RCA Amateur Radio Club
Indianapolis, IN

www.w9rca.org

NOVEMBER 2020 MONTHLY NEWSLETTER

A VIRTUAL ZOOM MEETING WILL BE SCHEDULED FOR
TUESDAY NOVEMBER 10th AT 7:00 EST
INVITATIONS TO JOIN WILL BE EMAILED BY NOVEMBER 9th

RCA ARC NEWS

THE NOVEMBER 10 MEETING – For the November 10th meeting we shall again use a Zoom virtual meeting. The meeting will start at 7:00 pm and is being hosted on the Indiana ARRL Section Zoom courtesy of the Indiana SCM Jimmy Merry, KC9RPX.

You will receive an email message with a link, meeting ID and password by November 9. If you can access your emails by your smart phone, then you can join using it. If you join using your desktop or laptop and do not have a video camera, then it will join you with audio only assuming you have some type of microphone connected to the computer. If not, then you will be logged as listen only. You can also use your phone and call in using the numbers listed in the email for the session.

OCTOBER MEETING SUMMARY – Thanks to all those who participated in the October Zoom meeting. The meeting was a bit of a show and tell… Dick, W9ZB, showed off his mini-spectrum analyzer. Harold, KE6TI, described his latest home brew project a QRP 80m rig he's presently working on. The various attributes of the present digital modes compared to analog modes were discussed. In person meetings will not resume until at least January and that is questionable at this point.

AMATEUR RADIO LICENSE TEST SESSION

Time: Saturday, November 14, 2020, Starting at 12:00 pm **by appointment only**.
(Registration, FRN, form NCVEC 605 filled out and a mask. All will be required)
Location: Salvation Army EDS Training Facility, 4020 Georgetown Rd
Indianapolis, IN 46254-2407
Contact: **Jim Rinehart, k9ru@arrl.net, 317 721-1458**

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

Nov 7-9	ARRL SS CW contest
Nov 7	Hoosier Hills Hamfset **http://www.w9qyq.org/hamfest/**
Nov 14-15	FT Wayne Hamfest & Computer Expo - Cancelled
Nov 21-23	ARRL SS Phone contest
Nov 28	Wabash Valley ARA Turkey Fest https://www.w9uuu.org/

Dec 4-6 ARRL 160M contest
Dec 12-13 ARRL 10M contest

FIELD DAY RESULTS ARE PUBLISHED IN THE DECEMBER 2020 ISSUE OF QST

December QST will be arriving in your mailbox this week. I want to congratulate all locations across Indiana that participated in Field Day 2020. Pages 69 - 76.

An outstanding accomplishment by Indy United ARC. Indy United not only won Class 3A this year but also had the highest score across North America in 2020. An outstanding achievement. Congratulations!

3A

Indy United ARC W9SU (+W9RCA)

4,841 QSOs

32 Participants

17,330 Total Points

INDIANA Section

For the complete 2020 Field Day results article, see the December edition of QST view here:

https://contests.arrl.org/ContestResults/2020/Field-Day-2020-FinalQSTResults.pdf

View the line score:

https://contests.arrl.org/ContestResults/2020/Field-Day-2020-FinalLineScores.pdf

Top Ten Scores

Call Sign	Score	Class	Section
W9SU	17,330	3A	IN
W4IY	17,110	8A	VA
NR4M	16,018	3A	VA
KØRF	14,054	2D	CO
K5CM	13,442	2A	OK
W1NVT	12,784	2A	VT
K1B	12,220	4E	NH
AA3B	11,902	1E	EPA
NV9L	11,392	2E	IL
W6YX	11,246	2F	SCV

--ARRL Indiana Section Section Manager, Jimmy L Merry Jr, KC9RPX kc9rpx@arrl.org

ARRL URGES MEMBERS TO JOIN IN STRONGLY OPPOSING FCC'S APPLICATION FEES PROPOSAL

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 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).

Under the proposal, amateur radio licensees would pay a $50 fee for each amateur radio application for new licenses, license renewals, upgrades to existing licenses, and vanity call sign requests. The FCC also has proposed a $50 fee to obtain a printed copy of a license. Excluded are applications for administrative updates, such as changes of address, and annual regulatory fees. Amateur Service licensees have been exempt from application fees for several years.

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. The 2018 statute excludes the Amateur Service from annual regulatory fees, but not from application fees. The FCC proposal affects all FCC services and does not single out amateur radio.

ARRL is encouraging members to file comments that stress amateur radio's contributions to the country and communities. ARRL's **Guide to Filing Comments** includes "talking points" that may be helpful in preparing comments. These stress amateur radio's role in volunteering communication support during disasters and emergencies, and inspiring students to pursue education and careers in engineering, radio technology, and communications.

As the FCC explained in its *NPRM*, Congress, through the Ray Baum's Act, is compelling regulatory agencies such as the FCC to recover from applicants the costs involved in filing and handling applications.

In its *NPRM* the FCC encouraged licensees to update their own information online without charge. Many, if not most, Amateur Service applications may be handled via the largely automated Universal License Service (ULS). The Ray Baum's Act does not exempt filing fees in the Amateur Radio Service, and the FCC stopped assessing fees for vanity call signs several years ago. --ARRL

RADIO AMATEURS IN WESTERN PENNSYLVANIA TO COMMEMORATE KDKA BROADCASTING CENTENNIAL

Pittsburgh radio station KDKA will celebrate 100 years of radio broadcasting in November, and Pennsylvania radio amateurs will honor that milestone in a multi-station special event. KDKA dates its broadcasting history to the airing of the Harding-Cox presidential results on November 2, 1920, and the station has been on the air ever since. The special event, which will involve the operation of four stations, will run through the entire month of November.

"More than 100 years ago, many experimenters started delving into a new technology known as wireless, or radio," said Bob Bastone, WC3O, Radio Officer for the Skyview Radio Society in New Kensington, Pennsylvania. Bastone explained that many of those early pioneers were radio amateurs. "One hundred plus years later, many amateur radio operators are still contributing to wireless technology, while also serving their communities and enhancing international goodwill. Congratulations to KDKA Radio, also known in the early years as amateur radio stations 8XK, 8ZZ, and W8XK."

Special event stations K3K, K3D, K3A, and W8XK will set up and operate at several locations in Pennsylvania during November. Stations will determine their own modes and schedules. Visit the W8XK profile on QRZ.com for information on certificates and QSLs.

What became KDKA initially began broadcasting in 1916 as amateur radio station 8XK, licensed by the Federal Radio Commission (FRC), the predecessor to the FCC. At the time, amateurs

were not prohibited from broadcasting. The small station was operated by Dr. Frank Conrad, who was Westinghouse Electric and Manufacturing Company assistant chief engineer. The transmitter ran 75 W, and the broadcasts gained some popularity in Pittsburgh.

During World War I, amateur radio operation was suspended due to national security concerns. After the war, 8XK was reorganized as a commercial AM radio station, KDKA. The first transmissions of KDKA originated in a makeshift studio on the roof of Westinghouse K Building in East Pittsburgh.

Ham radio clubs participating in the centennial special event include the North Hills Amateur Radio Club in Pittsburgh — which is planning to operate from KDKA's 1930s' transmitter site, where an original tower pier still stands. A 1920s' transmitter site, in Forest Hills, will serve as another operating location. In addition to the North Hills ARC and Skyview Radio Society, other clubs taking part include the Panther Amateur Radio Club, Steel City Amateur Radio Club, the Wireless Association of South Hills, the Butler County Amateur Radio Public Service Group, and the Washington Amateur Communications Radio Club.

Individual radio amateurs will operate from their own stations, and a small group of hams is planning a portable operation from South Park in suburban Pittsburgh.

Stations will invite the public to visit, while observing the required social distancing protocols.

"We amateur radio operators look forward to contacting thousands of other hams around the world to celebrate this huge milestone in the commercial broadcasting industry," said Bastone. Contact him for more information. — *Thanks to ARRL Public Information Officer and Allegheny County ARES Emergency Coordinator Bob Mente, NU3Q, for providing the information for this story.*

NEW ZEALAND RADIO AMATEURS LOSE ACCESS TO 60 METERS

Radio amateurs in New Zealand no longer have access to 60 meters, effective on October 24. Use of the band by radio amateurs in New Zealand is provisional, allowing hams there to use two frequencies in the band — 5353.0 kHz and 5362.0 kHz — as part of a "trial."

New Zealand Association of Radio Transmitters (NZART), the national amateur radio organization, said the New Zealand Defence Force (NZDF) advised the organization that it was not willing to approve another renewal of the 5 MHz trial allocation. NZART has indicated that it will continue to work with telecoms regulator RSM to see if other ways may be available to provide access to 5 MHz frequencies by New Zealand amateurs.

As in the US, the federal government and military are primary on the 5 MHz band. According to NZART, the decision was not made lightly by NZDF, but access to that part of the HF spectrum is very important to support NZDF's new platforms, tactical radio equipment, and updated HF site equipment in the delivery chain.

"Additionally, access to HF is a key part of their communications plans both in New Zealand and to support our forces overseas," NZART explained. "While this is a disappointing outcome, NZART would like to thank NZDF for allowing us to take part in the trial, and we look forward to working with them in the future on matters of common interest." — *Thanks to Paul Gaskell, G4MWO/*The 5 MHz Newsletter

GUIDELINES ISSUED FOR ARRL DX CONTEST MULTIOPERATOR STATIONS

ARRL has issued guidelines for multioperator stations competing in the ARRL DX Contest (CW and phone). With the global pandemic continuing to impose restrictions on social gatherings, multioperator contest stations may not be able to operate normally while still adhering to local social distancing guidelines. ARRL has taken the decision to make temporary accommodations for a multioperator station to participate as a team in these popular ARRL contests, under the following guidelines:

•Team members may operate from their home stations in conjunction with the multi-op station.

•Their home station must be located within a radius of 100 kilometers (62 miles) of the multiop contest station.

•Their home station must be located within the same DXCC entity as the multiop contest station. In the case of US and Canadian stations, the team member station must be in the same US state or Canadian province.

•All team member stations must use the same call sign and exchange as the multiop contest station for the duration of the contest.

•Logging software must be networked, so that all team member stations are using a common log.

•Individual operators may not work the multiop contest station or other team member stations using a personal call sign or other call sign.

•All multioperator rules, such as band changes and number of signals on a band, still apply. See the full contest rules for details.

•The team must determine and control band assignments, ensuring that no more than one team station is transmitting on any given band at a time.

The multiop contest station may be staffed at less than full capacity while maintaining safe practices, so operating with a combination of team members at home stations and team members at the contest station is permissible.

The CW contest takes place on the third full weekend in February (February 20 – 21, 2021). The phone contest takes place on the first full weekend in March (March 6 – 7, 2021). --ARRL

FCC HEADQUARTERS RELOCATES

FCC Headquarters has moved. The new address is 45 L St. NE, Washington, DC 20554. The change is effective immediately. The FCC announced plans to move last spring, but the transition was delayed by the COVID-19 pandemic.

The FCC, like many federal agencies, has its own zip code, so there will be no disruption in mail delivery sent by USPS to the former address. The FCC still prohibits the delivery of hand-carried documents, and all COVID-19 restrictions or instructions regarding access to FCC facilities remain in place at the new location.

“The FCC continues to balance its efforts to be accessible to the public with the need for heightened security and health and safety measures and encourages the use of the Commission’s Electronic Comment Filing System (ECFS) to facilitate the filing of applications and other documents when possible,” the FCC said in an October 15 *Public Notice*.

Due to the pandemic, the move was accomplished by professional movers without the presence

of any employees, all of whom had been working from home. An attempt was made during the summer to let employees back into headquarters for a day to pack up their offices and remove personal belongings, but that plan had to be scrapped after several employees tested positive for COVID-19.

Most FCC staff continue to work from home and are not expected to be physically present in their new offices before next June.

In anticipation of the planned move, the FCC last spring also announced the adoption of a new FCC seal. The redesign is the product of an agency-wide contest that solicited proposals from employees and contractors. The revised design incorporates several elements: communications technologies; four stars on the outer seal border, drawing from the legacy of the predecessor Federal Radio Commission (FRC) seal, retaining the three-wire dipole supported by two towers; 18 stars on the shield, recognizing the current number of bureaus and offices; and the eagle and shield, identifying the FCC as a federal government agency.

Official use of the new seal was to begin following completion of the FCC's move from The Portals to its new location on L Street NE. --ARRL

FCC ORDERS AMATEUR ACCESS TO 3.5 GHZ BAND TO "SUNSET"

Despite vigorous and continuing opposition from ARRL and others, the FCC has ordered the "sunsetting" of the 3.3 – 3.5-GHz amateur radio secondary spectrum allocation, effective on November 9. The decision allows current amateur activity on the band to continue, "grandfathering" the amateur operations subject to a later decision. The FCC proposed two deadlines for amateur operations to cease on the band. The first would apply to the 3.4 – 3.5 GHz segment, the second to 3.3 – 3.4 GHz. The FCC will establish the dates once it reviews additional comments.

"We adopt our proposal from the *Notice of Proposed Rulemaking* to remove the amateur allocation from the 3.3 – 3.5 GHz band," the FCC said in its *Report and Order* (*R&O*) and *Further Notice of Proposed Rulemaking* in WT Docket No. 19-348, adopted on September 30 and published October 9 in *The Federal Register*, *R&O*. "[W]e adopt changes to our rules today that provide for the sunset of the secondary amateur allocation in the band, but allow continued use of the band for amateur operations, pending resolution of the issues raised in the *Further Notice*."

The September 30 *R&O* followed a 2019 FCC *Notice of Proposed Rulemaking* (*NPRM*) in which the FCC proposed re-allocating 3.45 – 3.55 GHz for "flexible-use service" and auctioning the desirable "mid-band" spectrum (generally defined as between 1 GHz and 6 GHz) to 5G providers. These and other recent spectrum-repurposing actions stem from the MOBILE NOW Act, enacted in 2018, in which Congress directed the Commission to make additional spectrum available to auction for mobile and fixed wireless broadband. The FCC action is consistent with worldwide allocations adopted by the ITU for these frequencies.

In the run-up to the Commission's decision, ARRL met with the FCC's professional staff to explain its concerns and to answer questions. Subsequently, ARRL met with the wireless advisors to the FCC Chairman and two Commissioners. In those meetings, ARRL reiterated that continued secondary status for amateurs will not impair or devalue use of this spectrum by the primary licensees intending to provide 5G or other service. ARRL noted amateur radio's long history of successful coexistence with primary users of the 9-centimeter band, sharing this spectrum with the federal government users and secondary, non-federal occupants.

ARRL pointed out that vital links in amateur television and amateur radio high-speed mesh

networks using the band have been especially valuable during such emergency situations as the wildfires currently raging on the west coast. Deleting the amateur secondary allocation will result in lost opportunities for experimentation and public service with no public interest benefit to make up for that.

ARRL argued that deleting the secondary allocation would waste the scarce spectrum resource, particularly in areas where commercial services often do not construct full facilities due to small populations. The FCC action means that amateur radio will lose access to the 3.5-GHz secondary allocation even where commercial operations do not exist. ARRL told the Commission that it should not intentionally allow this spectrum to be vacant and unused, wasting the public resource, when amateurs can use some portion of it in many geographic areas with no detriment to any other licensee, just as it has in the past. ARRL argues that amateur operations should be permitted until and unless an actual potential for interference exists.

Deletion of the 3.3 – 3.5 GHz secondary amateur allocation will become effective on November 9, but amateur radio operation as of that date may continue while the FCC finalizes rules to license spectrum in the 3.45 – 3.55 GHz band and establishes deadlines for amateur operations to cease. The FCC proposed allowing amateur operation in the 3.3 – 3.4 GHz portion of the band to continue "pending further decisions about the future of this portion of the spectrum," the timing for which is unknown. The Commission proposed to mandate that operations cease in the 3.4 – 3.5 GHz portion when commercial licensing commences for the new 3.45 – 3.55 GHz "5G" band, which is predicted to begin in the first half of 2022.

"[W]e seek comment on whether it is in the public interest to sunset amateur use in the 3.3 – 3.55 GHz band in two separate phases, e.g., first above 3.4 GHz, which is the focus of [the *R&O*] and later in that portion of the band below 3.4 GHz," the FCC said.

ARRL expressed gratitude to the many members and organizations that joined ARRL in challenging the FCC throughout this nearly year-long proceeding. They included multiple radio clubs, weak signal enthusiasts, moonbounce participants, and the Amateur Radio Emergency Data Network (AREDN), the Amateur Television Network (ATN), AMSAT, and Open Research Institute (ORI).

ARRL will continue its efforts to preserve secondary amateur radio access to 3.3 – 3.5 GHz. Members are invited to share comments by visiting www.arrl.org/3-GHz-Band.

"We recognize that any loss of our privileges will most directly impact radio amateurs who use the frequencies to operate and innovate," said ARRL President Rick Roderick, K5UR. "Such instances only embolden ARRL's role to protect and advocate for the Amateur Radio Service and Amateur Satellite Service. There will be continued threats to our spectrum. So I urge all amateurs, now more than ever, to strengthen our hold by being ceaseless in our public service, experimenting, and discovery throughout the radio spectrum." --ARRL

BRITISH COLUMBIA RADIO AMATEUR HEARS MARS RECONNAISSANCE ORBITER

According to a 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.”

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. Thatdiscovery delighted space scientists.

NATIONWIDE RED CROSS EMERGENCY COMMUNICATIONS DRILL SET FOR NOVEMBER 14

The nationwide American Red Cross Emergency Communications Fall Drill, a joint exercise with ARRL Amateur Radio Emergency Service (ARES®) groups, is set to take place on November 14. This exercise evolved from the highly successful spring drill that attracted hundreds of participants from some 40 states and Puerto Rico.

The fall drill will be a Winlink-specific event with these goals: (1) pass traditional American Red Cross (ARC) forms from as many states and as many radio amateurs as possible to one of six division clearinghouses, and (2), bring as many radio operators as possible up to a "basic" level of Winlink proficiency. A series of Winlink Workshops is held each Thursday at 0100 UTC on Zoom.

Winlink Proficiency Goals have been drafted, 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 may find these resources helpful.

More than 300 radio amateurs have signed up for the event, and some 100 volunteers showed up for a pre-drill briefing call earlier this month. Another briefing call will be held in early November.

This event is open to *all* radio amateurs.

For more information, contact Mike Walters, W8ZY, with ARES-related questions, or Wayne Robertson, K4WK, with Red Cross-related topics. -- Thanks to *The ARES Letter*

TECHNICAL

FLDIGI COULD BE A TOOL IN THE NOVEMBER FREQUENCY MEASURING TEST

A new frequency-measuring test mode added to the digital communication program *Fldigi* -- developed by Dave Freese, W1HKJ -- makes the program useful for the Frequency Measuring Test (FMT) on November 13. The new test mode replaces frequency analysis mode, making *Fldigi* useful for FMT participants. *Fldigi* can still measure an unknown frequency to three decimal places (i.e., to 1 mHz), but it can also use a reference frequency to correct the unknown calculation for inaccuracies of the receiver. (An article by Bob Howard, VE3YX, details the use of *Fldigi* in the FMT.)

Very little equipment is necessary to participate in the FMT. A software-defined radio (SDR) accessed by the internet will work; check out the GPS-stabilized SDRs Kiwi SDRs. A hardware cable or a virtual cable can connect SDR audio to the *Fldigi* input. Calibration will be required.

While older rigs can be used, *Fldigi* works best with a rig that can be controlled by a serial or USB connection from the PC to set the VFO with 1 Hz resolution. Some rigs display frequency to 1 Hz. Others only display to 10 Hz but can be set by the PC to 1 Hz. Most rigs dating from about 1995 and later will work well. *Fldigi* needs to know the frequency that the radio *thinks* it is tuned to or the frequency that you think it is tuned to.

The new FMT modem works best with a reference signal injected along with the FMT transmitted signal -- the FMT's unknown signal. The reference signal must have some accurately known frequency that can be set near the unknown frequency (within 1 kHz or so). The reference can be a signal generator stabilized by a GPS Disciplined Oscillator (GPSDO) that can easily be set to output a useful frequency. Using *Fldigi's* new FMT modem without a reference can still provide good results, but requires careful calibration.

ACTIVE LF OPERATOR OFFERS ADVICE ON NEW FST4 AND FST4W PROTOCOLS

The recent beta release *WSJT-X* version 2.3.0-rc1 (release candidate 1) digital software suite includes two new protocols, FST4 and FST4W. FST4 is for two-way contacts, while FST4W is for "quasi-beacon" style transmissions. Both modes offer a range of options for T/R-sequence lengths and threshold decoding sensitivities extending well into the -40 dB range, developers said, as well as a wide variety of parameters that can be tweaked, such as transmission time, bandwidth, and so forth. On the *WSJT-X* development reflector, Paul Kelley, N1BUG, discussed whether the wide variety of options are really necessary or a stumbling block to two uncoordinated stations attempting a contact. Kelley said he understands the concern regarding the transmission times, but, as a "very active" 2200-meter operator, he advises that the new protocols were developed with the LF and MF bands in mind.

"LF and MF are not HF," Kelley said. "There is no one-size-fits-all for these bands. On HF, you may be able to work the whole world with one relatively fast speed. It is not so down here."

Kelley pointed out that MF operators are limited to 5 W EIRP on 630 meters and a mere 1 W EIRP on 2200 meters. Working "real DX" requires some specialized modes, plus determination and patience.

"One would probably not want to use anything slower than 120 seconds for QSOs with well-equipped stations at 1,000 kilometers (620 miles) distance," he said. "It would be very boring and waste a lot of time. But for some DX paths on 2200 meters, only 1,800- or 900-second periods would offer any hope for success. It's not so boring when you are about to set a new world record or make a personal best DX QSO. We need this flexibility."

Kelley predicts that some new conventions will emerge over time -- for example, 900- and 1,800-second periods might not see much use on 630 meters, while most of the faster choices probably will. "On 2200 meters, I think all four FST4W speeds will be quite useful," he said. "It may be that the fastest FST4 options won't see a lot of use on 2200 meters, but it may be too early to know for sure."

WSJT-X DEVELOPER EXPRESSES PUZZLEMENT OVER FT8 CONTEST USE

The ARRL reports WSJT-X co-developer Joe Taylor, K1JT, recently expressed puzzlement over the use of FT8 in contests -- rather than FT4, which was designed for contesting

Reporting on what Joe K1JT wrote in the Mt. Airy VHF Society newsletter the ARRL Letter story says: "I fail to understand why anyone who uses FT8 in a contest would fail to use FT4 for much of the time," Taylor said. "FT4 is about 3 dB less sensitive than FT8, but it's twice as fast."

Taylor offered the comment in the Mt. Airy VHF Society's October 2020 Cheese Bits, regarding the September ARRL VHF Contest. Taylor said a large fraction of stations that are worked with FT8 are much more than 3 dB above the FT4 decoding threshold.

"With FT4, you can still work anyone that can be worked with CW, and near the CW threshold, you'll do it faster using FT4," he said. "And with FT4, you can work stations that are far weaker (by ~20 dB) than what's necessary for SSB. When I did work other stations with FT4, I did it by transmitting the FT8 message 'K1JT FT4 318.'" Taylor said he'd then move to 50.318 MHz FT4, and several contesters followed him there. "Many more would have made it much more fruitful," he said.

"For speed, flexibility, and ease of running the bands, yes, you should use SSB and CW when there are stations to work," Taylor said in summary. "When you run out of those, use FT8 and especially FT4."

Taylor also remarked, "In my 80th year, I can no longer call on my past stamina for contesting."

Read the full text of what Joe K1JT wrote on page 11 of the Mt. Airy VHF Society newsletter at this link

SHORTS

ARRL Logbook of The World Harmonizes Designation of FST4 Protocol The Logbook of The World (LoTW) Committee worked with *WSJT-X* developer Joe Taylor, K1JT, to harmonize the designation of FST4 among *WSJT-X*, the ADIF standard, and LoTW. At present, FST4 is only supported in a recently released beta version of *WSJT-X*. The committee's action was to avoid the sort of confusion that cropped up among LoTW users logging contacts in FT4 when that protocol was first included in *WSJT-X*. In the case of FST4, the committee acted proactively to help users avoid difficulties and obtain the maximum number of contact matches. The ADIF standard has been updated to support FST4 as a sub-mode of MFSK, and configuration file CONFIG.xml for LoTW has been updated to version 11.13, accordingly, to support FST4. Users will be offered the update when they run TQSL.

Again, FST4 is only available in *WSJT-X*. An ADIF file emitted by *WSJT-X* should properly identify FST4, so that contacts will upload smoothly into LoTW, *provided* the CONFIG file has been updated. — *Thanks to Greg Widin, K0GW*

Robert Bankston, KE4AL, is New AMSAT President 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.

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, N0JY, 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

ARRL National Convention and Orlando HamCation® Postponed to February 2022 - ARRL and the Orlando Amateur Radio Club (OARC) have announced that the ARRL National Convention and Orlando HamCation® -- which was to host the convention -- have been postponed until February 10 - 13, 2022. The convention had been set for next February.

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 theeducational 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.

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

THANKS FOR READING !

THE RCA ARC MONTHLY NEWSLETTER IS COMPILED AND EDITED BY JIM RINEHART, K9RU AND JIM KEETH, AF9A. ALL MATERIAL CONTAINED HEREIN IS OBTAINED FROM THE SOURCES CREDITED AND EDITED FOR THIS NEWSLETTER. EMAIL TO mail to:WebMaster@w9rca.org. Check our web site at http://www.w9rca.org