



Legacy Amateur Radio Club

# RCA AMATEUR RADIO CLUB



AFFILIATED CLUB

INDIANAPOLIS, INDIANA

JANUARY 2018

MONTHLY NEWSLETTER

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE  
TUESDAY, JANUARY 9th, 6:30 PM AT

[SQUEALERS](#), 5899 E. 86th STREET, INDIANAPOLIS, IN  
The meeting room in the back has been reserved for us.

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*Happy New Year!!!*

## RCA ARC NEWS

**SUMMARY OF THE DECEMBER MEETING** – Thanks to all who attended the December meeting at the new location. The January meeting will meet at Squealers and we have reserved the meeting room. The Club insurance has been paid for the next year, one of our bigger reoccurring expenses. Jim, K9RU, reported that the 6m beacon is back on the air, 50.069 MHz. On maybe a related note, our west receiver for the '88 repeater has not been operational for several days. Plus we are looking at replacing the 2 meter receive antenna weather permitting. Otherwise, the '88 repeater has been operating normally. Dave Miller, K9RTT, our contact person at IVY Tech will be retiring at the end of the year. We have a “receive site” at IVY Tech but K9RU has another contact who can get us access to the site. No new information regarding the 2018 Field Day. Upcoming on the air events include the January VHF contest, Straight Key Night, and starting 1/1/2018 the year long ARRL Grid Chase.

Jim, K9RU, brought to our attention an interesting Risen RS-918SSB Chinese “all mode” 10W portable SDR radio which covers 1 to 30 MHz. It is a clone of the mcHF QRP transceiver designed by M0NKA. The styling is similar to the KX2, but it has a color, touch display with waterfall and spectrum display. M0NKA has released a new layout more like a tablet like Flex is doing.

<https://www.amazon.com/RECENT-RS-918SSB-SDR-HAM-Transceiver/dp/B072155421>  
<http://www.m0nka.co.uk/>

**UPDATE ON THE 6M BEACON** -- We did see that it was spotted by K0GU on 12/14/2017 and 12/28/2017 and by KD4ESV on 12/15/2017. It is running 5 watts into a 6M Ringo at 100 feet.

**ANTARCTICA ... NOT HAM RADIO BUT COOL PICS** – Bob, W9KVK, provided this Power Point file containing a bunch of high resolution photos taken in Antarctica:

<https://www.dropbox.com/s/vox1ah0yny9dvd7/Living%20at%20SOUTH%20POLE.pps?dl=0>

If you happened to work R11AND on JT65 last year, he was at Novolazarevskaya base, shown on one of the maps..

## AMATEUR RADIO LICENSE TEST SESSION

**Time:** Saturday, Jan. 13, 2018, 12:00 pm (Walk-ins allowed)

**Location:** Salvation Army EDS Training Facility, 4020 Georgetown Rd, Indianapolis, IN

**Contact:** Jim Rinehart, [k9ru@arrl.net](mailto:k9ru@arrl.net), 317 721-1458

## HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

- Jan 6 Kids Day <http://www.arrl.org/kids-day>
  - Jan 6-7 RTTY Roundup <http://www.arrl.org/rtty-roundup>
  - Jan 20-22 ARRL January VHF Contest <http://www.arrl.org/january-vhf>
  - Jan 26-28 CQ World-Wide 160M CW Contest <https://www.cq160.com/rules.htm>
- For More Contests Information: <http://www.contestcalendar.com/>  
Opportunities for public service: <http://indyhams.org/event>

## THE ARRL INTERNATIONAL GRID CHASE KICKED OFF ON NEW YEARS DAY!

Ready, set, go! The [ARRL International Grid Chase 2018](#) got under way on January 1 UTC (New Year's Eve in US time zones). The objective of the year-long event is to work stations on *any* band (*except* 60 meters) in as many different Maidenhead grid squares as possible, and then upload your log data to ARRL's Logbook of The World (LoTW). Many hams are familiar with grid squares from the VHF/UHF and satellite realms, and everyone lives in one. An [online calculator](#) by David Levine, K2DSL, can determine your grid square. Enter a postal address, ZIP code, or a call sign, and the calculator will return the grid square for that location. Each new grid square contact confirmed through LoTW will count toward your [monthly total](#).

Any contact you make in 2018 can count for your Chase score; as long as the other operators participate in LoTW, you'll get credit automatically when they upload their logs. This means that contest contacts will also count, as will contacts with special event stations, or other on-air activity that uses LoTW to confirm contacts.

There are no restrictions on modes or bands, as long as they are legal. Satellite contacts are valid for the Chase. The event is open to *all* radio amateurs.

Complete details of the ARRL International Grid Chase 2018 appeared in the December 2017 issue of *QST*. For more information, [contact](#) the ARRL Contest Branch. --ARRL

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## LOGBOOK OF THE WORLD TO ADD SUPPORT FOR CQWAZ AWARD

Participants in CQ magazine's Worked All Zones ([WAZ](#)) award program will soon be able to use the Logbook of The World ([LoTW](#)) system of ARRL, the national association for Amateur Radio, to apply for the WAZ award and its endorsements, ARRL and CQ announced on December 14.

Amateur Radio operators will be able to use LoTW logs to generate lists of confirmed contacts to be submitted for WAZ credit. Standard LoTW credit fees and separate CQ award fees will apply.

Implementation, documentation, and internal testing of the link between LoTW and WAZ is complete. ARRL and CQ are now assembling a team of external beta testers to assure that the link is ready for widespread use. A separate announcement will be made when LoTW's support for CQ WAZ is available to everyone.

Logbook of The World is ARRL's electronic confirmation system for Amateur Radio contacts. It provides a confirmation when both stations in a contact submit their logs to the system and a match between the logs is confirmed. LoTW has supported the CQ WPX Award program since 2012.

"I am very pleased that participants in the CQ Worked All Zones award program will finally be able to use Logbook of the World confirmations in their applications for WAZ awards and endorsements," said CQ magazine Editor Rich Moseson, W2VU, adding that "WPX program participants have made excellent use of this service for the past five years and we look forward to providing it to WAZ program participants as well."

"We are excited about the prospect of supporting CQ magazine's WAZ program through Logbook of The World, as it is something that many ham radio operators have been asking for," said Greg Widin, K0GW, ARRL First Vice President and chair of the Logbook Study Committee. "We believe this partnership will enhance the Amateur Radio experience for many practitioners."

Worked All Zones is the second-oldest active Amateur Radio award program, behind the International Amateur Radio Union's Worked All Continents (WAC) award. --ARRL Letter

## MORE ROOM FOR HAMVENTION® AT GREENE COUNTY FAIRGROUNDS AND EXPO CENTER

Hamvention® reports that the Greene County Commissioners and the Greene County Fair Board have approved the construction of a new building at the Greene County Fairgrounds and Expo Center, the new Hamvention venue in Xenia, Ohio.

"Greene County officials have decided to move forward with construction of a new building, as it will continue to expand their presence in the region as a world-class Exposition Center," Hamvention Spokesperson Michael Kalter, W8CI, said in a news release. "Hamvention certainly benefits from the decision to expand the Expo Center footprint. Construction is planned to be complete ahead of Hamvention 2018, and [the new building] will be used for the event."

In addition to the new structure, another building on the property, previously known as Fairgrounds Furniture, is being vacated and will be available for use by Hamvention in May 2018. Additional details are forthcoming.

Kalter said Hamvention has been told that the additional floor space will cover an area larger than the tents Hamvention used for some activities in 2017. --ARRL Letter

"Although this decision was made to expand opportunities at the Expo Center, Hamvention is grateful for the support Greene County, Xenia Township, and the city of Xenia," Kalter added. --ARRL Letter

## DAYTON DINNER BELL IS RINGING!

It's reservation time for two major banquets held in conjunction with Dayton Hamvention — the Contest Dinner and the Top Band Dinner.

The North Coast Contesters will sponsor the 26th Annual Dayton Contest Dinner on Saturday, May 19, at 6:30 PM (social hour starts at 5:30 PM) at the Crowne Plaza in downtown Dayton, home of the Contest Super Suite and Contest University (CTU). Contest Dinner tickets are on sale exclusively via the Contest Dinner website.

Master of ceremonies for the Dayton Contest Dinner will be Contest Hall of Famer and World Wide Radio Operators Foundation (WWROF) Chairman John Dorr, K1AR. Featured speaker will be WRTC 2018 Chair Chris Janssen, DL1MGB. The 2018 Contest Hall of Fame inductees will be announced during the Contest Dinner. No tickets will be for sale at the door.

Tickets also are available for the 29th annual Dayton Top Band Dinner (scroll down for reservations). The dinner is Friday, May 18, at 7 PM (social hour at 6 PM). The featured speaker will be Top Band DXer Jerry Rosalius, WB9Z. — Thanks to Tim Duffy, K3LR, Dayton Contest Dinner Chair, President, North Coast Contesters

## BOUVET DXPEDITION NEARS ITS MOMENT OF TRUTH

The group mounting the [3Y0Z Bouvet Island DXpedition](#) reports that it's sorting through the myriad of details necessary to make a DXpedition to the second most-wanted DXCC entity a reality. Plans call for 3Y0Z to be on the air in late January and early February.

A shipping container holding tons of gear is now in Punta Arenas, Chile, set to be moved out of "customs bond" soon. Last-minute supplies being collected to take as extra baggage include ice screws, "should we find ourselves camping on refrozen melt areas on the glacier."

Shelter and antenna layouts have been finalized, as has marine transportation. Team members will take a marine safety course before embarking. Still under negotiation is the cost of helicopter shuttles from the ship to and from the island.

Two years of detailed planning have gone into the Bouvet Island DXpedition. "We want to live up to all that is expected of us on this 'generational' DXpedition, which is likely the largest and most challenging DXpedition ever," the DXpedition team said earlier this fall. "Indeed, there may never be another like it."

The 3Y0Z [Propagation Page](#) has been updated and now includes a button visitors can click, enter a call sign and grid square, and get a propagation forecast specific for their location -- all bands over a 24-hour period.

A dependency of Norway, Bouvet is a sub-Antarctic island in the South Atlantic. The last Bouvet activation was 3Y0E, during the winter of 2007-2008. -- *Thanks to [The Daily DX](#) for some information*

## FCC PENALIZES MARKETER OF HAM-BAND DRONE AUDIO-VISUAL TRANSMITTERS

The FCC has imposed a \$180,000 civil penalty on a Sarasota, Florida, company that had been marketing noncompliant audio-visual transmitters intended for use on drones in violation of the Commission's Amateur Service and marketing rules. In an [Order](#) released on December 19, the FCC explained that Lumenier Holdco LLC (formerly known as FPV Manuals LLC) was advertising and marketing uncertified AV transmitters capable of operating on both amateur and non-amateur frequencies, including bands reserved for federal government use. Some of the transmitters also exceeded the 1-W power limit for Amateur Radio transmitters used on model craft, the FCC said.

"Moreover, entities that rely on amateur frequencies in operating compliant AV transmitters must have an amateur license and otherwise comply with all applicable laws for such operation," the FCC said in the *Order*. The FCC said that while it generally has not required amateur equipment to be certified if it operates solely on Amateur Radio frequencies, certification is required if a device can operate outside of the ham bands.

Last January, in what it called an "[extremely urgent complaint](#)" to the FCC, ARRL targeted the interference potential of a series of audio/video transmitters used on unmanned aircraft and marketed as Amateur Radio equipment. ARRL General Counsel Chris Imlay, W3KD, said those transmitters used frequencies intended for navigational aids, air traffic control radar, air route surveillance radars, and global positioning systems.

In addition to paying a civil penalty, Lumenier, which has admitted to marketing the noncompliant AV transmitters, will enter into a *Consent Decree* with the FCC to settle the enforcement proceeding and terminate the investigation.

The case stemmed from complaints received by the Wireless Telecommunications Bureau's Spectrum Enforcement Division. "The investigation revealed that some of the AV transmitters marketed by Lumenier were capable of being operated outside of the authorized Amateur Radio Service bands, including on frequencies reserved in whole or in part for federal agencies, but were not certified or otherwise compliant with the rules," the FCC said in its *Order*. "These AV transmitters are considered intentional radiators and must comply with the Commission's Equipment Authorization and Marketing rules.

The FCC said that Lumenier ceased marketing the noncompliant transmitters after receiving a *Letter of Inquiry* from the FCC last April. The *Consent Decree* accompanying the FCC *Order* requires Lumenier to admit that it violated equipment authorization and marketing

rules and establish a compliance plan to ensure that the company complies with FCC rules in the future. --ARRL Letter

## RADIO AMATEUR'S INVENTION TO TREAT ALZHEIMER'S PATIENTS GOING TO CLINICAL TRIALS

Inveterate inventor and radio amateur Eric Knight, KB1EHE, may be on the cusp of medical history as a device he developed in collaboration with a prominent Alzheimer's disease researcher enters clinical trials this month. Both are hoping that the device, which essentially saturates the brain with low levels of RF, may prove to be a viable treatment for the dreaded disease affecting millions.

"Sometimes breakthroughs happen in ways that are unexpected," Knight told ARRL.

Knight learned of experiments that world-renowned Alzheimer's researcher Dr. Gary Arendash was carrying out on mice specially bred to have the disease, exposing them to low levels of RF. Knight said the effects were dramatic, sometimes even reversing the disease's effects in the mice. Borrowing some concepts from his early experiments with small rockets and avionics, he set about developing, and later patented, a device that could provide the requisite RF exposure to the human head.

"In the early 2000s, we were trying to figure out then how to make antennas that would wrap around the airframes of the rockets we were designing," he said, noting that the diameter of his group's space vehicle was about the same as that of a human head. Knight learned that Arendash was attempting to extend his investigations in a similar vein, and eventually they collaborated.

"He came at it from mice and science, I came at it from an aerospace and hobby perspective," said Knight, who patented a device based on a bicycle-type helmet. At the same time, Arendash was developing a similar wearable -- a fabric cap resembling an old-time aviator's headgear. Both devices are embedded with small antennas to bathe the brain in electromagnetic radiation in the 900 MHz spectrum set aside for Industrial, Scientific, and Medical (ISM) applications -- some 100 MHz higher than a cell phone's frequency.

"Ironic for sure," Knight said. "Who would imagine that cell phone radio waves could be a potential treatment for Alzheimer's disease?"

Knight, who has no medical background, said the device to be used in the clinical trials consists of the cap plus a palm-sized transmitter and wiring harness worn on the arm. The resulting combination has been dubbed the NeuroEM 1000. Participants will get doses of RF twice a day.

From the Food and Drug Administration's (FDA) standpoint, the clinical trials aim primarily to show that the technology is safe, but Knight said he and Arendash are also looking for data that might demonstrate that the device could be beneficial in treating Alzheimer's. The protocol they've developed goes further than what the FDA requires and includes before-and-after baseline data, with cognitive testing, assays of spinal fluid and blood, and PET scans.

"The hope is that there is a tiny bit of efficacy. Then we can work to refine it," Knight said, adding, "No one is expecting a magic cure." --ARRL Letter

## FCC PROPOSES \$25,000 FINE FOR BREAKING NOW-VOLUNTARY LABELING RULES

The FCC has proposed fining Acuity Brands Inc. of Atlanta, Georgia, \$25,000 for apparently marketing radio frequency devices that were not labeled in accordance with Commission Part 18 rules in place at the time. The FCC issued a *Notice of Apparent Liability* ([NAL](#)) on November 21. Compliance with the particular rule at issue now is voluntary.

"Specifically, Acuity marketed three models of consumer-grade electronic fluorescent lighting ballasts -- two since 2006 and one since 2009 -- that did not have the FCC logo affixed to

them," the FCC said in the *NAL*. Application of the FCC logo, which the FCC no longer requires, was to inform purchasers that a device had undergone compliance testing. The FCC also said Acuity continued to market two models of the ballasts at issue for approximately 6 months after being notified, causing the Commission to up the penalty.

"We take this action today as part of our duty to ensure that radio frequency devices are marketed in accordance with the Commission's rules," the FCC said. "Consistent with this goal, we find it necessary to enforce the rules requiring that devices subject to equipment authorization are properly labeled to inform a consumer that such devices have been tested for compliance under the Commission's technical rules, because those devices could easily cause interference if they do not conform to those rules."

In January 2016, the Office of Engineering and Technology (OET) conducted tests on Acuity's AccuPro Model AP-RC-432IP-120-1 fluorescent lighting ballast after receiving complaints of interference said to have been caused by the ballasts. The matter was referred to the FCC Enforcement Bureau, to determine whether Acuity marketed the model at issue before receiving equipment authorization.

A footnote in the *NAL* points out that the use of the FCC logo became voluntary on November 2, but Acuity's alleged violations occurred before that. The FCC adopted a rule that allows the FCC logo to be physically placed on a device at the discretion of the responsible party consistent with §18.209, but "only if [the] device complies with the applicable equipment authorization rules." Presence of the logo "will not obviate the need to provide required compliance information or maintain pertinent records related to device testing," the FCC said in adopting the change.

Acuity submitted test reports showing that the two types of fluorescent lighting ballasts it markets did comply with relevant technical requirements, but the company conceded that three models of its consumer-grade lighting ballasts did not have an FCC logo affixed for nearly 10 years.

ARRL has in the past -- and without response -- complained to the FCC regarding the marketing and sale of interference-causing lighting ballasts, as well as about a lack of required compliance notifications. --ARRL Letter

## VIETNAM VET, RADIO AMATEUR GRANTED DYING WISH TO GET ON THE AIR ONE MORE TIME

Vietnam War veteran John Nugent, WA2EQJ, got on the air for what likely will be his final time earlier this month, thanks to help from the Amateur Radio community. The 75-year-old US Army Signal Corps veteran, who has cancer, lives at the James A. Lovell Federal Health Care Center in North Chicago, Illinois. Licensed since he was 16, he told a social worker at the facility that one item on his "bucket list" was to operate on ham radio one last time. Staffers at the facility got in touch with the Lake County Veterans Assistance Commission, and replies came from the American Legion Amateur Radio Club, the North Shore Amateur Radio Club, and [Lake County Radio Amateur Civil Emergency Service](#) (RACES), among others.

"He was just over the moon," social worker Alesia Behnke [told](#) the *Chicago Tribune*. "We had no idea we were going to pull it off."

The various Amateur Radio volunteers did, however, setting up an antenna outside the facility and a simple HF station inside. David Hartnett, K9DRH, and crew Don Whitney, K9DRW; James Nelson, K9QF; Harry Hahn, WB9R, and Scott Campbell, KC9SJP, were among those who made it happen. ARRL Illinois Section Manager Ron Morgan, AD9I, spread the word that WA2EQJ would be on the air.

"John is terminally ill and wanted to make some 20-meter radio contacts one last time," a post on the Lake County RACES page recounted. "He has been in the [Lovell Center] for more than 3 years." Nugent had volunteered to serve in the Army and was wounded during his Vietnam service.

On December 5, Nugent -- with help from his family members and Lovell Center staff -- turned on his radio and contacted stations in California, Illinois, and Texas. After the contacts were in the log, Nugent's son, Chris, thanked the Lake County RACES and other volunteers who facilitated his dad's last wish.

Among the stations Nugent contacted was special event W9F, operated by members of the Fermilab Amateur Radio Club (WB9IKJ) to mark the 50th anniversary of the National Accelerator Laboratory (Fermilab).

"We were able to add dying Army vet John Nugent, WA2EQJ, to the W9F special event log because of the rapid e-mail alert from the ARRL Illinois Section Manager, notifying ARRL members that it was Mr. Nugent's dying wish to make a final radio contact," Michaline Przekop, KC9ARP, told ARRL. "It was truly a touching and unforgettable experience."

[Video](#) of the event is available. --ARRL Letter

## FIRST TRANSATLANTIC 472 KHZ BAND CONTACT

The ARRL reports on first transatlantic contact on 630 meters (472 kHz) which took place between David Bowman G0MRF and Dave Riley AA1A

They used the JT9 digital mode to complete the more than 5,160 kilometer contact during the early hours of December 23, 2017.

On the UK end, G0MRF was running a modified Icom IC-7300 with a filtered preamp and a 60-W amplifier to a 250-foot wire configured as an inverted L. AA1A benefited from his near-Atlantic Coast location in Marshfield, Massachusetts, Bowman said.

Read the full story at <http://www.arrl.org/news/radio-amateurs-continue-to-plumb-the-spectral-depths> 472 kHz site <http://www.472khz.org/>

## NORWAY COMPLETES TRANSITION TO DIGITAL AUDIO BROADCASTING

Norway has completed a nearly year-long transition to digital radio, becoming the first country in the world to shut down national broadcasts of its analog FM radio network and move to Digital Audio Broadcasting (DAB). The three state-run outlets — NRK P1-P3 — and commercial stations P4 and Radio Norge have ceased broadcasting in FM and transmit DAB instead.

The switch has not been popular with everyone, with complaints involving technical issues and lack of DAB coverage in Norway. In addition, radio users have complained about the need to buy new receivers or digital adapters. Also, fewer than one-half of Norway's motorists have DAB capability in their vehicles.

Proponents contend the transition not only will offer better sound quality and more channels but save money.

Radio listening in the Scandinavian country has dropped by 10% over the past year, and public broadcaster NRK has lost 21% of its audience, according to media reports.

The switchover to DAB+ involves only national radio channels; most local stations still broadcast in analog FM. Other countries in Europe are poised to follow Norway's lead. Finland launched digital broadcasting in 1998 but shut it down 7 years later. --ARRL

## URBAN EXPLORERS' VIDEO REVEALS LARGELY UNSEEN SIDE OF HARA ARENA

Reminiscent of underwater footage from a TV documentary about the discovery of a long-lost vessel, a recently posted [YouTube video](#) that takes a deep dive into the innards of former Hamvention® venue Hara Arena has been attracting notice within the Amateur Radio community. The narrated video probe was posted on December 22 by Once Occupied, an urban exploration group that originated in Dayton, Ohio. It's not the first video of the derelict Hara Arena since it closed — and since anything thought to be of value inside was auctioned

off. The IRS put the Hara Arena complex itself on the auction block last August to satisfy a tax lien, but no successful bidder was ever announced.

It's not clear whether the three-person Once Occupied expedition had permission to be inside Hara Arena nor how the individuals, who do not identify themselves, gained entry to the building complex. Among the more fascinating revelations was how much equipment, event paraphernalia, and just plain debris remain inside the 165,000-square foot Hara complex, which included an apartment.

"This is creepy and surreal, but I couldn't turn it off and had to watch the whole thing," allowed Pete Varounis, NL7XM, the QCWA's official call sign historian, who shared the video with his colleagues on the QCWA board of directors. "You will recognize entire areas that teemed with activity during every Hamvention," he continued. "It looks like raw footage from Chernobyl after the Russian nuclear disaster."

The urban explorers were a bit more mundane. "The facilities include a bar pub, ballroom, conference center, ice rink, and four exhibition halls. This place is huge!" the narrative posted with the more than 20-minute video clip related. As the Once Occupied team noted, Hara Arena over the years played host to sports teams and top entertainers — including Elton John and the Rolling Stones — as well as to Hamvention. Hara's shutdown in 2016 in part forced Hamvention's move to its current venue at the Greene County Fairgrounds and Expo Center in Xenia.

A lot of this particular video covers parts of Hara Arena never seen by Hamventioners — including catwalks, tunnels, and behind-the-scenes rooms and facilities such as offices, kitchen areas, and storerooms, some of which still contained unopened goods and supplies. File cabinets still store paper files, and abandoned computer and other equipment is scattered about. At least one box the group encountered contained new T shirts for a sports team that once made its home at Hara Arena. Some areas of the building's interior seem to have been hit by a tornado. The explorers do not appear to take anything from Hara Arena or disturb what remained behind.

"Our passion is exploring abandoned places. We explore because we love adventure and the thrill of the hunt," Once Occupied says on its [Facebook page](#). "Documenting our journeys through digital media allows us to share the stories of the past." The group warns that such urban exploration is not without risk and "not for everyone." --ARRL

## SHORTS

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**Purdue Student Accepts "Amazing Opportunity" to Intern for NASA:** A recipient of the prestigious [William R. Goldfarb Memorial Scholarship](#), Jacob Nunez-Kearny, KF7DSY, of Mesa, Arizona, will interrupt his matriculation at Purdue University to accept an internship this spring at NASA's Johnson Space Center in Houston. "This is an amazing opportunity that has been many years in the making that I have decided to accept," Nunez-Kearny told ARRL. He will return to Purdue the following fall, and, because he already had college credits when he started his freshman year, he should still be able to graduate in 4 years -- in 2019. He remains a full-time student during his internship. A graduate of Desert Ridge High School in Mesa, Nunez-Kearny is pursuing a career in aerospace engineering. The ARRL Foundation administers the Goldfarb Scholarship, which is the result of a generous endowment from William Goldfarb, N2ITP (SK). Before his death in 1997, Goldfarb set up a scholarship endowment of close to \$1 million in memory of his parents, Albert and Dorothy Goldfarb. It is awarded to one high school senior each year.

**Readers of CQ magazine's print edition are well aware we have been behind schedule on printing and mailing our issues on a timely basis.** We apologize for these delays, which resulted from a variety of little things going wrong, all at the same time.

Rather than trying to play catch-up over the course of the next several months, we have made



the decision to allow the November and December 2017 issues to remain as digital-only issues, and to jump-start our print edition with the January 2018 issue. This will enable us to get back and stay on schedule as we move toward our 75th anniversary of serving the amateur radio community. The January issue is at the printer being processed right now. **Please note: All print subscriptions are being extended for two months.**

Anyone may access the digital editions of the November and December issues using the following links:

CQ December 2017: <http://www.zinio.com/reader.jsp?issue=416437244&o=ext>

CQ November 2017: <http://www.zinio.com/reader.jsp?issue=416434275&o=ext>

Please view in Firefox.

Thank you for your patience and understanding.

**CQ/X** is a "GPS-enabled logging program developed for use by mobile operators in state and regional QSO parties" which works in conjunction with appropriate hardware to automate county and grid tracking during contests. The program's author, NO5W, has is updating it for use during the upcoming ARRL International Grid Chase starting January 1, 2018. Watch his [website](#) for details

**Check out this application for those inexpensive DVB-T USB dongles:** [Reception of Russian Meteor-M2 Weather Satellite transmissions in real-time](#), using the SDR# DSP application along with a QPSK Demodulator plug-in. The rather complete article even includes an antenna recommendation.

**HF Signal** [hfsigs.com](http://hfsigs.com) is about to release the new [uBITX QRP Multi-band HF Transceiver](#), in addition to the [BITX40 40 meter SSB transceiver](#) has been mentioned previously in this newsletter.. According to their website, this is a board-level kit covering 3 to 30 MHz for SSB and CW operation. Assembly will require you to "... mount the board inside an enclosure of your choice, screw in the connectors and solder the wired connectors to the sockets and controls." The brain of the kit is an Arduino Nano processor running [open source software](#). "The BITX boards are hand assembled by a collective of women. Each of the toroids is hand wound. This provides these women with a livelihood. The assembled boards are then DC checked and a final RF check is performed to check the receiver's sensitivity as well as transmitter's output before being shipped."

**One of the few US broadcast stations east of the Mississippi that sport K-prefix call letters -- KQV in Pittsburgh -- will go silent** at midnight on January 1 after nearly 1 century on the air. "It's a sad day for broadcasting and for the news business," KQV Station Manager Bob Dickey Jr. [told](#) the Pittsburgh *Tribune Review*. The family-owned news-talk station operates on 1410 kHz with 5,000 W into a five-tower array that provides separate day and night patterns. Unofficial accounts indicate that KQV started out as "special amateur station" 8ZAE, to be used by the Doubleday-Hill Electric Company primarily for two-way communication with another station in Washington, DC. (Doubleday-Hill also sold radios.) In October 1921, the Federal Radio Commission issued the station a "limited commercial license," randomly assigning the KQV call letters

**MSHV** - The algorithms, source code, look-and-feel of WSJT-X and related programs, and protocol specifications for the modes FSK441, FT8, JT4, JT6M, JT9, JT65, JTMS, QRA64, ISCAT, MSK144, are Copyright © 2001-2017 by one or more of the following authors: Joseph Taylor, K1JT; Bill Somerville, G4WJS; Steven Franke, K9AN; Nico Palermo, IV3NWV; Greg Beam, K17MT; Michael Black, W9MDB; Edson Pereira, PY2SDR; Philip Karn, KA9Q; and other members of the WSJT Development Group.

The program was borrowed from the open source software K1JT. Only decoders and generators were used from K1JT – WSJT and were rewritten to C ++. Almost the same location of controls was used for easy operation. The software is fully compatible with the modes in WSJT software. The visual interface is QT4.6.8. All required libraries are compiled statically and are embedded in the body of the software. Additional libraries are not necessary. All settings and configurations happen immediately and do not need to be restarted, for example changing the sound settings or rig control.

Information:

Authors of the protocols are: K1JT Joe Taylor, and K9AN Steven Franke – for MSK144 and FT8

- MSK144 For meteor scatter. Message frame duration is 72 ms and with Sh option 20 ms. Character transmission rate for standard messages is as high as 250 cps.
- JTMS For meteor scatter. Character transmission rate 197 cps.
- FSK441 For meteor scatter. Character transmission rate 147 cps.
- FSK315 For meteor scatter. Character transmission rate 105 cps.
- ISCAT Optimized for meteor and ionospheric scatter at 6 meters. Character transmission rate 16.15 or 32.3 cps.
- JT6M Optimized for meteor and ionospheric scatter at 6 meters. Character transmission rate 14.4 cps.
- FT8 Designed for fast tropospheric QSOs.
- JT65 VHF/UHF For EME and troposcatter.
- PI4 PharusIgnis4 A digital modulation (MGM) for beacon purposes.

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NEW MSHV version 1.62

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**THANKS FOR READING. HAVE A SAFE AND HAPPY NEW YEAR!**

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