



The Listening Post



HamCation® 2021 --- POSTPONED

Dedicated to Community Service and All Central Florida Hams

October 2020

President's Message

Greetings to everyone. The past 30 days have flown by! Mostly because the amount of Zoom meetings, phone calls, e-mails, and more than Michael and I
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OARC MEETING

October 7, 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

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Frank Gergits, KC9GNQ

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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)*

have been on in reference to HamCation®. By now you have likely heard that our 75th Anniversary of HamCation® and the ARRL National Convention have been postponed to February 2022. Instead of repeating information in this column, be sure to read Michael's column about HamCation® in this issue. Just one last thing, this was NOT an easy decision to make, but under the circumstances, I believe it to be the right decision!

I want to bring everyone up to speed about our monthly meetings and our monthly test sessions. I recently spoke with the Beardall Senior Center management. Beardall Senior Center is still closed. They have not re-opened and at this point, there are no plans to re-open in the immediate future. However, they have said that when they do re-open, it will likely be at a reduced capacity leaving OARC out of the equation. So, for now, our OARC Monthly meetings will remain virtual and on ZOOM and You Tube. We will not be returning to Beardall until such time that they have re-opened with FULL capacity. There is no ETA when any of this will start to happen.

As far as our test sessions are concerned, they are still on hold. We are looking for another location that will allow enough VE's and Test Candidates to social distance so we can hold a successful test session. We do not know where this will be, what night it will occur on, or any further details at this time. Once a location has been determined and is agreeable with the VE Team, a re-start date will be selected, and we will get the word out. Bob Cumming, W2BZY reminds me monthly on the amount of request he receives asking for the time and date of our next session. This has become a priority to get re-started.

We have scheduled our annual Christmas Party for Saturday, December 5 at the Knights of Columbus. Doors will open at 6pm, dinner is served at 7pm. We will be collecting Toys for Tots again this year, as I suspect this will be a highly requested charity this year. Please bring a small, unwrapped toy for our collection. Ana has been planning a great celebration with everyone. 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

Or if you wish to pay by a credit card, send an email to Holiday@oarc.org letting us know how many tickets you need. We will send a link back to you so that you can pay online. Just like previous years, we need an accurate head count for our caterer. We must receive your check in the mail or your email registering for the party by Tuesday November 17.

All CDC 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 be refunded their money.

Coming up at this Wednesday's virtual meeting, Ray Novak, N9JA and Will Jourdain, AA4WJ of ICOM America will be joining us to present the IC-705 that was just released in the market. If you have been looking for a great QRP rig or just want to see what the 705 is all about, be sure to join us at 7:00pm via ZOOM to learn everything.

Look in this issue for information on our November Presenter.

73

John Knott, N4JTK

HamCation® Chairman News

(by Michael Cauley, W4MCA)

Greetings Everyone

I hope everyone is still staying safe.

After much deliberation, the difficult decision was made by The Orlando Amateur Radio Club and ARRL, to postpone Orlando HamCation® and the ARRL National Convention.

The joint decision came after considering the national public health emergency including the health and safety of all participants, the uncertainty that continues to impact our organizations, and the reluctance to travel to, and attend, large events.

As the world's second largest hamfest, we pride ourselves on delivering a high-quality event to our attendees and would not want to put on a show that is anything less than what the ham radio community deserves.

Instead, the 75th Orlando HamCation® and ARRL National Convention has been postponed until February 10-13, 2022.

We are looking to host some unique Webinars, a QSO Party and Prize Drawings for 2021. More information will be coming soon about this.

I would like personally to thank the HamCation® Executive Committee for all the advice and guidance that was put into this difficult decision. I also want to thank the 35 members of the HamCation® committee for all the hard work they have put in this year for HamCation®. Finally, I want to thank all the volunteers that would have put

in endless hours at HamCation® 2021. Without you we would not be able to put on a 5 Star, high quality event year after year.

73,
Michael Cauley, W4MCA
2021 HamCation® General Chair

Board of Directors Elects New ARRL CEO

David Minster, NA2AA

(The ARRL Letter for August 27, 2020)

The ARRL Board of Directors has elected David Minster, NA2AA, of Wayne, New Jersey, as ARRL's new Chief Executive Officer, starting on September 28. Minster is currently Managing Partner at Talentrian Partners, a management consulting firm serving the consumer goods and luxury goods industries.

Minster began his career as a software engineer, moving into management at Unilever, as a Chief Information Officer of this globally recognized portfolio of brands that includes Elizabeth Arden Company, Chesebrough-Ponds Canada, Thomas J. Lipton Co., and others. From there, he moved to fine jewelry manufacturer and retailer David Yurman, where he served as COO and CIO. More recently, Minster served as CEO of jewelry brands Scott Kay and Judith Ripka.



"Building a culture of accomplishment and accountability is what I do best," he said. "My initial focus will be working with the Board on establishing strategic goals and concrete plans to navigate ARRL through the digital transformation required for the coming decades of its Second Century. This includes exciting and innovative ways to be engaged in amateur radio, while growing activity and membership."

Minster got his Novice license, WB2MAE, in 1977, when he was in his teens. He progressed from Advanced to Amateur Extra and, after a stint as NW2D, he settled on the vanity call sign NA2AA in the 1990s as a way to honor a mentor, N2AA, and the contest station that he used to frequent, K2GL, in Tuxedo Park, New York.

Minster's ham radio pursuits have ranged far and wide over the years. His background includes National Traffic System training and participation in public service events, as well as contesting from home, club stations, and contest stations in the Caribbean -- particularly on Bonaire, where he is a member of PJ4G. Primarily a CW operator, Minster collects unique and vintage bugs and keys.

Minster earned a bachelor's degree in computer engineering from The Ohio State University and has a special interest in satellites, digital communications, remote

operation, and ham radio computing and software. He has written keyer software for the commercial market, and contest logging, packet, and satellite telemetry software for personal use.

In addition to being an ARRL member, Minster is a member of AMSAT, the Frankford Radio Club, the Straight Key Century Club, CWops, and the North American QRP CW Club.

"I spend every day of my life, one way or another, engaged in amateur radio. It is more than just a hobby for me; it is my community. It is where I live; where I have built lifelong friendships, and friendships that span the globe. Amateur radio allows me to dream and to experiment. I can't wait to bring my energy and boundless enthusiasm in service to ARRL."

ARRL President Rick Roderick, K5UR, said, "We are excited to welcome David as our new CEO, and look forward to his progressive leadership. His experience in management and operations, plus his activities in amateur radio, will serve our organization and members well."

Minster will succeed Barry J. Shelley, N1VXY, who was CEO in 2018, and who has been serving as ARRL's Interim CEO since January 2020. Shelley had been ARRL's Chief Financial Officer since January 1992.

FCC Proposes to Institute Amateur Radio Application Fees

(The ARRL Letter for September 3, 2020)

Amateur radio licensees would pay a \$50 fee for each amateur radio license application if the FCC adopts rules it proposed last week. Included in the FCC's fee proposal are applications for new licenses, renewal and upgrades to existing licenses, and vanity call sign requests. Excluded are applications for administrative updates, such as changes of address, and annual regulatory fees.

The FCC proposal is contained in a *Notice of Proposed Rulemaking* ([NPRM](#)) in MD Docket 20-270, which was adopted to implement portions of the "Repack Airwaves Yielding Better Access for Users of Modern Services Act" of 2018 -- the so-called "[Ray Baum's Act](#)."

The Act requires that the FCC switch from a Congressionally-mandated fee structure to a cost-based system of assessment. In its *NPRM*, the FCC proposed application fees for a broad range of services that use the FCC's Universal Licensing System (ULS), including the Amateur Radio Service that had been excluded by



an earlier statute. The new statute excludes the Amateur Service from annual regulatory fees, but not from application fees.

"[A]pplications for personal licenses are mostly automated and do not have individualized staff costs for data input or review," the FCC said in its *NPRM*. "For these automated processes -- new/major modifications, renewal, and minor modifications -- we propose a nominal application fee of \$50 due to automating the processes, routine ULS maintenance, and limited instances where staff input is required."

The same \$50 fee would apply to all Amateur Service applications, including those for vanity call signs. "Although there is currently no fee for vanity call signs in the Amateur Radio Service, we find that such applications impose similar costs in aggregate on Commission resources as new applications and therefore propose a \$50 fee," the FCC said.

The FCC is not proposing to charge for administrative updates such as mailing address changes, and amateur radio will remain exempt from annual regulatory fees. "For administrative updates [and] modifications, which also are highly automated, we find that it is in the public interest to encourage licensees to update their [own] information without a charge," the FCC said.

The FCC also proposes to assess a \$50 fee for individuals who want a printed copy of their license. "The Commission has proposed to eliminate these services -- but to the extent the Commission does not do so, we propose a fee of \$50 to cover the costs of these services," the FCC said.

The FCC dropped assessment of fees for vanity call signs several years ago, but the Ray Baum's Act does not exempt filing fees in the Amateur Radio Service.

ARRL is reviewing the matter and intends to file comments in opposition.

Deadlines for comments and reply comments will be determined once the *NPRM* appears in the *Federal Register*. File comments by using the FCC's Electronic Comment Filing System ([ECFS](#)), posting to MD Docket No. 20-270. This docket is already open for accepting comments, even though deadlines have not yet been set.

Ham-Astronauts to Crew Boeing, SpaceX Commercial Missions for NASA

(The ARRL Letter for August 27, 2020)

Ham-astronauts abound among crew members assigned to pioneering commercial space missions by Boeing and SpaceX. Jeanette Epps, KF5QNU, is the latest astronaut assigned to the Boeing Starliner-1, a four-passenger vehicle that will undertake its first mission to the International Space Station (ISS) in 2021. Others on the crew will

include veteran Sunita Williams, KD5PLB, and Josh Cassada, KI5CRH. Another crew member is yet to be named.

Epps, Williams, and Cassada will spend 6 months on the ISS. The flight will follow NASA certification after a successful uncrewed Orbital Flight Test-2 and Crew Flight Test with astronauts. The spaceflight will be the first for Epps and Cassada and the third for Williams, who spent long-duration tours on the ISS for Expeditions 14/15 and 32/33. NASA assigned Williams and Cassada to the Starliner-1 mission in [August 2018](#).

Four veteran astronauts are preparing to launch this fall on the SpaceX Crew 1 mission. They are Victor Glover, KI5BKC; Mike Hopkins, KF5LJG; Shannon Walker, KD5DXB, and Soichi Noguchi, KD5TVP, of the Japan Aerospace Exploration Agency (JAXA).



Jeanette Epps, KF5QNU.
[NASA, photo]



Boeing Starliner 1 crew members Josh Cassada, KI5CRH, and Sunita Williams, KD5PLB.

NASA and SpaceX are targeting no earlier than October 23 for the first operational flight with astronauts of the Crew Dragon spacecraft and Falcon 9 rocket as part of the agency's Commercial Crew Program. The SpaceX Crew-1 mission will be the first regular rotational mission to the space station following completion of NASA certification.



NASA's SpaceX Crew-1 crew members in the company's Crew Dragon spacecraft during training. From left to right: Shannon Walker, KD5DXB; Victor Glover, KI5BKC; Mike Hopkins, KF5LJG, and Soichi Noguchi, KD5TVP. [SpaceX, photo]

Astronauts Bob Behnken, KE5GGX, and Doug Hurley traveled to the ISS on a SpaceX Crew Dragon in late May, marking the first time that humans traveled aloft via a commercial spacecraft.

NASA's [Commercial Crew Program](#) is working with the US aerospace industry as companies develop and operate a new generation of spacecraft and launch systems capable of carrying crews to low-Earth orbit and to the space station. Commercial transportation to and from the station will provide expanded utility, additional research time, and broader opportunities for discovery on the orbital outpost, NASA says.

"As commercial companies focus on providing human transportation services to and from low-Earth orbit, NASA will concentrate its focus on building spacecraft and rockets for deep-space missions," the space agency said.

Some of the ham-astronauts will be available for ham radio contacts from the ISS with schools and educational groups via the Amateur Radio on the International Space Station ([ARISS](#)) program.

First Element of ARISS Next-Generation Radio System Installed and Operating on ISS

(The ARRL Letter for September 3, 2020)

The initial element of the Amateur Radio on the International Space Station (ARISS) next-generation radio system has been installed onboard the ISS, and operations using the new gear are now under way. The first element, dubbed the InterOperable Radio System (IORS), was installed in the ISS *Columbus* module. The IORS replaces the Ericsson radio system and packet module originally certified for spaceflight in mid-2000.



Part of the ARISS InterOperable Radio System -- the multi-voltage power supply -- being put through its paces during one of its many NASA tests. [Photo courtesy of ARISS]

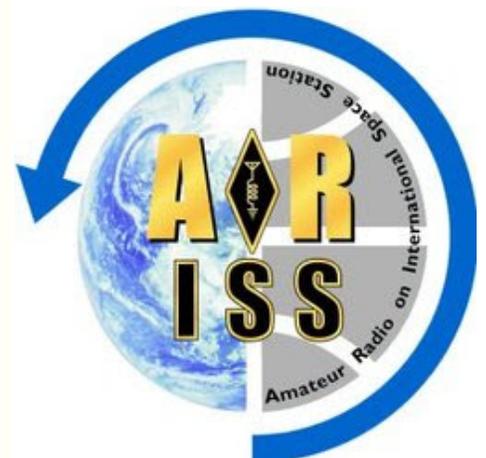
"Finally! It's been a scramble the last few days with coordination over the weekend and yesterday with astronaut Chris Cassidy, KF5KDR," ARISS-US Delegate for ARRL Rosalie White, K1STO, said. "But the new ARISS radio system is now installed, set up, and functioning. What a long road we've traveled over the past 5 years!"

Initial operation of the new radio system is in

FM cross-band repeater mode using an uplink of 145.99 MHz (CTCSS 67 Hz) and a downlink of 437.800 MHz. Special operations will continue to be announced, ARISS said.

Launched from Kennedy Space Center last March, the IORS consists of a "space-modified" JVC-Kenwood D710GA transceiver, an ARISS-developed multi-voltage power supply, and interconnecting cables. The design, development, fabrication, testing, and launch of the first IORS culminated a 5-year engineering effort by the ARISS hardware team of volunteers.

ARISS says the new system offers a higher-power radio,



voice repeater, digital packet radio (APRS) capabilities, and a Kenwood VC-H1 slow-scan television (SSTV) system.

A second IORS will undergo flight certification for later launch and installation in the Russian Service Module. "Next-gen development efforts continue," ARISS said. "For the IORS, parts are being procured and a total of 10 systems are being fabricated to support flight, additional flight spares, ground testing, and astronaut training." Follow-on next-generation radio system elements include L-band repeater uplink capability -- currently in development -- and a flight Raspberry Pi, dubbed "ARISS-Pi," still in the design phase. The ARISS-Pi promises operations autonomy and enhanced SSTV operations, ARISS explained.

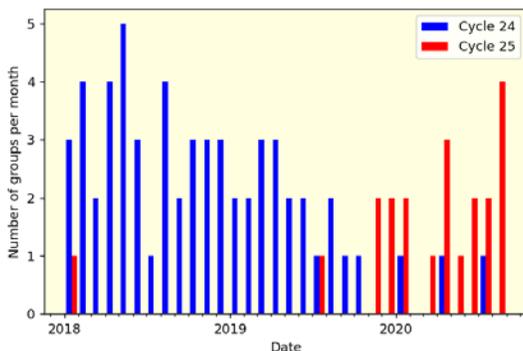
This year, ARISS marks 20 years of continuous amateur radio operations on the ISS. The largely volunteer organization welcomes [donations](#) to the ARISS program for next-generation hardware development, operation, education, and administration.

Solar Minimum Most Likely Occurred in December 2019

(The ARRL Letter for September 3, 2020)

Sunspot Index and Long-Term Solar Observations ([SILSO](#)) in Belgium said this month that the minimum between Solar Cycles 24 and 25 "most probably" took place last December. SILSO, a part of the Royal Observatory of Belgium and formerly known as

SIDC, cited as evidence the January 2020 increase in the [13-month smoothed sunspot number](#) -- the first upswing since the Cycle 24 maximum in April 2014.



"[F]or now, this latest smoothed value in January 2020 is the very first point indicating a rise of the activity. So, the date of the minimum still needs a full confirmation over the coming months,"

SILSO [said](#) on its website. "For now, preliminary smoothed values, limited to less than 13 months,

hint at increasing values over coming months. If the rising trend indeed continues, this [December 2019] date will become fully definitive."

SILSO said another indication of the transition between the two solar cycles can be drawn from counting individual sunspot groups that belong to either the old or new solar cycle. "While most sunspot groups belonged to the last solar cycle [Cycle 24] until September 2019, the dominance switched to groups of the new cycle in November 2019," SILSO said.

SILSO said that in terms of the number of active regions, the minimum between Cycle 24 and Cycle 25 falls in October 2019. "This is close to December 2019," SILSO said. It attributes the difference to three factors:

The sunspot number also takes into account the total number of spots, and the size of the emerging active regions.

The time of the minimum depends on the respective trends of the declining phase of the past cycle, and of the rising phase of the new cycle, over the 12 months surrounding the minimum.

The date of the minimum has a significant uncertainty range. Near minimum, activity hardly varies and is close to minimum for a few months.

"The date of the minimum is thus always less sharply defined than the date of the maximum of the cycles, which are more sharply peaked," SILSO explained.

SILSO noted "a steady stream" of small, active regions since last December, but that activity stagnated at a constant low level. "However, since July -- and even more in the course of August 2020 -- the activity seems to truly take off, with at least one sunspot group visible on almost all days. Such a level of activity had not been reached since early 2019."



"This late-breaking upward trend is now expected to accelerate over the coming months," SILSO predicted. "So be prepared for a more eruptive and interesting sun!"

Ham Radio Wireless Network Camera Detects Washington Wildfire

(The ARRL Letter for September 10, 2020)

Nigel Vander Houwen, K7NVH, reported on September 8 that some [HamWAN](#) users in the Puget Sound region of Washington, who were viewing the network's camera feeds, spotted a large brush fire.

"They reported it to the DNR [Department of Natural Resources], which thanked them



for the first report they'd gotten on the fire, and they've sent a team to try and keep it small and under control," Vander Houwen said. "It's estimated currently at around 50 acres, southeast of Enumclaw, along Highway 410." The fire was not said to be threatening any homes. State Route 410 was reported closed between Enumclaw and Greenwater, and drivers heading to Mount Rainier National Park were advised to take another route.

HamWAN is a nonprofit organization developing best practices for high-speed amateur radio data networks. It runs the Puget Sound Data Ring. So far, HamWAN networks have been used for such applications as low-latency repeater linking (including DMR), real-time video feeds, APRS internet gateways (I-gates), providing redundant internet access to emergency operations centers, and more.

A frame from video via a HamWAN camera of an air tanker dropping water on the fire. (<https://www.youtube.com/watch?v=MJ1X4VvRFWY>)



Amateur radio licensees in the HamWAN service area can connect directly to the network with a modest investment in equipment and no recurring costs. The HamWAN Puget Sound Data Ring has cells deployed at numerous wide-coverage sites, interconnected with 5 GHz radios. The HamWAN technical team has been installing remotely controllable cameras at HamWAN link sites, and one of these was used for the wildfire report.

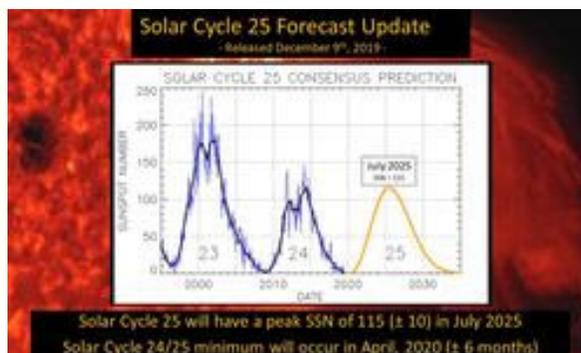
Analysis Determines We Are in Solar Cycle 25

(The ARRL Letter for September 17, 2020)

It's now official. The solar minimum between Solar Cycles 24 and 25 -- the period when the sun is least active -- occurred in December 2019, when the 13-month smoothed sunspot number fell to 1.8. This is according to the Solar Cycle 25 Prediction Panel, co-chaired by the National Oceanic and Atmospheric Administration (NOAA) and the National Aeronautics and Space Administration (NASA). We are now in Solar Cycle 25, with peak sunspot activity expected in 2025, the panel said. The panel expressed high confidence that Solar Cycle 25 will break the trend of weakening solar activity seen over the past four cycles.

"We predict the decline in solar cycle amplitude, seen from Cycles 21 through 24, has come to an end," said Lisa Upton, panel co-chair and solar physicist with Space Systems Research Corporation. "There is no indication we are approaching a Maunder-type minimum in solar activity."

At 11 years, Solar Cycle 24 was of average length and had the fourth-smallest intensity since regular record-keeping began in 1755, with what is considered Solar Cycle 1. It was also the weakest cycle in a century. At solar maximum in



April 2014, sunspots peaked at 114 for the cycle, well below the 179 average.

Solar Cycle 24's progression was unusual. The sun's northern hemisphere led the sunspot cycle, peaking more than 2 years ahead of the southern hemisphere sunspot peak. This resulted in fewer sunspots at solar maximum than if the two hemispheres were in phase.

For the past 8 months, activity on the sun has steadily increased, indicating that we have transitioned to Solar Cycle 25, [forecast](#) to be a fairly weak cycle -- about the same as Solar Cycle 24. Solar Cycle 25 is expected to peak in July 2025, with a predicted 115 sunspots.

"How quickly solar activity rises is an indicator on how strong the solar cycle will be," said Doug Biesecker, the NOAA-NASA panel co-chair and a solar physicist at NOAA's Space Weather Prediction Center ([SWPC](#)). "Although we've seen a steady increase in sunspot activity this year, it is slow."



An artist's rendering of the Space Weather Follow-On L-1 observatory.

"While we are not predicting a particularly active Solar Cycle 25, violent eruptions from the sun can occur at any time," Biesecker added.

Before Solar Cycle 25 peaks in 2024, NOAA is slated to launch a new spacecraft dedicated to operational space weather forecasting. The Space Weather Follow-On L-1 observatory ([SWFO-L1](#)) will be equipped with instruments that sample the solar wind, provide imagery of coronal mass ejections, and monitor other extreme activity from the sun in finer detail than before. NOAA's next Geostationary Operational Environmental Satellite (GOES-U) is also scheduled to launch in 2024. GOES-U will carry three solar monitoring instruments, including the first [compact coronagraph](#), which will help detect

coronal mass ejections. Enhanced observations of the sun from these satellites will help improve space weather forecasting.

NCVEC Holds Its Annual Meeting via Teleconference

(The ARRL Letter for September 10, 2020)

ARRL Volunteer Examiner Coordinator ([VEC](#)) Manager Maria Somma, AB1FM, reports that the National Conference of Volunteer Examiner Coordinators (NCVEC) held its annual meeting via teleconference on August 21. Somma is the NCVEC Vice Chair. NCVEC Chair Larry Pollock, NB5X, presided at the 35th annual meeting. The NCVEC

functions to facilitate communication between the FCC and VECs. Representatives of all 14 FCC-certified VECs took part in the conference, while nine FCC staff members were on hand.



FCC Enforcement Bureau (EB) Special Counsel Laura Smith advised VEC delegates that the FCC has been on lockdown since March and that staff members will be teleworking indefinitely. This includes staff at FCC Headquarters in Washington, DC; the Gettysburg, Pennsylvania location, and the other field offices.

Smith said field engineers aren't going out unless the issue involves safety or if lives are in danger.

FCC Mobility Division ([MD](#)) Deputy Chief Tom Derenge explained that one of his areas of responsibility is processing paperwork for applicants answering "yes" to the basic qualification question (BQQ) that asks if they've ever been convicted of a felony. Derenge said that paperwork from his office goes to the FCC General Counsel and the Investigations and Hearings Division (IHD). Those divisions are responsible for resolution in non-compliant conduct. Paperwork in these instances may take a while to be processed, Derenge said.

Derenge recommended that VECs make it clear to applicants that their address will be public information when the new license is issued. He pointed out that once an address is in the FCC database, it's nearly impossible to be permanently removed.

Dorothy Stifflemire, the Associate Division Chief of the [WTB Technologies Systems and Innovation Division](#), told VECs that new license applicants should create an FCC user account and register their Social Security number (SSN) in the FCC Commission Registration System (CORES) before attending exam sessions. Registrants will be assigned a Federal Registration Number (FRN), which will be used in all license transactions with the FCC.

She explained that auto-registration in CORES at exam sessions using a Social Security number will be going away. In addition, because no mail is being sent due to the COVID-19 pandemic, applicants will not receive their auto-created password and FRN and will not be able to access the Universal Licensing System (ULS), the FCC license records database. Going forward, she said, VECs should make sure all applicants have an FRN before exam day.



Remote administration of amateur radio exam sessions was the hot topic of discussion, Somma said. Since April 1, ARRL VEC, W5YI-VEC, and the Greater Los Angeles Amateur Radio Group VEC (GLAARG) have remotely tested more than 4,000 applicants using videoconferencing and online examinations. Proof-of-concept and procedural information were discussed for the benefit of other VECs that might be

interested in pursuing remote testing. Exam candidates can search for upcoming remote online examination dates on the [HamStudy website](#).

Somma and Assistant ARRL VEC Manager Amanda Grimaldi, N1NHL, represented ARRL at the virtual gathering.

North American CW Sprint is Great Practice for Fall Contesting

(The ARRL Letter for September 10, 2020)

CW Sprints take place twice a year, in September and February; RTTY Sprints are in March and September.

"The CW Sprint can seem intimidating, particularly the first couple of times with its loud signals and high code speed, but there are some secrets to getting the hang of things," said veteran contester and contest manager Ward Silver, NOAX. A unique feature of the CW Sprint is the "QSY rule," which rewards operating agility as much as signal strength. Larger stations can't sit on a single frequency racking up contacts, and more modest stations can make that work in their favor. "Participation in the year's CW contests has been on the upswing, as people are staying home due to the pandemic," Silver added, noting that the September contest offers some solid practice ahead of the various fall contests, especially [ARRL November Sweepstakes](#).

Silver notes that band conditions during the September Sprint are an incentive for operators to put more emphasis on 20 meters than in the February Sprint, because sunset is much later in September. "We will also be just a week from the equinox, a time when conditions are usually pretty good on 20 and 40 meters," he pointed out. Eighty meters will be less noisy than in mid-summer, and if the thunderstorms take a day off, we can expect coast-to-coast activity."

Silver urged Sprint veterans to encourage fellow hams and club members to give it a try. "Teams are fun, too, especially for new contesters and contest club members," he noted. Teams do not have to be associated with formal clubs.

The QSY rule can be daunting for newcomers. In short, a station calling CQ on a new, clear frequency may work one responding station on that frequency and then must move at least 5 kHz before calling CQ again, and at least 1 kHz before initiating another contact, either by calling CQ or by responding to another station. The responding station inherits the initial frequency.

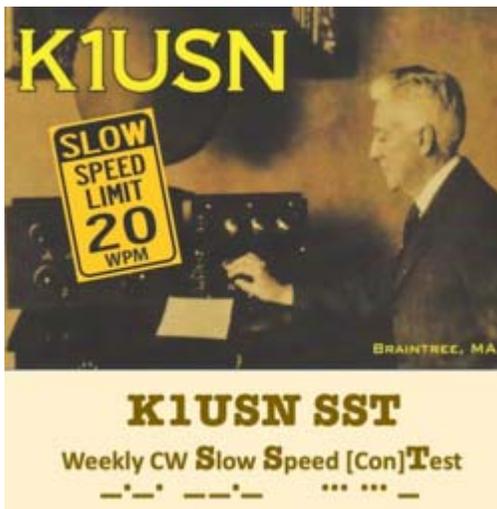


The exchange is both call signs, a consecutive serial number, name, and state/province/DX. Listening stations can tell which station in a contact to call by listening to call sign placement in the exchange, as Silver describes in "[Conversation: Having Fun in the North American CW Sprint](#)," in the September 2 issue of the [ARRL Contest Update](#).

K1USN Radio Club Announces New Weekly Slow-Speed CW Contest

(The ARRL Letter for September 10, 2020)

The K1USN Radio Club in Massachusetts is launching a new weekly, hour-long, slow-speed contest, the [K1USN SST](#). The inaugural session will be on Monday, September 14, from 0000 - 0100 UTC (Sunday, September 13, in North American time zones). K1USN trustee Pi Pugh, K1RV, said the decision to embark on sponsorship of a new operating event involved surveying some 2,000 radio amateurs to gauge their enthusiasm for such an event. Pugh said the club worked with a group of [CWops](#) members within the club, with the blessing of the CWops CW Academy Advisor Group. CWops is not involved in sponsoring the K1USN SST.



The 800 who responded indicated an overwhelming need for some sort of slow-speed activity as a follow-up to CW Academy, Pugh told ARRL. "It was a lot of work, but we hope this will prove to be a valuable tool within the CW community," Pugh said.

Although predicated on the desires of the CW Academy community, Pugh stressed that the weekly activity will be open to all looking to improve their CW skills. It can also provide a more comfortable entry point for those just getting started in CW contesting.

"The weekly 20 WPM or slower SSTs can build confidence to find open frequencies and begin calling CQ," Pugh suggested. Participants are advised to be patient, supportive, and willing to slow down as necessary.

Suggested frequencies are 3.532 - 3.539 on 80 meters; 7.032 - 7.039 MHz on 40 meters, and 14.032 - 14.039 MHz on 20 meters. Stations exchange name and state/province/country.

NEW HF OPERATORS -- THINGS TO DO

(The ARRL Contest Update for September 2, 2020)

The fall contest season is nearly upon us! Over the next few weeks there are smaller-contest opportunities to try modes that might be new to you, or contest formats that are enjoyable. For those that enjoy modern digital contests, RTTY could be very appealing. Compared to today's FT4/FT8, contacts can proceed at a faster rate, but signals in general have to be stronger, and errors can occur in the decoding, since there's no inherent error correction. If you're already set up for FT4/FT8, you're probably also set up for RTTY. Check out RTTYContesting.com's Getting Started on RTTY page, and for even more information, review past presentations on Contest University's website. You'll probably also want to study up on the use of a logging program, such as N1MM Logger+, in conjunction with a RTTY program.

WORD TO THE WISE

(The ARRL Contest Update for September 2, and 16, 2020)

Gore

As it relates to high altitude balloon competitions: "A triangular or tapering piece of material used in making a garment, sail, or umbrella." Or a balloon.

Bone Pile

For hams, it's the (sometimes large) accumulated collection of tower sections, complete and partial antennas, cable, and associated materials that are just waiting to be used again.

(bonus!) Waffle House Index

From Wikipedia: "An informal [metric](#) named after the [Waffle House](#) restaurant chain and is used by the [Federal Emergency Management Agency](#) (FEMA) to determine the effect of a storm and the likely scale of assistance required for disaster recovery."

OPERATING TIP

(The ARRL Contest Update for September 2, and 16, 2020)

FT4/FT8 Operating Tips

It's a little late for this year's contest, as the World Wide Digi DX Contest was last weekend, but the FT4/FT8 [Operating Tips](#) are relevant for any contest employing these modes, especially the section on minimizing NILs.

Using DSP Filter / Noise Reduction to Copy A Potential Multiplier

[N4HNNH's YouTube video demonstrates how to pull out a DX contest station](#) using a radio's DSP filtering / noise reduction to extract a station from noise. Learning how to do this quickly can put more multipliers in your log under trying conditions. The radio controls he adjusts to recover the signal may be named differently, or differ in implementation for your radio.

CONVERSATION

(The ARRL Contest Update for September 2, 2020)

Having Fun in the North American CW Sprint

By Ward Silver, NOAX

NA CW Sprint - 20, 40, and 80 meters - 0000-0359 UTC on September 13 (Saturday evening in NA)

Exchange is **both** call signs, serial number of the contact, your name, and state/province/country.

There have been some very good CW contests this summer, beginning with the multi-mode IARU HF Championship in July and August brings the *NCJ*-sponsored NA QSO Party. Every week there are three one-hour [CWops-sponsored CWT sessions](#) on Wednesday and a 30-minute [NS Sprint practice session](#) on Thursday night (in North America). Coming up on September 5 is the [CW Open](#) -- another CW Ops sponsored contest -- with three 4-hour sessions. But wait, there's more!

If you haven't yet tried the NA CW Sprint, it's a natural neighbor of the NAQP CW and CWT contests. (Rules and schedules are found [here](#).) CW Sprint can seem intimidating, particularly the first couple of times with its loud signals and high code speed, but there are some "secrets" to getting the hang of things. Once you know them, you'll have a lot more fun!

First, CW Sprint has a special and unique "QSY rule" that rewards agility as much as signal strength. No sitting on one frequency! Medium guns and little pistols can make that work in their favor. Here's how it works:

- Call CQ > make a QSO > QSY 5 kHz before calling CQ again or 1 kHz before answering another CQ. The station you worked "inherits" the frequency and can call CQ or work a calling station.
- Answer a CQ > make a QSO > the frequency is yours! After your QSO is done, you can immediately work a station calling you or call CQ on that frequency. Once you complete a second QSO on the frequency, you have to QSY 5 kHz before calling CQ or 1 kHz to work another station.
- Hear a station inheriting the frequency > call them and make a QSO > the frequency is yours as in the preceding rule.

What that means is there are a LOT of stations tuning for CQ-ers: Find a frequency, call CQ, make a QSO, then move. Calling CQ at a comfortable speed is less stressful than full-speed operating, send "QRS" if needed. Set your A and B VFOs 5 to 10 kHz apart and jump between them or use alternate bands. After you work a CQing station, remember that other stations will try to call you afterwards, so be prepared to receive a call sign. If you don't get called, start your own CQ.

Since most activity migrates from 20 to 40 to 80 meters, 40 meters is a little less busy at the beginning and a good place to get into the rhythm, particularly if you are uncomfortable with the hurly-burly at the start. 20 meters can produce QSOs late in the contest, too. You can work stations on all three bands, so stations will be active on all three bands.

You can also tune around, responding to CQs or calling stations inheriting a frequency. But how do you know which station to call? Since all exchanges must include BOTH call signs, the secret is knowing WHERE to place your call sign in the exchange. This single bit of information makes CW Sprint a whole lot easier. If you are going to leave the frequency after the QSO, send your call sign at the beginning of the exchange, like this:

Step 1 - NØAX: CQ NA NØAX NØAX

After I make a QSO, I must QSY

Step 2 - N5KO: N5KO

Step 3 - NØAX: N5KO NØAX 42 WARD MO

My call goes here ^ ^ ^ ^

Step 4 - N5KO: NØAX 73 TREY CA N5KO

Trey's call goes here ^ ^ ^ ^

Step 5 - NØAX: R or TU

Trey inherits the frequency

If I hear a station ending an exchange with a call sign as in Step 4, I know that station will inherit the frequency and I can send my call to work them. If I hear an exchange end without a call sign as in Step 3, I know the QSO is only half over. I can wait and call the responding station or I can go tune for another station. (It can help at first to have your logging software programmed with one CW message to send Step 3 and another to send Step 4. You can get fancy with the macros later.)

Two other "Sprint secrets" are helpful:

- When calling a station, send your call only once and promptly -- especially at the beginning of the contest. It is not for nothing that what comes after Step 5 is called a "jump ball!" If you find yourself not getting that ball, try CQing above most of the action.
- Acknowledge clearly that you have received an exchange by sending R or TU (just X will do) so everyone knows when Step 5 is complete and can call. Don't call before the acknowledgement.

Would you like to listen to examples? N6TR, a regular top finisher, has prepared a "[Sprint Survival Page](#)." Look for the section "CW Sprint QSO Example." Tree explains a number of ways to have a good time in the CW Sprint. Jim N3BB also wrote a February 2019 *QST* article about NA Sprint.

Why not jump in there and try? As the Great Gretsky says, "100 percent of the shots you don't take don't go in!" Get your feet wet with a CWT and NS Sprint session during the week and then give it a go on Saturday - we'll be glad to see you, fast or slow.

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.

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



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

OARC Meetings and Events 2020 - 2021

October 7, Wednesday	Virtual Meeting, 7:00pm YouTube Live! and Zoom
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	Meeting, 7:30pm at the Beardall Center
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** _____