

Di-Dah-Dit

Official Newsletter of the Parkersburg Radio Klub 1722 20th. St. Parkersburg, WV 26101

Ham Radio University Going Virtual Again

With COVID-19 uncertainties precluding an in-person gathering for a second year, the 23rd annual Ham Radio University (HRU) educational conference will be held as a virtual event again this year, on Saturday, January 8, 1300 - 2000 UTC, as an online GoToWebinar

HF and VHF Digital Communications

Parks on the Air

SKYWARN

Cables and Connectors

Using Raspberry Pi Computers in Amateur Radio.

Online attendees will be able to ask questions of the presenters. Founded by Phil Lewis, N2MUN (SK), HRU also serves as the online convention of the ARRL NYC-Long

Island Section.

As in past years, participation in HRU 2022 is free; an optional donation of \$5 is suggested. Additional information is online, including the schedule of forums and advance registration starting December 20. * * * * * * * * * * * * * * * * * *



videoconference.

Advance registration is required and begins on December 20.

HRU 2022 will be adding five forums this year, for a total of 19 presentations by experts in a broad range of amateur radio activities, including Amateur Radio Emergency Communications. Other topics are:

Basics of HF Operating

Ham Radio Contesting and DXing

Communicating through Amateur Radio Earth Satellites

Software-Defined Radios

Observations of Overthe-Horizon Radar Interference in Ham Bands **Top All Others**

12/15/2021

The volume of reports of over-thehorizon (OTH) radar interference from observers working with the International Amateur Radio Union (IARU) Region 1 Monitoring System (IARUMS) dwarfs that of all other interference sources, the November IARUMS newsletter reports. Nearly 800 OTH radars were observed during November alone, and the total number of reports for the year is more than 4,500 — although that number likely includes multiple reports of the same OTH radar systems. While the intruder watcher is focused on IARU Region 1, much of the major interference it recounts can affect the amateur bands in the world's other two IARU regions. IARUMS has tracked most OTH radar signals to sites in Russia and China, but a recent report indicated that India has an OTH radar system in the works. IARUMS is calling the system "of concern," although it's not known what frequencies it may use.



During November 17 – 21, IAR-UMS reported a "strange, somewhat washed-out signal" on the order of 7 kHz wide, that "drifted slowly back and forth" in 40 meters and below.

"The first evaluation suggested a double-sideband signal," the newsletter said. "Wolf, DK2OM, could determine the symbol rate at 2400 bps. It was probably a signal from the family of single-tone 1800 Hz [8-PSK] modulated modems."

Some IARUMS stalwarts made multiple time-difference-of-arrival (TDoA) observations that pinned the signal's source to east-southeast of Toulouse, France, not far from a French Naval radio station. The signal disappeared on November 21.

IARUMS said it's been observing wideband radars — likely of Chinese origin — with bandwidths of up to 160 kHz at 10 sweeps per second. In November, however, reports began to accumulate of radars — or perhaps a combination of OTH radar signals — with bandwidths of up to 360 kHz. "It was also often observed that the [OTH radar] shifted its frequency back and forth, which is also sometimes the case with the [Chinese] 'Foghorn' systems," IARUMS said. In the Far East, IARUMS speculated, such a signal could blanket the entire 40-meter band.

Ongoing is the "radio war" between Russia and Ukraine, which IAR-UMS said has been "a constant nuisance for years." The broadcasts are heard on 7050 and 7055 kHz, as well as on other frequencies.

Senator Blumenthal Supports Amateur Radio at Senate Confirmation Hearing

Senator Richard Blumenthal (CT) received an affirmative reply from FCC Chairwoman Jessica Rosenworcel when he asked her to com-

mit to providing his office "an update on the steps that the FCC is taking to support amateur radio operators." The Senator posed the written

question as part of Rosenworcel's renomination hearing conducted by the Senate Commerce, Science, and Transportation Committee.

Blumenthal noted specifically that "Radio amateurs voluntarily provide an array of public services, especially emergency and disaster-related support communications when infrastructure has been destroyed by a hurricane or similar disaster. Their contributions in this area are regularly recognized by local and state authorities."



US Senator Richard Blumenthal

"ARRL is grateful to Senator Blumenthal for his support and recognition of radio amateurs," said ARRL President Rick Roderick, K5UR. Blumenthal has previously co-sponsored legislation supporting amateur radio, and his staff was recently briefed by ARRL on pending amateur radio matters at the FCC. Roderick added, "We need the partnership of the FCC and Congress to ensure our rules and spectrum con-

tinue to support the march of technological innovation in our vibrant Amateur Radio Service."

Multiple proceedings to update or change the FCC's Amateur Radio Service Part 97 rules to account for changes in technology and operating practices have been languishing at the FCC, some going back five or more years. ARRL is hopeful that these will be addressed soon.

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Replica Transmitter will be On the Air to Mark Transatlantic Test Success

A replica 1BCG transmitter will operate as W2AN/1BCG on ±1.820 MHz on CW, from The Vintage Radio and Communications Museum of Connecticut.

"We're using type 204-A tubes," said Mark Erdle, AE2EA, of the Antique Wireless Association. "The original transmitter used type 204 tubes. The primary difference is that the 204-A tubes had a thoriated filament that reduced the filament current. Transmissions from W2AN/1BCG will be one way, just like the original transatlantic tests in 1921. An SWL certificate is available by emailing a copy of the transmitted message.

Transmissions start on December 11 at 2300 UTC continuing every 15 minutes until December 12 at 0400 UTC.

In a separate event on December 12 at 0252 UTC, The Radio Club of America's W2RCA will make a one-way transmission on 1825 kHz at 12 WPM CW, from Connecticut. RCA members constructed the orig

inal transmitter and "shack" used in Connecticut for the successful transatlantic transmissions. In addition to the original 1921 message, a new message will be transmitted that looks ahead to the next 100 years. Those who copy the message qualify for a certificate. -- Thanks to Mark Erdle, AE2EA, Antique Wireless Association, and to the Radio Club of America



The 1BCG replica transmitter with room for additional 204-A tubes for more power.

ARRL and the Radio Society of Great Britain (RSGB) have assembled a list of stations and groups that are organizing events and activities to celebrate 100 years of amateur radio transatlantic communication. Visit http://www.arrl.org/transatlantic and https://rsgb.org/transatlantictests. The sites also include links to many previously published articles and presentations covering the historic tests.

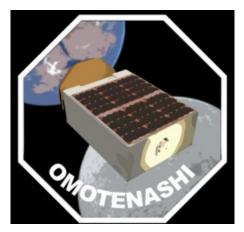
World's Smallest Moon Lander from Japan will Put Ham Radio Transmitter on the Moon

Japan's OMOTENASHI, the world's smallest moon lander, will have an X-band and UHF communication system, although it will not carry an amateur band transponder.

OMOTENASHI is a 6U CubeSat set for launch via a NASA SLS rocket as early as February 2022. It will have a mission period of from 4 to 5 days. The name is an acronym for Outstanding Moon Exploration Technologies demonstrated by Nano

Semi-Hard Impactor. Wataru Torii of the Japan Aerospace Exploration Agency (JAXA) Ham Radio Club, JQ1ZVI, said radio amateurs can play a role in gathering data from the spacecraft.

The spacecraft is made up of two separable components, both having independent communication systems -- an orbiting module and a surface probe. The orbiting module will take the surface probe to the moon. It will transmit beacon or digital telemetry data on UHF (437.31 MHz). The surface probe -- the moon lander -- will transmit digital telemetry or three-axis acceleration analog-wave with FM modulation on UHF (437.41 MHz). Transmitter power will be 1 W in both cases.



"If we succeed in receiving the UHF signal from the surface probe, we could know the acceleration data on the impact on the moon and the success of the landing sequence," Torii explained.

"We already have a station for uplink and downlink at Wakayama in Japan -- used as an EME [moon-bounce] station. However, if the satellite is invisible from Japan, we cannot receive the downlink signal. So, we need a lot of help from ham radio stations worldwide."

The orbiting module beacon will transmit on 437.31 MHz using PSK31. The surface probe beacon will transmit on 437.41 MHz using FM, PSK31, and PCM-PSK/PM.

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Dayton Hamvention Expects to be Live Event in 2022

Dayton Hamvention® organizers are planning to mount the first inperson show in 2022, following 2 years of COVID-related cancellations. The event is set for May 20 -22 at the Greene County Fairgrounds and Expo Center in Xenia, Ohio. Last January, Hamvention organizers from the sponsoring Dayton Amateur Radio Association (DARA) announced they were calling off the 2021 event after considerable planning was already under way. The Hamvention Executive Committee cited lagging COVID-19 vaccine distribution in the US and the emergence of a more communicable form of the virus.



Southgate Amateur Radio News quotes Hamvention General Chairman Rick Allnutt, WS8G, as saying that Hamvention committees "have been meeting, and volunteers are committed to making up for the time lost to pandemic cancellations." The Hamvention website is already accepting bookings from vendors and inside exhibitors, and individual visitors can already buy tickets, which Allnutt said, "are all printed and ready to go."

Nominations for the 2022 Hamvention Awards opened on November 1. Hamvention seeks "the best of the best" nominees for its Technical Achievement, Special Achievement, Amateur of the Year, and Club of the Year awards. Nominations close on February 15, 2022. Submit nomination forms via email or USPS to Hamvention Awards Committee, Box 964, Dayton, OH 45401-0964

Contest University (CTU) will take place on May 19 in conjunction with the annual Hamvention Super Suite activities, which will be moving to the Hope Hotel in Dayton. In addition to CTU, these activities will include the Top Band Dinner, the Contest Dinner, and the KC DX Club's CW-copying competition, among other possible events. *****

Minutes October 2021

Meeting was called order by Mike at 6:25 50-50 raffle was held one by Bob KB8FB of \$15 Minutes of the Sept. meeting were read by Mary Wharton and approved as read.

Introductions were made by 20 members and guests.

Old business:

Earl KB8HRG gave a report on the digital repeater. He thinks he's going to go with the fusion digital process because the radios are a little bit higher in price but the fusion system is more versatile than the DNR system, after 15 minutes of

discussion it was decided that we needed to do a little bit more work and Eatl would get back to us in November with the price and place of purchase.

Earl KB8HRG expressed condolences for the Klub at the passing of Bill Roberts KE8GGV's wife Linda KE8PZT, Several Klub members were going to the funeral home at the conclusion of our meeting.

New business

Jerry KAHNJW read to the correspondences that we had received concerning the ARRL Roanoke Division Director elections. The letters were from N2ZZ and WA4NC concerning their candidacy's for this position. No recommendation was given by the klub. You should be getting your ballots within the next week if you are an ARRL member.

It was reminded that you can get a club application from the website W8PAR.org.

There was some discussion about Christmas meetings and whether we could get the Southern Bells as entertainment this year. Jane N8MOW said she would check into it.

Having no further business Bob KBADFB motion to adjourn at 7

Minutes taken by Mary Wharton, secretary.

November Minutes 2021

Meeting was called to order by Mike at 6:40 (The meals were running late)

Introductions were made by 21 members and guests

50-50 drawing was won by a C8NW Danny for \$20

Treasures report was given by Jane in a demo WN8MOW and excepted an audit has just been completed and the books checked out OK Minutes from the last meeting were read by Mary Wharton and approved as read

New business:

Jane indicated she had talk to Bill about the memorial for his wife Linda it was decided to donate \$50 to the Humane Society in her name.

Jane has arranged for the mandrel singers to give entertainment at the Christmas dinner which will be held on December 13, 2021 at the Western Sizzlin steakhouse.

Jane and Mary will be working on Christmas decorations for the tables.

We discussed with Earl the purchasing of the New repeaters.

He has permission to purchase whatever he decides is best that was voted on tonight to allow him to make that decision

Having no further business Bob KBADFB motion to adjourn about 720.

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Members December 13, 2021

Members started arriving about 5:30 for their dinner's. The tables were decorated with green table clothes and centerpieces with holly, Thanks Jane.

After eating at ablut 6:30 we were treated to a concert by the Parkersburg South High School Mandrel singers. They gave a very nice concert of traditional music.

Mike called the meeting to order at about 6:45.

Introductions were made by 25 members and guests.

The 50-50 raffle was one by Bob KB8EFB in the amount of \$25.

We skipped the treasures report and the minutes of last meeting.

There was no new business.

The only old business was about the repeater and Earl KB8HRG will give a report next month.

Next we had door prize drawings and we had a pile of them. Thanks for very generous Klub members ,everyone got at least two door prizes, consisting of food and flashlights and knives etc.

The meeting was adjourned at approximately 7 o'clock.

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Photos from the Christmas Dinner/Meeting















I am going to try and get a video on the W8PAR website.