

RCA Amateur Radio Club Indianapolis, IN



www.w9rca.org

SEPTEMBER 2021

MONTHLY NEWSLETTER

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE TUESDAY, SEPTEMBER 14th 6:30 PM AT NORTH SIDE EVENTS, FORMERLY THE KNIGHTS OF COLUMBUS, IN THE GAME ROOM, 2100 EAST 71st, INDIANAPOLIS, IN

RCA ARC NEWS

AUGUST MEETING SUMMARY – Thanks to all who attended our first in-person meeting meeting since the the Corona Virus shut down. There was quite a crowd at the North Side Event Center with two large events there. The service was a bit slow but considering the crowd still very good and the food was as good as it had been in the past. The meeting room (game room) is given to us at no cost provided those attending buy some food.

We discussed Field Day in which the Indy FD Club did very well even though there were a host of technical problems mostly computer and/or network related. Final results have not been annunced yet. They are usually announced in December QST. One not computer problem turned out to be new LED lights which had been installed in the building since last year. Electrical noise from these lights was really bad so they were kept turned off. A new repeater proposed for Hortonville, IN on 146.865 was discussed as this is just 15kHz below our 146.880 frequency. Testing will be done to see if there is any interference. It was decided we should pay our dues to the Indiana Repeater Council.

AMATEUR RADIO LICENSE TEST SESSION

| Date: | Saturday, September 11, 2021 |
|--------------------|--|
| Time: | Starting at 12:00 pm by appointment only. |
| Location: | Salvation Army EDS Training Facility, 4020 Georgetown Rd |
| | Indianapolis, IN 46254-2407 |
| Required: F | RN and completed form NCVEC 605. |
| | |

Contact: Jim Rinehart, k9ru@arrl.net, 317 721-1458

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

| Sept 11-12 | Worked All Europe DX Contest https://www.darc.de/derclub/referate/conteste/wae-dx-contest/en/ |
|--------------------------|--|
| Sept 11-13 | ARRL September VHF Contest https://www.arrl.org/september-vhf |
| Sept 11 | MIDSTATE ARC Tail Gate Hamfest8 AM-Noon. Johnson County |
| - | Prosecutor's Office Parking Lot1 Caisson Drive, Franklin IN. |
| | PIO@MIDSTATEHAMS.ORG |
| Sept. 11 | Tippecanoe County Hamfest, Tippecanoe Co. 4H Fairgrounds, |
| | chell1470@gmail.com |
| Oct. 02 60 th | Annual Hoosier Hills Hamfest, Lawrence County 4-H Fairgrounds, |
| | http://www.w9qyq.org |
| Oct. 16 | Shelbyville 2021 Tailgate, Shelby County Fairgrounds, |
| | http://www.brvars.com |

FCC APPLICATION FEES UNLIKELY TO GO INTO EFFECT UNTIL 2022

The schedule of FCC amateur radio application fees likely will not go into effect before 2022. FCC staff confirmed during a recent virtual meeting with Volunteer Examiner Coordinators (VECs) that the agency is still working on the necessary changes to the Universal Licensing System (ULS) software and other processes and procedures that must be in place before it starts collecting fees from amateur applicants. Earlier this year, the FCC said it would not start collecting fees from amateur applicants before this summer. The new estimate is that the fees won't go into effect until early next year.

Once it's effective, the \$35 application fee will apply to new, modification (upgrade and sequential call sign change), renewal, and vanity call sign applications. All fees will be per application. Administrative update applications, such as those to change a licensee's name, mailing, or email address, will be exempt from fees. ARRL VEC manager Maria Somma, AB1FM, said Volunteer Examiner (VE) teams will not face the burden of collecting the \$35 fee.

"Once the FCC application fee takes effect, new and upgrade applicants will pay the exam session fee to the VE team as usual, but they'll pay the \$35 application fee directly to the FCC using the FCC Pay Fees system," she explained. When the FCC receives the examination information from the VEC, it will email a link with payment instructions to each successful candidate who then will have 10 days from the date of the email to pay.

After the fee is paid and the FCC has processed an application, examinees will receive a second email from the FCC with a link to their official license. The link will be good for 30 days. Licensees also will be able to view, download, and print official license copies by logging into their FCC ULS account. The FCC no longer provides printed licenses.

Licensees can log into the ULS with their 10-digit FRN (FCC Registration Number) and password at any time to view and manage their license and application, print their license, and update anything in their FCC license record, including adding an email address.

FEE SCHEDULE

INDIVIDUALS

\$35 FEE: New, modification (upgrade and sequential call sign change), renewal, and vanity call sign applications. All fees will be per application.

NO FEE: Administrative updates, such as a change of name, mailing or email address, or license cancellation.

AMATEUR RADIO CLUBS

\$35 FEE: New, renewal, trustee change, and vanity call sign applications. All fees will be per application.

NO FEE: Administrative updates, such as a change of name, mailing or email address, or license cancellation. --ARRL Letter

ARRL BOARD ESTABLISHES PROGRAM TO COVER INITIAL FCC LICENSE FEE FOR YOUNG APPLICANTS

The ARRL Board of Directors has formally endorsed a proposed program calling on ARRL to cover the \$35 application fee for license candidates younger than 18 years old. The FCC is not expected to implement the \$35 application fee schedule until sometime in 2022. The Board approved the "Youth Licensing Grant Program" at its July meeting in Hartford, Connecticut. The program concept, first raised at the Board's annual meeting in January, was reviewed by an adhoc committee, which expanded the scope of the original motion by ARRL Southeastern Division Director Mickey Baker, N4MB.

Goals of the Program include expanding the reservoir of trained operators, technicians, and electronics experts within the amateur radio community, and removing a financial obstacle to young people who wish to acquire an amateur radio license, as a means of encouraging potential careers in science, technology, engineering, and mathematics.

Under the program, ARRL would cover a one-time \$35 application fee for each qualified candidate who passes one or more amateur radio exams taken on the same day at a single examination session. Tests would have to be administered by a Volunteer Examiner (VE) team working under the auspices of the ARRL Volunteer Examiner Coordinator (VEC). Qualified candidates also would pay a reduced exam session fee of \$5 to the ARRL VEC.

The new program also would "enhance ARRL's position as the leader in volunteer testing," the Board motion said. "The Board believes that the recruitment and training of young amateur radio operators is a necessary and proper mission of the ARRL, and that subsidization of the \$35 fee will reduce the number of new amateurs that otherwise would be lost from these groups," the Board said.

The Board said ARRL Headquarters staff would determine the method of qualifying applicants and instruct VE teams, giving the teams flexibility to determine that a candidate is eligible for reimbursement in the absence of documented proof. The Board envisioned that the VEC would

pay the FCC directly. The new program initially would serve up to 1,000 new license applicants younger than 18 years old.

The motion gave ARRL staff "complete latitude" to determine how payment is delivered to the FCC or to reimburse eligible applicants. This program length is indefinite; it may be renewed or terminated by the Administration and Finance Committee or by the Board of Directors. The motion carried with applause from Board members. --ARRL

ARRL NOW PROVIDES FREE RF EXPOSURE CALCULATOR

The FCC has adopted guidelines and procedures for evaluating environmental effects of RF emissions. The new guidelines incorporate two tiers of exposure limits based on whether exposure occurs in an occupational or "controlled" situation, or whether the general population is exposed or exposure is in an "uncontrolled" situation.

Under the new FCC rules, some amateurs need to perform routine station evaluations to ensure that their stations comply with the RF exposure rules. This can be as simple as running an online calculator to determine the minimum safe distance between any part of your antenna and areas where people might be exposed to RF energy from your station. Although amateurs can make measurements of their stations, evaluations can also be done by calculation.

To make this easy for amateurs, ARRL now provides an <u>RF exposure calculator</u> on its RF Exposure page. To use the calculator, enter your transmit peak-envelope power (PEP) and operating mode, and answer the questions about the maximum amount of time you might be transmitting. The calculator will give you the minimum distance people must be from your antenna and human exposure.

You can print the results and keep them in your station records. There is no requirement to send your results to the FCC. --ARRL Letter

ARRL RESPONDS TO STORY OF RADIO AMATEUR TOLD TO REMOVE HIS ANTENNA

ARRL has responded to an Orlando, Florida, news story on August 23, 2021 by WFTV Channel 9 alleging a radio amateur was told to remove his antenna by the management of his subdivision following a complaint made by a neighbor.

"The news story appears to stem from a 2-year-old complaint from a neighbor who believed her insulin pump had malfunctioned due to the radio amateur's operations 'a few doors down," said ARRL Laboratory Manager Ed Hare, W1RFI. "The story is lacking any details or timeline, so I contacted the radio amateur involved for information, and volunteered ARRL's assistance."

Hare explained that medical devices such as insulin pumps are regulated by the US Food & Drug Administration (FDA) specifically for electromagnetic compatibility (EMC) purposes and are expected to be capable of operating in all the RF environments likely to be encountered by consumers. FDA published guidance for its staff and industry defines EMC with respect to electrically powered medical devices "as the ability of a device to function safely and effectively in

its intended electromagnetic environment, including immunity to electromagnetic disturbance (interference)." FDA review of EMC information submitted with a device for approval "is based on the risk associated with EMC malfunction or degradation of the device under review, as well as the use of appropriate FDA-recognized standards or appropriate consensus standards."

Hare noted there is an FDA recall for the model number of the insulin pump in question, in approximately the same time frame. "But with so few details, there is no way of knowing whether that recall applies to the serial number used or whether the exact unit has the mechanical defect indicated in the recall notice that could cause the malfunction," explained Hare.

It also became apparent that there is no actual evidence connecting the amateur's transmissions to operation of the insulin pump. Hare was told that the amateur agreed to run tests to establish whether there was a cause and effect, but the neighbor declined.

Hare commented, "While there are no requirements for a radio amateur to stop transmitting due to alleged interference to a non-radio device, the preferred path with any complaint is for neighbors to work together."

3YOJ BOUVET ISLAND DXPEDITION RECEIVES \$100,000 FROM NORTHERN CALIFORNIA DX FOUNDATION

The Northern California DX Foundation (NCDXF) has donated \$100,000 to the upcoming 3Y0J DXpedition to Bouvet Island, which is set for late 2022. The DXpedition will be carried out by Amateur Radio DXpeditions, a Norwegian non-profit organization created for the purpose of conducting DXpeditions. The NCDXF is now the DXpedition's lead sponsor.

"We wish to recognize and thank the Northern California DX Foundation as the lead sponsor for our 3Y0J DXpedition to Bouvet," the 3Y0J team said. "Without the support of the NCDXF, operations to the world's rarest entities would be difficult."

A dependency of Norway, Bouvet is a sub-Antarctic island in the South Atlantic. It is the secondmost-wanted DXCC entity, behind North Korea.

The 3Y0J team said that with its overall budget of \$650,000, this DXpedition to Bouvet will be the most expensive ever. "With the NCDXF donation we hope to succeed in the fundraising as our first payment milestone for the vessel contract is approaching," the team said.

About a third of the vessel contract is due by the end of October, and the DXpedition said it wants to have confidence that it can succeed financially. "We critically need up-front donations to be able to make it. While we have a solid plan, a young and strong team, a dedicated crew, and the vessel *Marama*, we need your support to go there and make 120,000 QSOs from Cape Fie at Bouvet."

Three co-leaders are heading up the DXpedition. They are Ken Opskar, LA7GIA; Rune Oye, LA7THA, and Erwann Merrien, LB1QI.

Donations to the 3Y0J DXpedition are invited via PayPal or through the 3Y0J website. Visit the <u>3Y0J DXpedition Facebook page</u>.

In June, the Intrepid-DX Group announced that it was canceling its long-anticipated DXpedition to Bouvet Island after it lost its vessel contract. --ARRL

CQ WORLD WIDE DX CONTESTS TO INCLUDE YOUTH OVERLAY

Effective this fall, the CQ World Wide DX Contests (CQ WW) will offer a new Youth overlay, available to all competitors who are 25 years old or younger, as of the dates of the events. The Cabrillo overlay format will be CATEGORY-OVERLAY: YOUTH. To support this change, Youth overlay entries will be highlighted in the results, as is now done in the case of Classic and Rookie entries. Plaques will be available for winners in this category.

CQ WW has also established a new <u>Explorer</u> category to allow amateurs to participate in the CQ WW Contest while experimenting creatively with internet-linked stations and other developing technologies. The goal is to encourage innovation in operating strategies, station design, and technology adaptation.

CQ WW Contest Director John Dorr, K1AR, reminds participants that audio recordings may be requested for your entry as part of the log-checking process. Any single operator entrant competing for a top five finish at the world, continent, or US levels -- including Classic Overlay -- must record the transmitted and received audio, as heard by the operator for the duration of the contest operation. Failing to respond to this request may result in your log being reclassified or disqualified.

"The combination of embracing new technology as well as recognizing the youth community among us is going to make CQ WW an even more popular event," Dorr said. "My thanks go out to the CQ WW Contest Committee and others who helped make this happen." --ARRL Letter

JULY VOLUNTEER MONITOR PROGRAM REPORT RELEASED

The July 2021 activity report of the Volunteer Monitor (VM) Program has been released. This program is a joint initiative between ARRL and the FCC to enhance compliance in the Amateur Radio Service.

•Technician-class licensees in Spring Valley, Smith River, and Nipomo, California; Oneonta, New York; Idaho Falls, Idaho, and Center, Texas, received *Advisory Notices* concerning FT8 operation on frequencies not authorized to Technician licensees.

•General-class licensees in Marco Island and Arcadia, Florida, as well as in Maryland, received *Advisory Notices* for operation in the Amateur Extra-class portion of the 20-meter band.

•A licensee in Parks, Arizona, received an *Advisory Notice* concerning failure to abide by a request to stay off a repeater. The matter will be referred to the FCC for enforcement action.

•A General-class licensee in Acworth, Georgia, received an *Advisory Notice* concerning failure to identify properly and for repeated communications with unlicensed stations on 3.895 MHz.

•An Amateur Extra-class licensee in Keansburg, New Jersey, received an *Advisory Notice* concerning on-the-air threats directed at another operator on 3.844 MHz.

•The final totals for VM monitoring in July were 1,736 hours on HF frequencies and 2,185 hours on VHF and UHF frequencies.

The IT staff at ARRL Headquarters has begun work on the automated system for Volunteer Monitors to report monthly monitoring hours and *Incident Reports. -- Thanks to Volunteer Monitor Program Administrator Riley Hollingsworth, K4ZDH* –ARRL Letter

MINES ON THE AIR (MOTA) PROMOTED AS AN ACTIVITY SIMILAR TO SUMMITS ON THE AIR (SOTA)

Many hams enjoy getting out of the house to operate, engaging in such activities as Summits on the Air (SOTA), Parks on the Air (POTA), or Islands on The Air (IOTA). Now it's time to try Mines on the Air (MOTA) -- but banish any thoughts of underground operating. The spark plug for this activity is John "JohnnyF" Fuller, WJ0NF, in Colorado.

"I decided to start...the MOTA project because mines are everywhere in my area, and I was already checking them out and researching their history," Fuller explained on the MOTA website. He got into ham radio after losing "internet, cell, and landline service for the fourth time in 2016."

MOTA aims to see operators get out of the shack, enjoy the hobby, and take others (spotters) along for the ride. "It is meant to promote the hobby, enjoy the world around us, and bring a bit of history into our lives," Fuller said. "I encourage Activators to document their adventure with photos and videos that they can share with everyone -- either via this site, their own sites, or YouTube videos."

He continued, "I would also encourage activators to bring back part of the enjoyment via QSL cards. If you have the means, spend a few dollars, and create one-of-a-kind, limited-edition QSL cards for the spotters that couldn't be there."

Fuller said he's planned on limited runs of 20 - 30 cards for each activation, each card bearing an image of the relevant mine.

"We are just starting out, and I am sure things will change as the project grows," Fuller said. "For now, I would like to create a form where MOTA Activators can fill out the relevant information and submit it for addition to the database. Once the project grows past a critical point, we will have to move to a more interactive site where you can

search through the database and upload information on your own."

Fuller said to activate a mine and have it added to the database will just include information describing where the site is located and photographic proof that the operator was there. If a link to a website for the mine is available, he'd like that included too. Fuller's <u>Activation</u> <u>Requirements</u> page has more details.

Fuller has one important caveat: activating a mine for MOTA "is not meant for people to risk their health or lives by exploring unsafe locations. No more than SOTA or IOTA. In each activity, you need to use common sense. Stay out of these old mines and be safe."

He notes that not all mine sites are open to the public. "Make sure you know ahead of time what legal access you have to the location," he said. --ARRL Letter

FCC TO ALLOW FM ON CB, AUTOMATIC LOCATION TRANSMISSIONS ON GMRS/FRS

The Federal Communications Commission will amend its rules governing short-range, low-power radio services that will affect the CB radio service, general mobile radio services (GMRS) and family radio service (FRS).

At its Open Meeting on Aug. 5, the <u>FCC ruled on three petitions for reconsideration</u> of the 2017 Report and Order to update the commission's Part 95 personal radio services rules. The move will allow frequency modulation to be used as an optional modulation scheme for all existing CB radio service channels and allow automatic or periodic location and data transmissions in the GMRS and FRS, which are sometimes used during recreational activities and during emergencies and natural disasters.

The commission decided the public interest would be served by adopting additional rule changes. Cobra Electronics requested the commission permit frequency modulation as an optional modulation scheme in the CB radio service. Motorola Solutions asked the commission to allow automatic or periodic location and data transmissions on GMRS and FRS frequencies. Medtronic sought the correction of typographical errors and rule changes that inadvertently altered the substance of the Medical Device Radiocommunications Service (MedRadio) rules.

When the FCC last considered changes to Part 95 rules surrounding CB radio in 2017, the commission declined to allow use of frequency modulation; amplitude modulation and SSB single side band remained the only permitted voice-emission types. At the time, the commission concluded that such a change might substantially change the character of the service.

After considering Cobra's request, however, the commission found that permitting dual modulation will provide a significant benefit to CB radio users, giving them an additional modulation option while still maintaining the basic character of the service. "The addition of FM as a permitted mode will not result in additional interference because users who hear unintelligible audio on a particular channel can simply select another channel or switch modes," the commission said in its most recent ruling.

The commission noted that amplitude modulation and frequency modulation operations are permitted in other Part 95 services under similar technical parameters. The commission will generally apply the technical rules to FM signals as they are currently applied to AM signals for the CB Radio Service, an approach taken in other Part 95 services.

REGISTRATION NOW OPEN FOR AMSAT SPACE SYMPOSIUM

Registration is now open for the 39th AMSAT Space Symposium and Annual General Meeting, Friday through Sunday, October 29 – 31, at the Crowne Plaza AiRE in Bloomington, Minnesota, adjacent to the Minneapolis-St. Paul International Airport. General registration is \$75, and student registration is \$40. Registration for the Saturday evening Symposium Banquet is an additional \$55. Registration includes a digital copy of the 2021 AMSAT *Symposium Proceedings* and admission to the Symposium presentations and exhibits.

The AMSAT Board of Directors will meet Thursday and Friday, October 28 – 29. AMSAT Space Symposium presentations will start at 1 PM CDT on Friday and continue until 5 PM. The AMSAT

Reception is set for 7 PM on Friday. AMSAT Space Symposium presentations will continue on Saturday, October 30, 8 AM – 3 PM (with a 1-hour lunch break at noon). The AMSAT General Meeting gets under way at 3 PM on Saturday. The banquet will begin at 7 PM, preceded by a reception at 6 PM. The 3-day event wraps up with the AMSAT Ambassadors' Breakfast on Sunday at 7 AM.

Attendees may make reservations by calling the hotel directly at (952) 854-9000 or (877) 424-4188 (toll free) or online at **crowneplazaaire.com**. The group name is Amateur Satellite Group. Platinum and Titanium members of the AMSAT President's Club receive free admission to the Symposium and a complimentary lunch with the President on Saturday afternoon. Email **members@amsat.org** to arrange registration.

Presenters are invited to participate at the Symposium and/or submit a paper to the *Symposium Proceedings*. The Call for Papers includes more information.

GENESIS HAM SATELLITES AMONG PAYLOADS LOST IN LAUNCH FAILURE

The GENESIS-L and GENESIS-N ham radio satellites were among several carrying amateur radio payloads lost following the failure of the Firefly Alpha rocket during its first launch on September 2 from the Vandenberg Space Force Base in California. An anomaly occurred about 2 minutes into the mission, causing controllers to destroy the launcher in flight. The anomaly has yet to be explained.

This was sad news for AMSAT-EA (Spain), as GENESIS-L and GENESIS-N were the first satellites they had built themselves. According to the AMSAT-EA website, the GENESIS satellites were destroyed after the Firefly Alpha vehicle presented an anomaly as it hit a velocity of Mach 1 and reached Max Q, a point of maximum aerodynamic pressure on the vehicle. The launch had been halted a few seconds before takeoff, but the countdown was subsequently resumed. --ARRL Letter

GENESIS-L and GENESIS-N were to conduct a series of telecommunications-related experiments, while a ground-station analysis of the received signals would try to attain Doppler variations in order to perform orbit determination and satellite identification from radio amateur stations around the world.

Also lost in the launch failure were the Serenity, Hiapo, the Cresst Dream Comet, and QUBIK-1 and QUBIK-2 satellites, and Spinnaker-3/Firefly Capsule 1. All were designed to use amateur radio frequencies for telemetry and/or communication.

SHORTS

Roland "Rol" Anders, K3RA, has announced the starting date for this year's free Technician licensing class -- Sessions will be held online via Zoom. Classes start

on Thursday, September 9, and run for seven sessions. Anders has been holding these popular classes from the National Electronics Museum for many years. He chairs the National Conference of Volunteer Examiner Coordinators (<u>NCVEC</u>) Question Pool Committee. Anders has been following up his Technician exam class sessions with classes for prospective General-class and Amateur Extra-class licensees. Classes, which are available worldwide, have been recorded for later viewing. <u>Contact</u> Anders via email. -- *Thanks to* <u>The Daily DX</u>

The <u>Antique Wireless Association</u> has a vision "To preserve and share the history of technology used to communicate and entertain from the first telegram to today's wireless text messaging." Radio, specifically amateur radio, had a large role in early communication history. The AWA sponsors a number of contests during the year, and participants use vintage gear, or gear built in the style and tradition of long ago. The first contest is the <u>Bruce Kelly 1929</u> <u>QSO Party</u>, over the November 13 and November 20 weekends. If you start soon, you might be able to <u>build a transmitter</u> between now and then.

Peter, DF1LX, has written a tool for N1MM Logger+ called <u>n1mm_toolbox</u>. It's a 64-bit Microsoft Windows application that provides the following functionality:

Warns when operating outside of designated "contest-preferred segments" for IARU Region 1

- "Call Sign Alert" a file of call signs can be provided; if a spot is received with that call sign, it will be displayed in a small window, and that spot can be tune in the logger
- Time On/Off display in a window
- Countdown timer to contest start
- Record and play audio files

According to Joe Taylor, K1JT: "WSJT-X 2.5.0-rc4 has a bug that prevents normal use of messages that include compound or nonstandard call signs. For this reason we are making a public Release Candidate WSJT-X 2.5.0-rc5 after an unusually short interval. <u>The RC5 release candidate is now ready for download by beta testers</u>. On Windows the installation package also includes MAP65 3.0.0-rc5."

Meteor Scatter - A <u>propagation mode</u> that takes advantage of the ionization trails left by extraterrestrial debris burning up after entering the Earth's atmosphere. Every day, meteor scatter opportunities exist for contacts on 10 meters, 6 meters, and 2 meters at distances between 500 to 2300 kilometers, especially during the morning hours. During meteor showers, there may be hundreds of "pings" per hour. WSJT-X's MSK144 mode is typically used for meteor scatter communications, though the newer shorter-duration <u>Q65</u>-12A mode may see increasing use. To get started, try <u>Parker Radio Association's Simple Guide to Meteor Scatter / MSK144</u>.

Electronics Notes has begun to develop a <u>virtual museum and directory</u> of various vintage radios. It may include everything from crystal sets to early tube radios, government and military gear, and ham radio equipment up to the early solid-state era. Each radio gets a description, details of the specification, and a circuit where possible. Some already in the database include: the Philco 111 superheterodyne (1931); some of the EKCO Art Deco round radio sets from the 1930s - 1940s; a selection of government surplus radios such as the AR88, Marconi CR100, and 150; some ham radio equipment, and a Tandberg radio from the 1970s. "As you can imagine, this is very much a 'work in progress,' so we will be adding more as time permits so we can end up

with a useful selection of radios that people will find interesting to browse and read about," the website said.

<u>RadioBerry</u> is an HF SDR Transceiver board by PA3GSB built in the form factor of a **Raspberry Pi-Hat**. With DDC and DUC, it's operating range is 0-30 MHz. The <u>RTL-SDR.com</u> website features a video showing setup, configuration, and reception of HF signals a RadioBerry and Raspberry Pi 4

You just received an email with some contest video taken with a cell phone, and your Microsoft Windows 10 mail program or web browser is prompting you to buy a CODEC \$0.99 so you can view it? It's because some of the really new cell phones encode video with the H.265 format, which isn't supported by default in Windows 10. You can avoid the one-time \$0.99 download by installing the free open source application VLC media player, which includes support for the H.265 format. Once you install the free VLC app, the next time you get a video in that format, playing it will work just fine!

Growing Confusion on Bouvet DXpedition - There's bad news, good news and growing confusion on the long-planned (but currently cancelled) 2023 DXpedition to Bouvet Island. There are now three separate groups planning trips to the subantarctic island ... this year, next year and in 2023.

Shifting Sands (??) on the Sun - Spaceweather.com says Cycle 25 is "heating up faster than expected" and could mean an early solar maximum. But the Solar Terrestrial Activity Report says the new solar cycle is very closely tracking Cycle 24.

RS-HFIQ 5 Watt HF SDR Transceiver by HobbyPCB

https://forums.qrz.com/index.php?threads/rs-hfiq-5-watt-hf-sdr-transceiver-by-hobbypcb.778966/ https://www.hobbypcb.com/index.php/products/hf-radio/rs-hfiq

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