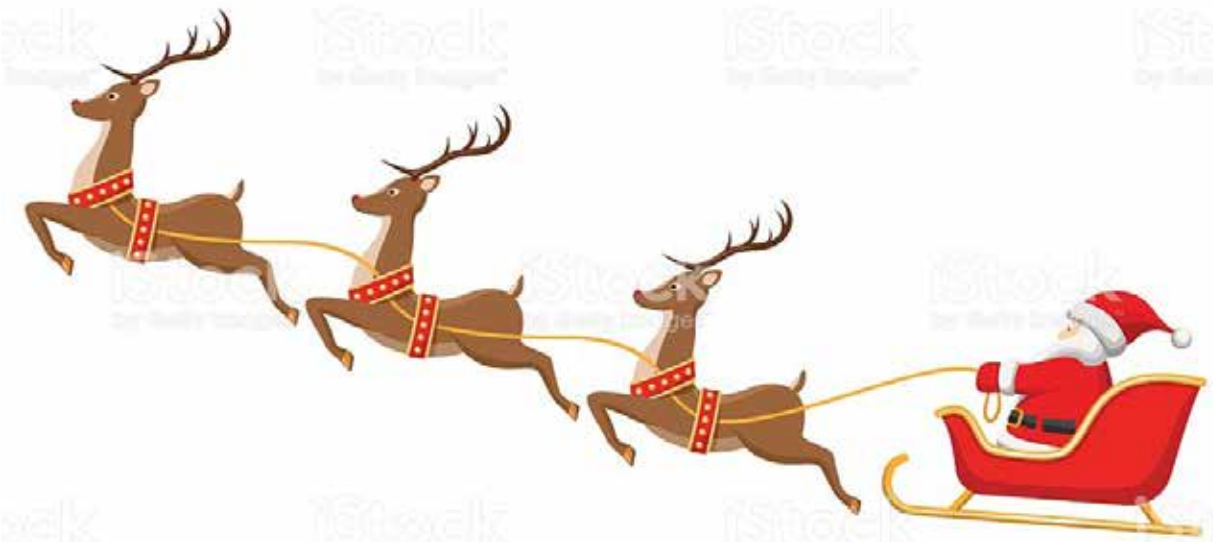
(continued from page 23, Director's meeting)

Upcoming BARS Schedule:
BARS meetings and activities will be scheduled on a case-by-case basis due to the health precautions associated with the cu rent COVID-19 pandemic situation.

Tentative Schedule (details to be communicated in the future)
November 16th - Director's Meeting.

With no other business at 9:08pm, David Richardson, W9KHZ, moved, and Bob Brown, KI4JWK, seconded that the meeting be adjourned which was approve without objection.

Recorded and submitted by:
Bruce Campbell, KM4EHU
Secretary



# MERRY CHRISTMAS

MAY THE PEACE AND BLESSINGS OF CHRISTMAS BE YOURS;
AND THE COMING YEAR BE FILLED WITH HAPPINESS

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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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 December 2020

Tue 1 Swap Net 145.370 (T-192.8) 8:00 PM; "Casual Communicators Net," 9:00 PM Eastern, 443.325+ MHz;: KY-QRP Net suspended,; Fayette County ARES Net at 8:30 PM on the 146.940 repeater and PL Tone of 88.5
Wed 2 Open Rag chew Net 8:00 pm 146.760 neg offset no PL tone; ;Wilderness Trail Emer Net, 8:30 pm, freq. 146.715, PL 100; Six Shooters Net, 9:00 PM on 52.525 MHz FM (vertically polarized.;
Thu 3 Jessamine Cty ARES Net, 7:30 PM, 145.490 Repeater, Gary Britten W4GNB net control.
Sat 5 Shack closed; Open Rag chew Net 9:00 am 146.760 neg offset no PL tone
Sun 6 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 7 District 11 ARES Net 9:00 PM 146.925 (PL-79.7) linked to 147.180 (PL-74.4) and other repeaters in area.
Tue 8 Amateur Swap Net 145.370 (T-192.8) 8:00 PM; "Casual Communicators Net," 9:00 PM Eastern 443.325+ MHz; KY- QRP Net suspended Fayette County ARES Net 8:30 pm on the 146.940 repeater with a PL tone of 88.5
Wed 9 Open Rag chew Net 8:00 pm 146.760 neg offset no PL tone; Wilderness Trail Emer Net, 8:30 pm, freq. 146.715, PL 100; Six Shooters Net, 9:00 PM on 52.525 MHz FM (vertically polarized);.
Thu 10 Jessamine Cty ARES Net, 7:30 PM, 145.490 Repeater, Gary Britten W4GNB net control.
Sat 12 Shack closed; Open Rag Chew Net 9 am 146.760 neg offset and no PL tone
Sun 13 Amateur Television & Specialized Communications Net, 9:00 PM (146.760 Repeater); District 11 Skywarn Net, 8:00 PM, 146.92 (PL-79.7 Hz) linked to 147.180 (PL-74.4 Hz)\
Mon 14 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 15 Amateur Swap Net 145.370 (T-192.8) 8:00 PM; "Casual Communicators Net," 9:00 PM Eastern, 443.325+ MHz. KY-QRP Net suspended; Fayette County ARES Net at 8:30 PM on the146.940 repeater and PL Tone of 88.5
Wed 16 Open Rag chew Net 8:00 pm 146.760 neg offset no PL tone; Wilderness Trail Emer Net, 8:30 pm, freq. 146.715, PL 100; Six Shooters Net, 9:00 PM on 52.525 MHz FM (vertically polarized);.
Thur 17 Jessamine Cty ARES Net, 7:30 PM, 145.490 Repeater, Gary Britten W4GNB net control
Sat 19 Shack closed; Open Rag chew Net 8:00 pm 146.760 neg offset no PL tone
Sun 20 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 21 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 22 Amateur Swap Net 145.370 (T-192.8) 8:00 PM; "Casual Communicators Net," 9:00 PM Eastern, KY-QRP Net suspended; Fayette County ARES Net 8:30 PM 146.940 with a PL tone of 88.5
Wed 23 Open Rag chew Net 8:00 pm 146.760 neg offset no PL tone; Wilderness Trail Emer Net, 8:30 pm, freq. 146.71 PL 100;
Thu 24 Jessamine Cty ARES Net, 7:30 PM, 145.490 Repeater, Gary Britten W4GNB net control.
Sat 26 Shack closed; Open Rag chew Net 9:00 am 146.760 neg offset no PL tone
Sun 27 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 28 District 11 ARES Net 9:00 PM 146.925 (PL-79.7) linked to 147.180 (PL-74.4) and other repeaters in area.
Tue 29 Amateur Swap Net 145.370 (T-192.8) 8:00 PM; "Casual Communicators Net," 9:00 PM Eastern 443.325+ MHz; KY- QRP Net suspended Fayette County ARES Net 8:30 pm on the 146.940 repeater with a PL tone of 88.5
Wed 30 Open Rag chew Net 8:00 pm 146.760 neg offset no PL tone; Wilderness Trail Emer Net, 8:30 pm, freq. 146.715, PL 100; Six Shooters Net, 9:00 PM on 52.525 MHz FM (vertically polarized);.
Thu 31 Jessamine Cty ARES Net, 7:30 PM, 145.490 Repeater, Gary Britten W4GNB net control.