



# RCA Amateur Radio Club

## Indianapolis, IN

[www.w9rca.org](http://www.w9rca.org)



JULY 2020

MONTHLY NEWSLETTER

A VIRTUAL ZOOM MEETING WILL BE SCHEDULED FOR  
TUESDAY JULY 14 AT 7:00 EDT  
INVITATIONS TO JOIN WILL BE EMAILED BY JULY 13

### RCA ARC NEWS

**JULY 14 MEETING** – For the July 14th meeting we shall again use a Zoom virtual meeting. The meeting will start at 7PM 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 July 13th. 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.

**JUNE MEETING SUMMARY** – Thanks to all those who participated in the June Zoom meeting. Jim, K9RU, reported on the latest regarding Field Day with the Indy United FD Club. Several changes and restrictions will be in place. The June 13<sup>th</sup> test session is still on with restrictions. The possibility of restarting in-person Club meetings was discussed. The Knights of Columbus is open and we could go there. There was not a lot of enthusiasm to do in-person meetings yet for awhile.

**FIELD DAY 2020 IS HISTORY** -- This year the RCA ARC was part of the Indy United Club operations at the Victory Conservation Club. Jim Keeth AF9A, John Garino KF9UH, Dick Davis W9ZB, Jim Rinehart K9RU and Jack Ham participated in the effort.

W9RCA call was used for the GOTA station with W9SU used for the main stations. The setup was 3A with two stations on CW and one phone. Also, satellite and VHF bonus stations. K9RU, AF9A, W9ZB, KF9UH and W9CSX operated the VHF station on 6 meter FT8.

The setup was done Friday afternoon so we avoided all the rain Saturday and Sunday. Rain ended by 2 pm Sunday which was great for the tear down.

Conditions were good and we set a new record score for the group. We'll see how we did nationally when results are published in QST in November. -- Jim K9RU

### AMATEUR RADIO LICENSE TEST SESSION

**Time:** Saturday, July 11, 2020, Starting at 12:00 pm with appointment  
(Registration, FRN, form NCV EC 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](mailto:k9ru@arrl.net), 317 721-1458

The next test session will be August 8th

### HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

July 10-11 Indianapolis Hamfest **CANCELED**

July 11 Auburn Hamfest - Free admission - 9AM to 3PM <https://w9ou.org/>

July 9-10, 2021 Indianapolis Hamfest

For more information: <http://www.indyhams.org/events>

## QSO TODAY VIRTUAL HAM EXPO ANNOUNCES FULL LINEUP OF SPEAKERS

The first QSO *Today* Virtual Ham Expo Saturday and Sunday, August 8 – 9, has confirmed what it's calling "a packed lineup of over 70 great speakers" for the ARRL-sanctioned event. Attendance is free and registration is open.

Presentations will cover a range of topics, with two tracks focused on providing hands-on, practical advice for those just getting started in amateur radio. Steve Johnston, WD8DAS, will demonstrate basic soldering techniques for repairing equipment and building projects. Marcel Stieber, AI6MS, will offer an overview of common battery types, discussing the pros and cons of each — including battery chemistry, common uses and misuses, and everyday application tips.

For experienced operators, topics will cover new techniques, equipment upgrading, 3D printing, and more. Glenn Johnson, WØGJ, will attempt to answer the question, "Is 3 dB Worth a Divorce?" and cover a wide range of antenna topics. Jim Veatch, WA2EUJ, will explain how to build a QRP radio. In his presentation, "The Slot Antenna — Undiscovered Country for Most Hams," John Portune, W6NBC, will demonstrate how a satellite TV dish can be "slotted" to make an effective outdoor 2-meter or UHF antenna for use in antenna-restricted neighborhoods.

Prominent youth educator Carole Perry, WB2MGP, will moderate a lineup featuring amateur radio's future leaders. Audrey McElroy, KM4BUN, will speak on, "Getting Girls Involved in STEM, Specifically Amateur Radio!" while hot-air ballooning will be the focus of a talk by Jack McElroy, KM4ZIA, "Highly Flying Kids with HAB."

QSO *Today's* Eric Guth, 4Z1UG, says that one challenge to any ham radio convention, whether in person or virtual, is keeping the content of presentations from becoming overly complicated and overwhelming. "For our inaugural virtual Expo, we've made sure that there are great speakers for both beginners and experienced hams," Guth said. "We've asked all of our speakers to be laser focused on their topics while providing hands-on, practical advice." Each presentation will wrap up with a live question-and-answer session.

For more information or to register, visit the QSO *Today* Virtual Ham Expowebsite. Attendance is free, and there are early bird prize incentives for registering by July 24. --ARRL

## PROMINENT RADIO AMATEUR HELPS TO LEAD US CONVALESCENT PLASMA COVID-19 EXPANDED ACCESS STUDY

Well-known contester, DXer, and *National Contest Journal (NCJ)* Editor Scott Wright, K0MD, has been "substantially" stepping back from ham radio while offering his expertise to the US convalescent plasma [COVID-19 Expanded Access Program](#). The study began in early April under the leadership of Principal Investigator Dr. Michael Joyner, MD, of the Mayo Clinic; Dr. Peter Marks, MD, PhD -- who is AB3XC -- and Dr. Nicole Verdun, MD, of the US Food and Drug Administration; Dr. Arturo Casavedall, MD, PhD, of Johns Hopkins University, and Wright, who is with the Mayo Clinic.

"The US Convalescent Plasma Expanded Access Program is a collaborative project between the US government and the Mayo Clinic to provide access to convalescent plasma for patients in the US who are hospitalized with COVID 19," Wright told ARRL. The work has been referenced during White House press briefings and in congressional testimony. The US government-supported study collects and provides blood plasma recovered from COVID-19 patients, which contains antibodies that may help fight the disease. The Mayo Clinic is the lead institution for the program.

"My role was to organize the infrastructure and the research approach, and to help lead the set-up of the data collection and of the website teams, while overseeing the study conduct and regulatory compliance," Wright explained.

According to a June 18 *Washington Post* [article](#), "A large study of 20,000 hospitalized COVID-19 patients who received transfusions of blood plasma from people who recovered found the treatment was safe and suggests giving it to people early in the disease may be beneficial."

An initial [safety report](#) on 5,000 patients appeared in May in the *Journal of Clinical Investigation*. The [safety study](#) on 20,000 subjects referenced in the *Washington Post* article was published earlier this month in the *Mayo Clinic Proceedings*.

Wright said most scientific studies of this magnitude take months to a year with planning and execution to get under way. In this case, the study team went from zero to 60 in a few short weeks.

"We started in less than a week. Most studies recruit 2,500 - 5,000 patients," Wright said. "We have recruited over 30,000 patients in 10 weeks, exceeding all expectations."

Hospitals in all 50 states and several US territories are participating, Wright said, and more than 8,000 physician-scientists are working with the team as investigators at their hospitals. "We also helped manage the start-up of collection of convalescent plasma by the large blood organizations, such as the American Red Cross, by strategically connecting donor pools and people willing to donate with the blood collection centers."

Wright's study responsibilities, which are on top of his regular day job, have required him to work daily, including weekends, for all of April, most of May, and all of June. "It has been intense," he said.

Wright said an FDA announcement on the benefit of convalescent plasma was expected soon. The FDA has been [inviting donations](#) of convalescent plasma from individuals who have fully recovered from COVID-19.

Wright will be the keynote speaker at the [QSO Today Virtual Ham Expo](#) August 8 - 9 to discuss the study, its results, and, he said, "linking it to skills acquired through ham radio. Read [more](#). --ARRL Letter

## RESEARCHERS USE 200 YEARS OF SUNSPOT OBSERVATIONS TO CREATE "SUN CLOCK"

Researchers in the UK and the US have developed a new "sun clock" that quantifies extreme space weather and pinpoints distinct on/off times of high solar activity and space weather. The sun clock will assist in planning to protect space and ground-based infrastructure that is sensitive to space weather. The [study](#), "Quantifying the solar cycle modulation of extreme space weather," was published in *Geophysical Research Letters*. It explains that the sun clock uses the daily sunspot number record available since 1818 to map solar activity over 18 solar cycles to a standardized 11-year cycle or "clock."

"Extreme space weather events can significantly impact systems such as satellites, communications systems, power distribution, and aviation," a Warwick University [news release](#) said, noting that these events are driven by solar activity. "By devising a new, regular 'sun clock', researchers have found that the switch on-and-off of periods of high solar activity is quite sharp."

The researchers' analysis shows that while extreme events can happen at any time, they are much less likely to occur during quiet intervals. The sun clock is aimed at helping scientists to determine more precisely when the risk for solar storms is highest and to plan the impact of space weather on space infrastructure. This gains importance as Solar Cycle 25 is imminent.

According to the researchers, no two solar cycles are the same, but using a mathematical technique known as the Hilbert transform, they were able to standardize the solar cycle for the first time. The clock revealed sharp transitions between quiet and active periods of solar activity.

"Once the clock is constructed from sunspot observations, it can be used to order observations of solar activity and space weather," the university said. This includes the occurrence of solar flares and the 10.7-centimeter solar flux that tracks solar coronal activity.

The researchers determined that once past on/off times are obtained from the clock, the occurrence rate of extreme events when the sun is active or quiet can be calculated.

"Scientists spend their lives trying to read the book of nature," lead author and Professor Sandra Chapman of the University of Warwick's Centre for Fusion, Space, and Astrophysics, said. "Sometimes, we create a new way to transform the data, and what appeared to be messy and complicated is suddenly beautifully simple." --ARRL

## MORE AMATEUR RADIO EXAM SESSIONS ENGINEERING IN-PERSON, REMOTE SOLUTIONS

As some states further relax restrictions imposed to minimize the spread of the COVID-19 virus, additional teams of ARRL Volunteer Examiner Coordinator (VEC) volunteer examiners (VEs) have conducted successful sessions. On June 13 at the Clark Township Municipal Building, the Electronic Technology Society of New Jersey (ETSNJ) held its first exam session since February, with help from several other clubs. With COVID-19 precautions in place, the June session was held outdoors.

"We had to have two sessions, because we had 20 candidates on our waiting list," said Larry Makoski, W2LJ, a member of the Piscataway Amateur Radio Club. Drew Moore, W2OU, was the ARRL VEC liaison. "We had the candidates line up their vehicles on one side of the parking lot. Directly across from them were the vehicles of the VEs. They were given the option of taking the

exam inside their vehicle, or if they wanted, they could bring a chair and clipboard and take the exam in front of their vehicle. Each vehicle was checked for compliance as we collected exam fees and checked photo IDs."

Makoski said social distancing was maintained, and face coverings and gloves or hand sanitizer were the order of the day. "We communicated with the candidates via a low-power FM transmitter tuned to 88.7 MHz or thereabouts, and they could hear us on their FM broadcast receivers inside their vehicles," he explained.

All went smoothly, and the weather cooperated. "Everyone who came walked away -- or should I say, drove away -- with either a new Technician-class license or an upgrade," Makoski said. A vacant seat was left for VE Bobby Cure, W2REC (SK), who had succumbed to COVID-19. "We tried to honor his memory by making him present in spirit," Makoski said.

VE teams from the Tri-County Radio Club, the Raritan Valley Radio Club, the South Plainfield Amateur Radio Club, the New Providence Amateur Radio Club, and the Fair Lawn Amateur Radio Club pitched in to help.

On the same Saturday in Florida, Doug Wiles, WF4B, reports that the St. Augustine Amateur Radio Society (SAARS) VE team held its first exam session in 6 months. The session took place in an outdoor pavilion, and test areas were disinfected prior to the candidates' arrival. Face masks were distributed and social distancing was practiced during the session, Wiles said. All three candidates passed.

On June 14 in Georgetown, Kentucky, VE Ron Malinowski, WX4GPS, with the Scott County Amateur Radio Club said 14 candidates passed their tests during an indoor session held there. "We took temperatures at the door, gave masks to anyone who came without, and we wiped down all seating areas after the attendee left," he said.

ARRL VE Team Liaison Janet Crenshaw, WB9ZPH, in Garland, Texas, told ARRL that a trucker signed up for a recent remote exam session.

"He had a Wi-Fi hotspot in the cab of his truck, so he found a parking space, pulled out his iPad and iPhone, and we had our Zoom test right there," she told ARRL VEC. "The world certainly has changed, and I've been encouraging people to realize that the world of ham radio has to change with it." --ARRL Letter

## VISALIA DX CONVENTION, REFASHIONED AS TWO VIRTUAL EVENTS IN 2021

There will be a Virtual Visalia in 2021. Organizers announced this week that the newly renamed International DX and Contesting Convention ([IDXCC](#)) in Visalia, California, will span two weekends next April. Each will be a "unique 3-day event" without duplication. Registration will begin early next year. The former International DX Convention was canceled in March due to the COVID-19 pandemic. Visalia sponsors said the event's new name better reflects what the convention had become over the years -- a gathering of avid DXers and contesters from around the US and the world. Sponsors said the challenge for planning next year's event was whether to prepare for an in-person convention or a virtual gathering.

"Everyone wants to hold out hope for a face-to-face meeting next year, but we have to ask, 'What will our new normal lifestyle be like next April, and can we guarantee a COVID-free environment for our attendees?'" an announcement on the IDXCC website explained. "After consultation with a few medical experts, epidemiologists, and longtime attendees of IDXCC, we have concluded that for 2021, the right choice -- and the safest choice -- is to have a virtual convention instead of an in-person meeting."

Visalia Part 1 will take place on April 16 - 18, 2021, and Part 2 on April 23 - 25. The program will include forums, technical talks, DXpedition reports, and award presentations.

[Visalia 2021 co-chairs John Miller, K6MM, and Rich Seifert, KE1B, invite questions and suggestions via email. Read more.](#)

## TENNESSEE COURT OF APPEALS AFFIRMS CONTEMPT RULING AGAINST RADIO AMATEUR

A Tennessee Court of Appeals has affirmed a radio amateur's liability for a 30-day jail sentence for violating a court directive to refrain from contacting another radio amateur who had filed a temporary order of protection. The appeals court's June 11 determination upheld a lower trial court ruling that found Michael J. Mgrdichian, ex-N2FUV, of Kodak, in criminal contempt for violating the order by contacting Jamie Faucon, N3FA (ex-AA3JF) of Knoxville via ham radio on three separate occasions. Mgrdichian appealed, primarily asserting that the lower court lacked jurisdiction over the case, because amateur radio is regulated by the FCC, a federal agency.

Faucon claimed that Mgrdichian had "stalked, threatened, and harassed" her on multiple occasions between 2016 and 2019, claiming that the threats were made via ham radio after Faucon had asked Mgrdichian to cease his actions. Faucon claimed that problems between her and Mgrdichian began after she complained to the FCC, alleging that Mgrdichian was using racially abusive language on the air. That matter was not at issue in the appeals court ruling.

The trial court had issued a temporary protection order for Mgrdichian to cease contacting Faucon, "either directly or indirectly, by phone, email, messages, mail, or any other type of communication or contact."

Mgrdichian attempted to have the lower court case dismissed by arguing that state courts do not have jurisdiction over any communication involving amateur radio. The trial court maintained, however, that it did have jurisdiction based on an alleged violation of the temporary protection order.

"The [temporary restraining] order did not prohibit [Mgrdichian] from using amateur radio; it did not attempt to establish a permitted level of interference; and it did not originate from, or result in, a nuisance claim," the appeals court reasoned in its ruling. "Instead, the subject matter of this case primarily rests on [Mgrdichian] violating the [temporary restraining] order by contacting [Faucon] on amateur radio. A party's radio usage -- whether it be commercial or amateur -- does not automatically preempt the case from being heard by a state court."

The appeals court determined that the trial court had jurisdiction to find Mgrdichian in criminal contempt of court when he violated the temporary restraining order by contacting Faucon via amateur radio.

The appeals court upheld findings that Mgrdichian was in contempt of the trial court's order on three occasions, each calling for 10 days in jail and a fine.

## AMATEUR RADIO DISCUSSED AT CEPT MEETING

International Amateur Radio Union ([IARU](#)) Region1 reports the 96th virtual meeting of the European Conference of Postal and Telecommunications Administrations (CEPT) Frequency Management Working Group (FMWG) June 8 - 12 dealt with several amateur radio matters.



According to IARU Region 1, the European Common Allocation Table (ECA) was reviewed, resulting in a revised version for consultation with stakeholders. IARU was able to amend the 241 - 250 GHz band entry to correct some errors. The state of the 50 - 52 MHz band in CEPT countries was also updated to take WRC-19 decisions into account. Last year, Ukraine requested that it be included in CEPT ECC [Recommendation T/R 61-02](#), the recommendation that defines the Harmonized Amateur Radio Examination Certificate (HAREC), and this was agreed.

Romania had contacted the FMWG chairman concerning the possibility of introducing electronic amateur radio licensing. This idea been passed to CEPT's Radio Amateur Forum Group for further discussion and possible action.

The meeting also discussed developing a regulatory framework for wireless power transfer (WPT) going forward, and attendees agreed that the CEPT Spectrum Engineering Working Group should continue to study the full range of WPT applications and emissions and that no regulatory steps would be taken until that work is complete. [Meeting documents](#) are available.

## ARRL TO HOLD 2021 NATIONAL CONVENTION AT ORLANDO HAMCATION®

ARRL has announced that Orlando [HamCation®](#) will host the [2021 ARRL National Convention](#) in Orlando, Florida, February 11 - 14. The convention will mark the 75th anniversary of HamCation -- one of the largest annual ham radio gatherings. The convention theme, "reDiscover Radio," is a rallying call for radio amateurs committed to developing knowledge and skills in radio technology and radio communication.

The convention will kick off on Thursday, February 11, with a series of day-long ARRL Training Tracks and a National Convention luncheon at the DoubleTree by Hilton Hotel Orlando at SeaWorld. A complete program and list of presenters will be available later this summer. Registration will open in the fall. HamCation will host the rest of the convention Friday - Sunday, February 12 - 14, at the Central Florida Fairgrounds & Expo Park in Orlando.

HamCation is sponsored by the Orlando Amateur Radio Club (OARC), an ARRL-affiliated club. OARC is supported by volunteers from radio clubs throughout the region. This year, an estimated 24,200 people attended all 3 days of the event.

[Details](#) on tickets and information about forums, exhibits (including information for vendors and tailgaters), testing, travel, and preferred hotels with special rates are on the HamCation website.

Online ticket sales begin in August. Tickets purchased (postmarked) by December 1, 2020, will cost \$15 and are valid for all 3 days.

## RESCUED RADIO AMATEUR SAYS, "HAM RADIO SAVED MY LIFE"

Alden Sumner Jones IV, KC1JWR, of Bennington, Vermont, is thankful for amateur radio, after he suffered a medical incident and lost consciousness on June 15 while hiking with others along a remote section of the Long Trail, not far from his home. An EMT from Appalachian Mountain Rescue (AMR), who was hiking nearby, saw Jones pass out, but was unable to connect with 911 via his cell phone. Jones, 41, regained consciousness and was successful in contacting Ron Wonderlick, AG1W, via the Northern Berkshire Amateur Radio Club's K1FFK repeater on Mount Greylock. Wonderlick initiated what turned into an 8-hour effort to get Jones off the trail and to a medical facility, acting as a relay among Jones, emergency crews, and other agencies involved. As the *Bennington Post* [reported](#), "The Vermont State Police also received assistance from

several licensed amateur radio operators who helped facilitate communications, greatly assisting in the rescue."

Matthew Sacco, KC1JPU, headed to a staging area where rescue crews were gathering. When he could not make it into the repeater, he employed some ham radio ingenuity to fashion a J-pole antenna from some window line he had on hand, casting it into a tree using a fishing pole. That did the trick. An individual on site was able to obtain an accurate location for Jones using the GPS on his cell phone.

After it was determined that rescuers could not reach Jones using an all-terrain vehicle, arrangements were made to have a search-and-rescue crew from New York retrieve Jones by helicopter. Amateur radio participants were able to relay critical information, including an accurate location, as preparations continued.

Jones, meanwhile, took advantage of his time with the EMT and other rescuers to talk up amateur radio and explain how to get licensed. According to one account, rescuers were having trouble making contact with the helicopter, so Jones loaned them a better antenna he happened to have.

Jones was eventually flown to a hospital in Albany, New York, again taking advantage of the occasion to promote amateur radio to the helicopter pilot and crew. Jones is said to be recovering.

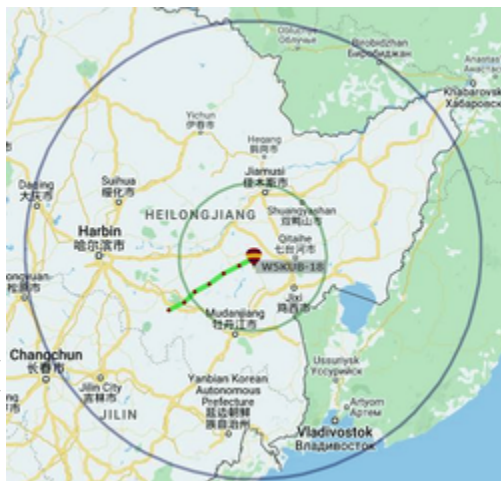
"Ham radio saved my life last night, and I am very thankful for how everyone helped me," Jones said afterward.

## BALLOON LAUNCHED BY WEB SHOW HOST COMPLETES THIRD ROUND TRIP

A [balloon](#) launched on May 20 by "Amateur Radio Roundtable" web show host Tom Medlin, W5KUB, and his team has begun its third circumnavigation of Earth. The balloon, at 43,000 - 45,000 feet, completed its second trip around the globe on June 19. It crossed the Atlantic Ocean "in record time" at a speed of about 170 MPH, the balloon website reported this week.

Identified as W5KUB-18, the balloon carries APRS and WSPR amateur radio payloads. By the morning of June 25, it was above China, moving at more than 100 MPH.

According to the balloon website, the mission and goal are to launch a high-altitude balloon for long-duration and multiple trips around the world. The balloon, an SBS-13, is capable of flying up to 45,000 feet. "It will be filled with hydrogen to obtain higher altitude," the website explains. "It will be solar powered only (no batteries, so it will only transmit during daylight). We will receive tracking every 10 minutes via WSPR on HF [14.0971 MHz]." Tracking transmissions will be turned off over the UK, Yemen, and North Korea due to regulations. The tracking transmitter runs just 10 mW, but it's being heard as far away as 9,000 miles, Medlin told ARRL.



"The entire tracker with GPS and processor is only 2 grams," Medlin said. "That's about the weight of a penny. The entire payload is only 15 grams total." The current effort is the group's ninth attempt to circumnavigate the globe.



Medlin says the balloon project has broadened his horizons. "You have to do a lot of specific engineering and measurements down to the 0.1 gram to fly one," he told ARRL. "You also become a weatherman, watching all the NOAA websites, winds at different altitudes, storms, etc. Storms will bring you down," Medlin said. With the float altitude set at 44,000 feet, he expects to be able to fly above most storms. "You also become very well-versed in geography as it flies," he added.

Medlin's livestreamed "[Amateur Radio Roundtable](#)" goes live on Tuesdays at 9 PM Eastern Time and accepts calls from viewers. He has operated a live cam at Dayton Hamvention® for several years. Read [more](#).

## ARISS VOLUNTEER TONY HUTCHISON, VK5ZAI, NAMED MEMBER OF THE ORDER OF AUSTRALIA

Veteran Amateur Radio on the International Radio Station ([ARISS](#)) volunteer Tony Hutchison, VK5ZAI, has been honored as a Member of the Order of Australia in Queen Elizabeth's Birthday Honours List. Hutchison was recognized "For significant service to amateur radio, particularly to satellite and space communication." The Australian Government's Department of the Prime Minister and Cabinet noted that Hutchison is one of 10 official ARISS telebridge stations to the International Space Station, as well as a HamTV ground station.

Hutchison's station has served as the ham radio contact point for ISS crew members to speak with schools and groups on Earth via ham radio, when a contact location is not within the footprint of an ISS pass. The students connect via a teleconference line from their school to the telebridge station, and then with the astronaut through ham radio.

Hutchison provided communication support for contacts with Australian astronaut Andy Thomas, VK5JAT/VK5MIR, during Thomas's tour on the Russian *Mir* space station, and he enabled the first school contact with *Mir* in 1993. As part of ARISS, he helped 65 schools prepare for ARISS contacts and used his telebridge station for 58 ARISS contacts throughout the world. He is a member of AMSAT-VK.

"Tony's been an ARISS mentor for years, and was lead of Australia's mentors," ARISS-International Secretary Rosalie White, K1STO, said. "He enjoyed talking to the *Mir* crews long before." White said that Hutchison, who is in his early 80s, remains involved in the ARISS program.

"Although I received the honour, I would like to share it with all team members I work with," Hutchison said. "If it weren't for the work that all the ARISS-International volunteers do, this award would never have been given." Read [more](#). --ARRL Letter

## MARS ANNOUNCES HF SKILLS EXERCISE

Members of the Military Auxiliary Radio System (MARS) will conduct an HF skills exercise July 20 - 24 to hone their operating skills and messaging-handling capabilities. MARS members will be reaching out to the amateur radio community via the 60 meters Channel 1 Net (5330.5 kHz dial) twice a day, the SATERN HF net (14.265 MHz), and by contacting various stations via HFLink throughout the exercise.

Participating MARS members will be requesting assistance with collecting county status information as well as airport weather information, called METARs. MARS members will also be

passing ICS 213 messages to numerous Department of Defense (DoD), federal, and amateur radio addressees.

This exercise will be announced via WWV at 00:10 and via WWVH at 00:50 starting on or about July 13. WWV and WWVH listeners will be asked to take an online listener survey. This HF radio training event will not impact regular communications.

A Department of Defense program, MARS organizes and trains amateur radio volunteers to operate in military radio networks to support HF radio contingency communications. Among other missions, MARS provides communication support to civil authorities and assists in establishing normal communication under emergency conditions. -- *Thanks to Paul English, Chief, Army MARS*

## TECHNICAL

**Fraunhofer HHI (Fraunhofer Heinrich Hertz Institute, Berlin)** has announced the approval of the H.266/Versatile Video Coding (VVC) standard, which it says reduces bandwidth needed for high resolution (4K and up) video by up to 50% compared to its predecessor, HEVC.

A result of collaboration among the world's largest tech companies—Apple, Ericsson, Intel, Huawei, Microsoft, Qualcomm and Sony—boasts improved compression without compromising visual quality, according to Fraunhofer HHI. The new standard can provide efficient transmission and storage of all video resolutions from SD to HD up to 4K and 8K, while also supporting HDR video and omnidirectional 360-degree video.

“Because of the quantum leap in coding efficiency offered by H.266/VVC, the use of video will increase further worldwide,” said Benjamin Bross, head of the Video Coding Systems group at Fraunhofer HHI. “Moreover, the increased versatility of H.266/VVC makes its use more attractive for a broader range of applications related to the transmission and storage of video.”

Fraunhofer also announced plans to establish a uniform and transparent licensing model based on the FRAND (fair, reasonable and non-discriminatory) principle for the use of standard essential patents related to H.266/VVC. This has led to the founding of the Media Coding Industry Forum (MC-IF), which includes more than 30 companies and organizations.

The new chips to use H.266/VVC are currently being designed, and Fraunhofer HHI is expected to publish the first software (for both encoder and decoder) to support H.266/VVC, by the fall according to Thomas Schierl, head of Video Coding and Analytics department at Fraunhofer HHI.

For more information, visit [www.fraunhofer.de](http://www.fraunhofer.de).

## SHORTS

**GOOD NEWS FOR CENTRAL INDIANA DMR USERS!** Aaron Donaldson, N9ALD, has purchased the Indy DMR machines, and has connected the UHF repeater back to the internet. It is still on the Brandmeister network as before. - KJ9B

**International Lighthouse Lightship Weekend (ILLW) 2020 will take place over the August 22 - 23 weekend**, a week later than usual to avoid conflicting with special events that may be on the air to commemorate the 75th anniversary of the cessation of World War II hostilities in the Pacific.

The [ARRL Contest Portal](#) has taken a [major leap forward in functionality](#). It's now a "is now a one-stop shop for all ARRL-sponsored contests." The portal's main page shows the status of

ARRL Contests over the last year, and navigation bars are provided to particular functions or contests. One of the most-tweeted features is the "Certificates" function - by typing in your call, you can download certificates for ARRL Contests for which you've submitted logs.

**N1MM Logger+ version 1.0.8481 added a new field, "FocusEntry,"** to the [Radio Info UDP Packet](#) to allow external programs to better control the operation of the logging program. An example might be to have an external program send message keys to an entry window to initiate a CQ.

**Radio amateurs and others may listen for ham radio activity from the International Space Station (ISS) by monitoring 145.800 MHz.**

**Ken Opskar, LA7GIA, has announced the Jan Mayen 2021 DXpedition, using the call sign JX0X,** in September of 2021, with an emphasis on 160 - 30 meters.

**Due to the COVID-19 pandemic, the announced [W8S Swains Island DXpedition](#) has been postponed until spring 2021 at the earliest.**

**AMSAT has designated China's [CAS-6 \(TQ-1\)](#) microsatellite as [TQ-OSCAR 108 \(TO-108\)](#).** Reports indicate that the transponder is active only for intervals of about 2 seconds, but, AMSAT says, "With patience, and quick transmissions, QSOs have been completed."

**Sunspot Death Throes of Cycle 24 | Solar Storm Forecast 07.05.2020**

<https://www.youtube.com/watch?v=IJJaMvUuvGc&t=155s>

***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](mailto:WebMaster@w9rca.org). Check our web site at <http://www.w9rca.org>

---