



The Listening Post



HamCation® 2021 --- POSTPONED

Dedicated to Community Service and All Central Florida Hams

November 2020

President's Message

Greetings to everyone. Here we are, rapidly approaching the end of the most unusual year in modern history. *(Continued on Next Page)*

1	• Message from the President
2	• HamCation™ Chairman News
3	• OARC Annual Christmas Party Saturday, December 5, 2020
4	• IARU Region 1 President Sounds Alarm on Wireless Power Transfer for Vehicles
5	• ARRL Urges Members to Join in Strongly Opposing FCC's Application Fees Proposal
6	• November 14: Nationwide Red Cross Emergency Communications Drill, Joint Exercise with ARES • Oldest Known US Radio Amateur, Cliff Kayhart, W4KKP, SK
8	• Pandemic-Delayed ARRL 2019 Annual Report Released
9	• ARISS to Celebrate 20 Years of Ham Radio on the International Space Station
11	• IARU Region 2 Releases 2020 Revision of its Band Plan
12	• British Columbia Radio Amateur Hears Mars Reconnaissance Orbiter • IARU Administrative Council Addresses Wide-Ranging Agenda in Virtual Meeting
14	• Robert Bankston, KE4AL, is New AMSAT President • FCC Plans to Delete 3.5 GHz Band, Canadian Privileges Will Remain
15	• New HF Operators --- Things to Do
16	• Word to the Wise / Operating Tip
17	• Conversation
19	• November's Guest Speaker: Bob Inderbitzen, NQ1R
21	• Weekly Radio Network Meetings
22	• OARC Meetings and Events 2020-2021
23	• OARC Membership Application

OARC MEETING

November 4, 7:00pm

YouTube Live and Zoom

Beardall Senior Center - **CLOSED**

800 Delaney Ave, Orlando, FL 32801

ARRL Testing: **CANCELED**

For information & Updates

See www.oarc.org

OARC Board of Directors

President: John Knott, N4JTK

Vice President: Michael Cauley, W4MCA

Treasurer: Ana Groe, KM4JVE

Secretary: Bob Nocero, W4KBW

Directors:

Bob Cumming, W2BZY

Frank Gergits, KC9GNQ

Tony Darnell, KK4VRP

Dean Groe, KD4TWJ

Frank Tagliani, KD4EZW

James Deuel, N0XIA

The Listening Post is the OARC newsletter for OARC members. The LP will be distributed electronically via E-mail and the OARC web site (www.oarc.org).

Editor: Ed Thralls NE4H.

Comments, suggestions and articles are welcome. Send to editors@oarc.org.

Contributing to this edition: John Knott N4JTK, Michael Cauley W4MCA

OARC REPEATERS

Call	Freq	Shift	PL
KB4UT	146.760*	-600	103.5
N4UMB	147.015	-600	103.5

* Fusion Repeater

D-Star

K1XC C	146.820	-600	
K1XC B	443.275	+5MHz	
K1XC A	1275.00	-12 MHz	Voice
K1XC A	1255.00	-12MHz	Digital
W4PLB C	145.160	+600	
W4PLB B	442.300	+5MHz	

All D-star repeaters are connected

From the President's Desk *(Continued from Previous Page)*

So looking forward to 2021 and praying that it will bring a much needed change back to some kind of normalcy.

Election Day is Tuesday. I hope that you have taken advantage of either mailing in your ballot or early voting. If you have not voted yet, please be sure to cast your vote safely on Tuesday. Just like in the OARC elections, make sure your voice is heard.

Many of you have purchased your tickets to the OARC Christmas Party already. There are still many who have not done so yet. It may be because of the pandemic and if that, we understand. Currently the Christmas Party is still a go! All precautions will be taken. Watch for an email closer to the event date for full details on the precautions that we will be taking at the dinner.

If you have not purchased your tickets yet and still plan on attending the Christmas Party, please go to <https://oarc.org/events-christmas-party> for full details and info on how to purchase your tickets online. If you already sent a check in, there is no need to purchase online. We do need everyone to register by November 17 so that we have a good head count for the caterer.

This month's presenter at the OARC meeting will be Bob Inderbitzen, NQ1R from the ARRL Headquarters. Bob will be doing a presentation on "Growing Amateur Radio". Would like to see a strong turnout for Bob's presentation. (See Bob's Bio, page 19)

73

John Knott, N4JTK

HamCation™ Chairman News

(by Michael Cauley, W4MCA)

Greetings Everyone

I hope everyone is still staying safe.

In last month's edition of the Listening Post we told you we are looking to host some unique Webinars, a QSO Party and Prize Drawings for 2021.

Things are starting to come together for the event. We are calling it the "2021 HamCation Special Edition Webinars and QSO Party".

We will be hosting 4 tracks of unique webinars on Saturday February 13 and Sunday February 14, 2021 from 10am to 4pm each day.

We will have a Vendor Track, Youth Track, Technology Track, and a Contesting Track. Each track will have multiple webinars about each of the categories.

We will also host a QSO Party during that weekend. More information will be forthcoming.

Keep an eye on the HamCation™ (<http://HamCation.com>) website for more details on the 2021 HamCation Special Edition.

73,
Michael Cauley, W4MCA
2021 HamCation™ General Chair

OARC Annual Christmas Party **Saturday, December 5, 2020** (by John Knott, N4JTK)

The OARC Annual Christmas Party is scheduled for Saturday, December 5th at the Knights of Columbus, 5727 Cornelia Ave, Orlando, FL 32807. Doors will open at 6:00pm and dinner will be served at 7:00pm. Ana Groe (KM4JVE) has been planning a great celebration for everyone.

We will be collecting Toys for Tots again, as I suspect this will be a highly requested charity this year. Please bring a small, unwrapped toy for our collection.

Tickets are \$10.00 each for members and your guest/spouse; \$25.00 each for non-members. Tickets can be purchased in advance by sending a check for the correct amount to:

OARC Christmas Dinner
PO Box 574962
Orlando, FL 32857

If you wish to pay by a credit card, you can click on this link if you are a member (Membership must be current) to purchase yours and your spouse's ticket:
https://swipesimple.com/links/lnk_afd94862

For non-members: https://swipesimple.com/links/lnk_58fbbe53

Just like previous years, we need an accurate head count for our caterer. We must receive your check by mail or your e-mail registering for the party by Tuesday November 17.

All CDC guidelines and any local/state requirements will be adhered to. More information will be published closer to the holiday party. If we must cancel the party, anyone who paid for the party will receive a refund.

IARU Region 1 President Sounds Alarm on Wireless Power Transfer for Vehicles

(The ARRL Letter for September 24, 2020)

International Amateur Radio Union (IARU) Region 1 President Don Beattie, G3BJ, wants to raise greater awareness regarding the interference potential of Wireless Power Transfer for Electric Vehicles (WPT-EV). He is urging IARU member-societies to contact national regulators to make them aware of the technology's potential for "RF pollution." Beattie notes that WPT-EV chargers can run as much as 20 kW.

WPT-EV was on the agenda for World Radiocommunication Conference 2019 (WRC-19). The International Telecommunication Union (ITU) Radiocommunication Sector (ITU-R) conducted studies to assess the impact of WPT-EV on radiocommunications and suitable harmonized frequency ranges. Those ITU-R studies identified the 19 - 25 kHz band, as well as bands in the 50 kHz and 60 kHz range, for high-power WPT-EV, and the 79 - 90 kHz band for medium-power WPT-EV. The consensus of WRC-19 delegates was to make no changes in the ITU *Radio Regulations* with respect to WPT-EV.

"The discussions about WPT-EV have reached a point where they are moving from the technical to the political arena," Beattie said. "Discussions with a national regulator indicate that we must now take action at the national level. The amateur service, but also other telecommunication services, will experience the consequences of WPT-EV."

Beattie urged member-societies in Region 1 to contact national regulators, preferably in person, to explain why radio amateurs are so concerned. He pointed out that long charging times in populated areas could generate harmonics that make radio communication very difficult.

"Models show that this also applies to the wider environment of a WPT-EV installation," Beattie said. "Broadcasters, stationary, and mobile services share these concerns" and provided input to CEPT Electronic Communications Committee [Report 289](#).



Beattie noted that the WPT-EV discussion has been going on for a long time. The technology is similar to that used for wireless charging of cell phones.

"The wireless charging of electric cars is done with large coils," he explained. "One of them on the ground under the vehicle, the second in the car. Typically, about 22 kW is transferred wirelessly through those coils. This is done using frequencies between 79 and 90 kHz. Technical and operational standards for WPT-EV are under development."

WPT-EV developers are seeking noise level limits that are some 30 - 45 dB above current noise levels, Beattie said. "Limits that have a serious negative effect on the radio spectrum," he asserted.

"In the interests of the future of amateur radio, we need to get the attention of national regulators," Beattie concluded. "This is about the future of amateur radio!"

ARRL Urges Members to Join in Strongly Opposing FCC's Application Fees Proposal

(The ARRL Letter for September 29, 2020)

ARRL will file comments in firm opposition to an FCC proposal to impose a \$50 fee on amateur radio license and application fees. With the November 16 comment deadline fast approaching, ARRL urges members to add their voices to ARRL's by filing



ARRL
The national association for
AMATEUR RADIO®

opposition comments of their own. The FCC *Notice of Proposed Rulemaking (NPRM)* MD Docket 20-270 appeared in the October 15 edition of *The Federal Register* and sets deadlines of November 16 to comment and November 30 to post reply comments, which are comments on comments already filed. ARRL has prepared a [Guide to Filing Comments with the FCC](#) which includes tips for

preparing comments and step-by-step filing instructions. File comments on MD Docket 20-270 using the FCC's Electronic Comment Filing System ([ECFS](#)).

"We encourage all members to use the ARRL *Guide* to file comments opposing the imposition of the proposed \$50 application fee," ARRL President Rick Roderick, K5UR, said. "Let's highlight amateur radio's long history of public service."



November 14: Nationwide Red Cross Emergency Communications Drill, Joint Exercise with ARES

(The ARES Letter for October 21, 2020)

The Nationwide Red Cross Emergency Communications Fall Drill is a joint exercise with ARES set for November 14, an evolution of the highly successful Spring Drill that had hundreds of participants from some 40 states and Puerto Rico.

The Fall Drill will be a Winlink-specific event with the following goals: (1) pass traditional Red Cross (ARC) forms from as many states and as many radio amateurs as possible to one of six Divisional Clearinghouses, and (2) bring as many radio operators as possible up to a "basic" level of Winlink proficiency. [To prepare, there is a twelve-week series of Winlink Workshops held each Thursday at 0100Z on Zoom. Join the [SEC-ARES](#) group for announcements and discussions. Include your name and call sign when registering on SEC-ARES.]

Winlink Proficiency Goals have been written, a Winlink Technical Support Team has been formed, and *Metrics for Drill Success* have been developed. The proficiency goals are established as a training guideline and references online training resources. Many hams new to Winlink should find these resources helpful.

Over 300 radio amateurs have signed up for the event and more than a hundred were on a Briefing Call on October 5. There will be one other Briefing Call, in early November. This event is open to all radio amateurs; if interested in more information, contact [Mike Walters, W8ZY](#), for ARES-related questions or [Wayne Robertson, K4WK](#), for Red Cross-related topics.

Oldest Known US Radio Amateur Cliff Kayhart, W4KKP, SK

(The ARRL Letter for September 29, 2020)

Charles Clifford "Cliff" Kayhart, W4KKP, of White Rock, South Carolina, died on October 26, a few days past his birthday. An ARRL member, he was 109 and the oldest known US radio amateur and possibly the oldest ham in the world.

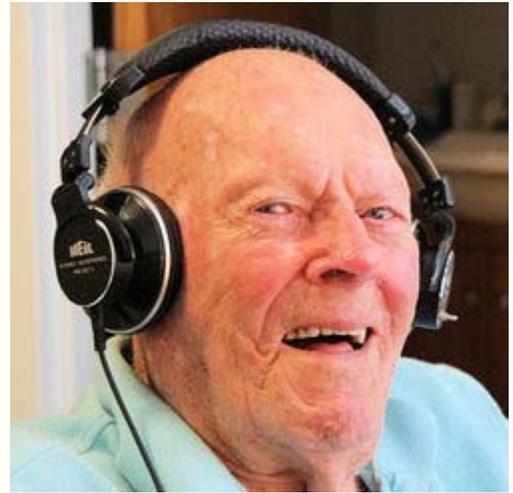
Last November, Roanoke Division Director Bud Hippisley, W2RU; Vice Director Bill Morine, N2COP, and South Carolina Section Manager Marc Tarplee, N4UFP, jointly presented Kayhart with ARRL's Centurion Award, which honors centenarian members who have at least 40 years of ARRL membership. On that occasion, Hippisley [interviewed](#) Kayhart.

First licensed in 1937 as W2LFE in New Jersey, he also held W9GNQ. According to his [obituary](#), Kayhart built his first radio at the age of nine. After working for New

York Telephone Company as a young man, he became enamored with engineering, so he headed off to Tri-State University in Indiana, graduating with a degree in aeronautical engineering. Afterward, he went to work for RCA in New Jersey, becoming a quality control manager. Positions followed at Philco Radio and Bendix Aviation.

During World War II, Kayhart joined the US Army Signal Corps, which sent him off to school to study radar. He was assigned to the US Army Air Corps in Georgia and then sent to Hawaii to become part of a Signal Service Battalion. He served at Iwo Jima, shortly after the US victory there, setting up

equipment for long-range radio communication and broadcasting, with rhombic antennas in four directions.



Cliff Kayhart, W4KKP, spoke with Roanoke Division Director Bud Hipsisley, W2RU, last November.

courtesy of the Dutch Fork Amateur Radio Group, to which he belonged, and the Columbia Amateur Radio Club. Kayhart remained active on the air until shortly before he died.

In 1946, Kayhart left the Army with the rank of captain, joining Magnavox the following year as its first field engineer; at the time, Magnavox was about to launch a line of television sets.

Eventually, he was transferred to the Customer Acceptance Department in Tennessee. Kayhart traveled to Japan in 1963 in search of Japanese television sets. He retired from Magnavox in 1976.

In the 1970s, while living in Tennessee, he spearheaded a project that installed a 2-meter FM repeater on the summit of Camp Creek Bald, still in operation on the Tennessee/North Carolina border.

After Kayhart moved into an assisted living facility in 2017, he had an HF station in his room,



Pandemic-Delayed ARRL 2019 Annual Report Released

(The ARRL Letter for October 1, 2020)

The 2019 ARRL Annual Report is now available in print and [online](#). The publication's release was delayed as a consequence of the coronavirus pandemic. Print copies for members who are interested will be available soon. ARRL President Rick Roderick, K5UR, called 2019 "an exciting year for ARRL," with several new initiatives moving through planning and development for rollout in 2020.

"Two of them -- *On the Air* magazine and the ARRL Online Learning Center -- signify steps taken toward the 'new generation of hams' that I've been talking about in the past few *Annual Reports*," President Roderick said. "They've been asking ARRL for help finding their way in amateur radio for so long, wanting to know everything from how to serve their communities, how to integrate the ham radio hobby and service with all the demands that modern life makes upon them, and even simply how to determine which parts of ham radio interest them."



ARRL President Rick Roderick, K5UR.

President Roderick also cited the development in 2019 of the ARRL Online Learning Center -- an array of online courses that will at first serve new hams and later expand to courses and materials for hams at all skill levels. The Online Learning Center is expected to launch in early 2021.

"2019 was more than busy for ARRL -- it was productive and constructive," President Roderick concluded. "We're growing and changing, and we do it all for you, the members, with an eye on our mission: to advance the art, science, and enjoyment of amateur radio."

ARRL membership was essentially flat from 2018 at 156,755 - - likely a result of the membership dues increase in 2019, but still slightly above projections.

The ARRL Volunteer Monitor Program was developed in 2019, replacing the Official Observers program. The new VM Program is a formal agreement between the FCC and ARRL in which trained volunteers will monitor the bands and collect evidence that may be used both to correct misconduct and to recognize exemplary on-the-air operation.

The *Report* summarizes a raft of responses to emergencies and disasters by Amateur Radio Emergency Service (ARES®) volunteers. ARES membership grew by 3,130 in 2019, and a new *ARES Comprehensive Plan* was introduced.

Financially, ARRL had a particularly good year in 2019, producing a \$596,000 gain from operations, along with strong investment markets resulting in an overall net asset gain of \$3.75 million.

ARISS to Celebrate 20 Years of Ham Radio on the International Space Station

(The ARRL Letter for October 8, 2020)

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

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



Jordan was among the participating students at Celia Hays Elementary School in Rockwall, Texas, late last February, who were excited to have their ARISS contact with Astronaut Drew Morgan. More than 190 students sat on the gym floor while another 680 on campus listened via the school's inter-communication system.

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

Before and during scheduled ham radio contacts, students, educators, parents, and communities learn about space and related technologies, and radio communication using amateur radio.

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

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

In the US, ARISS sponsors include [ARRL](#), [AMSAT](#), and NASA, the ISS National Lab-Space Station Explorers, and NASA's Space Communications and Navigation program.



Students at Kittredge Magnet School near Atlanta, Georgia, took part in an ARISS contact with Astronaut Drew Morgan, KI5AAA. Morgan answered 15 student questions. The students have their own radio club, Kittredge Magnet School Amateur Radio Club, KQ4KMS.

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

[Proposal information and more details](#), including expectations, proposal guidelines, and proposal forms, and dates and times of informational webinars, are on the ARISS website. Send questions to ariss.us.education@gmail.com. Like many educators who have coordinated ARISS radio contacts for their students, teacher Rita Wright, KC9CDL, an ARRL member, described the first ARISS school contact as inspirational and having a lasting impact on

their community. Five months after their contact, nearly 500 students greeted Bill Shepherd when he visited Luther Burbank School. Wright said it was "like tossing a pebble into a stream."

"The ripple effects are still occurring, and I suspect will continue to occur for a long time," she said.

IARU Region 2 Releases 2020 Revision of its Band Plan

(The ARRL Letter for October 8, 2020)

IARU Region 2 ([IARU R2](#)) -- the Americas -- has released the September 2020 revision of its [Band Plan](#) and made procedural changes to shorten the time to reflect future adjustments. The Band Plan includes a change approved at the October 2019 General Assembly to add an Amateur Satellite uplink subband, 21.125 to 21.450 MHz, on a non-exclusive basis. This matches similar changes in the Region 1 and Region 3 band plans.

A number of administrative changes have been made to the text, although the Band Plan itself has not been modified. These changes include:

- Modifications to the wording of the Band Plan to ensure that national regulators understand it is a voluntary document, and that countries may depart from the plan based on national requirements.
- Definition additions: Amateur Radio Direction Finding (ARDF), primary service, secondary service, and several acronyms.
- Inclusion of information detailing the primary and secondary users in each amateur radio allocation band.
- Correction of minor typographical errors.



At its May 2020 meeting, the IARU R2 Executive Committee added text to the Standard Operating Procedures that provides a process for the Band Plan to be updated in a more timely manner. Prior to this change, Band Plan modifications could only be approved at a General Assembly, held once every 3 years. Under the new provision, the Band Planning Committee may circulate proposed changes to member-societies with the approval of the Executive Committee. "Should no more than one objection be received within a 60-day period, the change shall be deemed accepted and reported as such at the next conference," the Band Planning Committee's terms of references state.

The IARU R2 Band Planning Committee has a member from each of the seven areas in Region 2, and one of those members also serves as the committee's chair. The current Committee Chair is [Alphonse Penney](#), VO1NO/VA1AVR.

British Columbia Radio Amateur Hears Mars Reconnaissance Orbiter

(The ARRL Letter for October 8, 2020)

According to a [Spaceweather.com](https://www.spaceweather.com) report, Scott Tilley, VE7TIL, in British Columbia, Canada, received a signal from the NASA Mars Reconnaissance Orbiter (MRO), flying just 274 kilometers (about 170 miles) above the red planet's surface. The signal was an X-band carrier containing no data or telemetry.

"Its purpose is to allow for Doppler tracking," Tilley explained. "The rapid change in pitch of the signal is caused by the relative motion of the satellite and the observer." He used a homemade satellite dish to hear the orbiter.

Tilley enjoys tracking down signals from "dead" satellites, zombie satellites, and spy satellites, but the MRO was a first for him. "MRO's signal is weak, but it is one of the louder signals in Mars orbit," he said. "The spacecraft has a large dish antenna it uses as a relay for other Mars missions. With the proximity of Mars these days, it was the perfect time to try."



Scott Tilley, VE7TIL used this homebrew dish antenna to hear signals from NASA's Mars Reconnaissance Orbiter. [Scott Tilley, VE7TIL, photo]

In 2018, Tilley saw the "signature" of the Imager for Magnetopause-to-Aurora Global Exploration (IMAGE), a NASA spacecraft believed to have died in 2005. That [discovery](https://www.discovery.com) delighted space scientists.

IARU Administrative Council Addresses Wide-Ranging Agenda in Virtual Meeting

(The ARRL Letter for October 15, 2020)

The International Amateur Radio Union Administrative Council (AC) met in a virtual session on October 8 - 10. Consisting of the three IARU international officers and two representatives from each of the three IARU regional organizations, the council is responsible for IARU policy and management. The meeting, which had been set to take place in Novi Sad, Serbia, was conducted via the internet because of coronavirus pandemic travel restrictions.

Recently appointed EMC Coordinator Martin Sach, G8KDF, reported on work being done to address the need for reasonable standards to limit the proliferating threat of radio spectrum pollution from digital devices and wireless power transmission.

IARU Beacon Project Coordinator Peter Jennings, AB6WM/VE3SUN, reported on the status of the NCDXF/IARU beacon network, explaining recent and planned upgrades, as well as the network's many applications.

In his report, Satellite Advisor Hans Blondeel Timmerman, PB2T, described the work of the Satellite Frequency Coordination Panel. He reported that steps are being taken to address the growing number of non-amateur satellites that use amateur satellite spectrum.

Special Advisor for Emergency Communications Rod Stafford, W6ROD, explained his work representing the IARU in the ITU Development Sector (ITU-D), particularly with regard to disaster communications, and preparations for the World Telecommunication Development Conference next month. He highlighted an opportunity to promote amateur radio in ITU-D as a training platform for youth.

Preparations are already under way for World Radiocommunication Conference 2023 (WRC-23) of the International Telecommunication Union (ITU), currently expected to be held in 2023. A team of some 20 IARU volunteers from all continents is engaged in the preparatory processes of the ITU and the regional telecommunications organizations. The AC reviewed a draft of IARU's positions on WRC-23 agenda items of concern.

A committee was formed in 2019 to address growing pressure on amateur spectrum, particularly secondary allocations, at 144 MHz and above. The panel reported on its work to date in defining present and future spectrum requirements. Additional information will be sought from the amateur community on how this spectrum is being utilized.

Taking note of the many ways that the global amateur radio community has responded positively to challenges posed by the pandemic, the AC agreed to develop a related theme for World Amateur Radio Day next April 18.

The council expressed the hope that an in-person meeting can be held in October 2021.

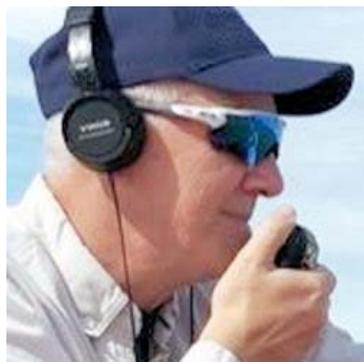


Robert Bankston, KE4AL, is New AMSAT President

(The ARRL Letter for October 22, 2020)

Robert Bankston, KE4AL, of Dothan, Alabama, is the new president of AMSAT. The AMSAT Board of Directors elected Bankston at its annual meeting on October 18, to succeed Clayton Coleman, W5PFG. Bankston has served as Treasurer and Vice

President of User Services. He is a life member of both ARRL and AMSAT. He volunteered to develop and launch AMSAT's online member portal and chaired the 2018 AMSAT Space Symposium.



Bankston is active on the satellites and enjoys operating portable from remote grid squares.

For his part, Coleman said that it had been "both a joy and a privilege" to serve as AMSAT president during 2020, which he called "a rather difficult year" for many in amateur radio.

"With the talented and capable individuals sitting on AMSAT's new Board and its officers, I am confident in a bright future ahead for AMSAT and the Amateur Radio Satellite Service."

Other officers elected included Paul Stoetzer, N8HM, as Executive Vice President; Jerry Buxton, NOJY, as Vice President of Engineering; Drew Glasbrenner, KO4MA, as Vice President of Operations; Jeff Davis, KE9V, as Secretary; Steve Belter, N9IP, as Treasurer; Martha Saragovitz as Manager; Alan Johnston, KU2Y, as Vice President of Educational Relations, and Frank Karnauskas, N1UW, as Vice President of Development. -- *Thanks to AMSAT News Service*

While FCC Plans to Delete 3.5 GHz Band, Canadian Privileges Will Remain

(The ARRL Letter for October 15, 2020)

Although the FCC [has announced plans](#) to delete the secondary amateur radio 3.3 - 3.5 GHz allocation, that amateur allocation will remain in place right across the northern US border. Radio Amateurs of Canada ([RAC](#)) said this week that the FCC action has raised concerns among Canadian amateurs.

"This FCC action does not directly affect Canadian amateurs, who continue to have a secondary allocation on this band," RAC stressed.

As RAC explained in a bulletin, Canadian regulator ISED published *Gazette Notice [SLPB-001-19: Decision on Revisions to the 3500 MHz Band to Accommodate Flexible Use and Preliminary Decisions on Changes to the 3800 MHz Band](#)*.

"In that document, ISED announced changes to the primary allocations to the Radiolocation, Fixed, and Mobile services at 3450 - 3500 MHz, removing Radiolocation, maintaining the Fixed services (used primarily for rural internet), and adding Mobile to 3450 - 3475 MHz, in line with its policy objective to 'foster innovation, investment, and the evolution of wireless networks by enabling the development and adoption of 5G technologies.'" RAC said this was the latest step in realigning allocations in the band that began with changes announced in December 2014. "At that time, as in the June 2019 announcement, the secondary allocation to amateur radio was not changed," RAC noted.



"As the 5G rollout advances, maintaining compliance with the 'no interference, no protection' requirement for secondary services is likely to impose increasingly severe restrictions on the ability of amateurs to use this band, even as the secondary allocation to the Amateur Service remains in place [in Canada]," RAC pointed out.

World Radiocommunication Conference 2023 (WRC-23) will include an agenda item to consider worldwide allocations to mobile internet services in several bands, among them 3.3 - 3.4 GHz and 10.0 - 10.5 GHz. The International Amateur Radio Union ([IARU](#)) has announced its intention to vigorously defend amateur interests in both bands at WRC-23, "and RAC representatives in Canadian working groups preparing the Canadian positions for WRC agenda items will be doing likewise," RAC said. -- *Thanks to Radio Amateurs of Canada*

NEW HF OPERATORS -- THINGS TO DO

(The ARRL Contest Update for September 28, 2020)

Ward, NOAX, talked about the NA CW Sprint in the [September 2, 2020 issue of the Contest Update](#). The independent [NA SSB Sprint](#) contest is this weekend, and the same concepts apply. The weekend of November 7, why not give the [ARRL CW Sweepstakes](#) a go? The exchange is challenging by virtue of its length with its origin in the message format used by the [National Traffic System](#). Want to try something [really scary](#)? The QRP [Zombie Shuffle](#) event on Friday, October 30 is well suited to this time of year.

WORD TO THE WISE

(The ARRL Contest Update for September 30, October 14, October 28, 2020)

Gimmick Capacitor

A capacitor made by twisting two strands of insulated wire together. Capacitance is on the order of 2-3pF per inch for normal hookup wire. Variations include the use of [Formvar](#)-insulated wire or coaxial cable for higher voltage applications. Here's a [Hackaday article with more information](#), and links to calculators for different wire types.

Chicken Stick

This one doesn't come with peanut sauce. A chicken stick is a device used to actively discharge components before working on a tube amplifier or other equipment that has high voltages. It consists of a non-conductive body, a wire with an alligator clip or ring terminal connected to ground, and a conductive tip. After a piece of gear is unplugged from the AC mains and any capacitors are given time to discharge, the chicken stick is [grounded to the chassis and the tip touched to various components](#) to ensure there is no stored charge. In an amplifier, anything in the power supply and RF deck that you could possibly come in contact with is a candidate for "touches," including coils, capacitors, chokes.

"Roger That"

Roger "indicates that a message was heard and understood" while the "that" part refers to the message. According to Dictionary.com, "Roger was brought into the spotlight in part due to public broadcasts of NASA's Apollo missions in the 1960s." (Ward, NOAX)

OPERATING TIP

(The ARRL Contest Update for September 30, October 14, October 28, 2020)

Your Exchange Should Be Correct and Not Be Unique

It's time for an operating tip repeat: If you're in a contest and you want to work others in that contest, your exchange should be in the same format as the other people you are working. For example, if the contest exchange is RST, CQ zone, and state, it's most common to send "599 03 WA" as an exchange. Sure, you could send "599 03 Washington" or "5NN 03 Washington" (in 5-bit Baudot, 5NN takes slightly longer to send than 599) but most logging programs are expecting a two-character abbreviation for state. If you're getting asked for frequent repeats by different stations, it may be a sign that your exchange has something unconventional in it.

Running with the Keyboard

"I run 20 like there's no tomorrow
Frequency I'm on, they crowd in on me
Least I don't need to touch my paddle
I send QRL with just one key!"

With today's logging programs, nearly any interaction you would want to have with a rig can be done by pressing a key on the keyboard. If you're looking for speed, learn how to keep your hands on the keyboard to turn RIT on/off, to switch receive filters, to send fills and say hi to a club member with a keyboard typed message. You'll save time, and you'll be less prone to make mistakes.

Cheat Sheets

Knowing the possible exchanges you might hear is helpful, even in a casual contest. For example, in the recently completed Illinois QSO Party, having the list of Illinois counties at hand is a good idea since there are 102 of them. For a contest like the IARU in July, it pays to become familiar with the call signs of the headquarters stations to recognize them as multipliers and be able to jump on them. Special call signs are issued by countries specifically for contests, and announcements of those are published on website such as NG3K.com.

CONVERSATION

(The ARRL Contest Update for September 30, October 14, 2020)

Remote Hands Make Light Work

I subscribe to a variety of amateur-radio-related email lists devoted to things like particular transceiver models, logging programs, contest clubs, keyers, RTTY decoders, FTx software... and so on. Traffic on many of the lists has increased over the last few months as people have had time to devote to this hobby.

None of the lists are solely devoted to troubleshooting problems at the computer-radio gear boundaries, but on occasion my inbox will fill up overnight as one person posts a problem, and one or more people enter a multi-round dialog to solve the problem. Watching a problem be presented in email, seeing additional information about it being teased out by the community, coming to an eventual resolution - it has the feel of a TV crime or medical drama where we're all trying to solve the case along with the actors.

Often times the pathway to a solution reveals more information on the inner workings of the components involved, which helps educate the mailing list readership. Sometimes the methods that used to troubleshoot can be applied to other situations, again, helping the entire community.

But on occasion one person's very particular problem might be more easily solved if a knowledgeable helper could just sit down next to the person and go over the problem, collect the necessary information, and provide suggestions on how to proceed. Rather than troubleshooting these kinds of problems using the back and forth of email messages, it might be better handled through... additional tools.

One appropriate group of tools that we've all become more familiar with lately includes [Zoom](#), [Join.me](#), Microsoft *Teams*, [Skype](#), and a number of others - meeting and video conferencing tools. Most, if not all of these have the "feature" that enables screen sharing by the meeting participants. The person that is experiencing the problem can share their screen with others in real-time, and the troubleshooting can happen in real-time. Using these lightweight, mostly non-invasive, and sometimes free conferencing tools for this purpose can shorten the time required to gather relevant information and apply appropriate remedies. Other related tools that might be useful include [TeamViewer](#) or [NoMachine](#) for when closer control of the target system is necessary.

Beyond troubleshooting, conference tools can be used for contest station building activities. For example, the [Pacific Northwest VHF Society](#) has a group that meets on weekends via video conferencing to build and troubleshoot microwave gear. Another: as Tim, K9WX, pointed out in this issue, the virtual SMC Fest's use of these tools allowed Cedrick, WT2P, to interactively demonstrate the measurement of filters and stubs to the Fest's audience.

One other feature to consider: Many of these tools also have the ability to record the session for later sharing. Perhaps that recording will be able to help someone else troubleshoot a similar problem in the future. Just don't forget to post a link to that video with a description to the email reflector.

Level Up Your Playing Field

I'm going to say it: It's probably impossible to have a "level playing field" in radio contesting. The WRTC event comes closest to providing a true level playing field by controlling many of playing field's variables: antennas, power output, terrain, and so on. But the WRTC event expects contestants to bring their own transceivers and associated peripherals, which could include [special purpose filters](#), signal processors, and the like. If only one band is open, and your teammate is able to "hear" through runs to work multipliers your team probably has an advantage.

For regular contests, different categories grossly lump stations together so that they're reasonably competitive against one another. But a Single Operator High Power (SOHP) entry from a station in an excellent low noise location with towers and good antennas will probably win over a SOHP effort from a city lot with dipoles, given reasonably matched operators.

Increasing your chances of winning is all about tilting the playing field to your advantage. If the rules allow 150 watts of output power in your category, you'll be at a disadvantage if you're only running 100 watts. If you can position your station geographically to better reach European multipliers, you should do so. Notice that your 10 meter antenna is too high after using [HFTA](#) to analyze signal arrival angles? Better move it lower. Single operators now have to have SO2R skills to earn a world or country podium spot in most contests. If your multi-single station is only using a single run radio and a single multiplier radio, you'll be giving up points to extremely serious multi-single operations have multiple teams working on each band.

What's the weakest part of your contest station compared to your peers? Fix that first. Where do you go from there? Pick the next weakest thing, and repeat.

Chances are, antennas are going to be high on the priority list. As far as I know, the only major-contest category that puts limitations on the antennas that can be used is the Tribander-and-Wires (TB-WIRES) overlay category for some CQ Contests. Resources put into improving antennas yield great rewards across all categories.

Remember, you can never have too many antennas to choose from!

73, Brian N9ADG

November's Guest Speaker: Bob Inderbitzen

Title: **Growing Amateur Radio**

There is no shortage of new ham radio licensees each year -- approximately 30,000. But only a fraction ever become active. Bob Inderbitzen, NQ1R, will share personal stories, perspective, and ARRL initiatives intended to develop more active, involved, and engaged radio amateurs.

More about Bob: Bob Inderbitzen, NQ1R is the Product Development Manager at ARRL, the national association for Amateur Radio®.

Bob obtained his first ham radio license, KA2PZD, as a 6th-grader in 1981. He was president of the Worcester Polytechnic Institute Wireless Association, W1YK, from 1987-90 while attending school at WPI in Massachusetts. He earned his Bachelor of Science degree in Management and Organization from Central Connecticut State University.

Bob was a very active Volunteer Examiner and amateur radio instructor before joining the ARRL staff in 1991. He is a familiar face at many annual hamfests and conventions, coordinating ARRL's participation at Orlando HamCation, Dayton Hamvention, and Europe's largest, annually-held amateur radio exhibition in Friedrichshafen, Germany.

He enjoys speaking with members and volunteers about ARRL membership recruitment, benefits and services. Today, his interests in ham radio include casual HF operating, portable operating and contesting. He is an ARRL Diamond Club Life Member and a contributor to ARRL's Second Century Campaign. He lives with his family in Glastonbury, Connecticut.



**Ordered your tickets?
RSVP by November 17th**

Weekly Radio Network Meetings

Mon @ 20:00	147.090	Seminole ARES Net – Except – First Monday of the month (146.460 Simplex)
Tues @ 19:00	145.350	Osceola ARES Net
Tues @ 19:30	147.195	Quarter Century Wireless Association
Tues @ 20:00	146.760	Wayne Nelson Trader's Net
Wed @ 19:00	147.300	Disney Emergency Amateur Radio Service
Wed @ 21:00	432.090	Florida Weak Signal Group
Thur @ 19:00	443.050	Orange County ARES Net
Thur @ 20:30	432.090	Florida Weak Signal Group



OARC Meetings and Events 2020 - 2021

November 4, Wednesday	Virtual Meeting, 7:00pm YouTube Live! and Zoom
December 2, Wednesday	No Club Meeting
December 5, Saturday	Christmas Party
January 6, Wednesday	Virtual Meeting, 7:00pm YouTube Live! and Zoom
February 3, Wednesday	Meeting, 7:30pm at the Beardall Center
February 12-14	HamCation™
March 3, Wednesday	Meeting, 7:30pm at the Beardall Center
April 7, Wednesday	Meeting, 7:30pm at the Beardall Center
May 5, Wednesday	Meeting, 7:30pm at the Beardall Center
June 2, Wednesday	Meeting, 7:30pm at the Beardall Center
June 26-27	ARRL Field Day
July 7	Meeting, 7:30pm at the Beardall Center
August 4	Meeting, 7:30pm at the Beardall Center
September 8	Meeting, 7:30pm at the Beardall Center
October 6	Meeting, 7:30pm at the Beardall Center
November 3	Meeting, 7:30pm at the Beardall Center
December 1	No Club Meeting
December 4	Christmas Party





OARC Membership Application

Make checks payable to:
Orlando Amateur Radio Club

Mail to:
Orlando Amateur Radio Club
Post Office Box 574962
Orlando FL 32857

To have your membership card mailed to you, please include a SASE with your check.

Date: ___/___/20___ [] Regular Member [] Family Member [] Associate Member
[] New Membership [] Renewal [] CMP

Name: _____ Call _____ Class _____

Address: _____

City _____ State _____ Zip _____

E-mail Address (print) _____

(Home) Phone: _____ (Cell) Phone _____ Birth Month _____

Rates: Regular [] 1 year \$15.00 [] 3 years \$40.00 [] 6 years \$75.00

Rates: Family [] 1 year \$5.00 per family member Husband, Wife or Child under 18

Rates: Associate [] 1 year \$15.00 Dues Total: _____

All Membership(s) will expire ONE, THREE or SIX year(s) from date paid.

Other Club Affiliations: _____

Are you an ARRL Member: [] Yes [] No

Name Badges: White letters on Black background with Gold embossed OARC logo.

[] Regular 3" x 1.5" @ \$10.00 each

Name: _____ Call _____

All badges are to be picked up at the General meeting or add \$3.00 for shipping & handling.

Shipping & Handling: [] Yes [] No

Badges _____ **S&H** _____ **Total** _____