



Next Monthly Meeting: Thursday, January 7th, 2021

The next scheduled meeting of the Wireless Association of South Hills, Inc. will be on Thursday, January 7th, 2021.

Due to the pandemic situation, the conference room at St. Clair Hospital's Outpatient Center is not available, and has been replaced by an on-line Zoom meeting, also starting at 7 PM.

If you would like to attend but did not receive an invitation, contact Tony KB3BYA. See you there!

Cover Photo: Happy New Year& Welcome 2021!

Cover Photo courtesy of an Internet search and was uncredited.. We'll credit when we find out whom to credit, sorry about that

WASH 2021 OFFICERS

EXECUTIVE COMMITTEE:

President Tony Romano KB3BYA Dan Campbell K3CMU VP / Secretary VP / Treasurer Mark Stabryla N3RDV

AND WE COULDN'T DO IT WITHOUT:

N3SH Trustee Larry Comden K3VX Rich Danko N3SBF WA3SH Trustee NP2SH Trustee Paul Jordan NP2JF N3SH WA3SH NP2SH/B QSL Manager Ron Notarius W3WN Carl Schroeder K9CS NP2SH 2009 QSL Manager VE Team Liaison Grant Olson KC3MLL Webmaster Curtis Turner KB3CMT Harold Rosenberger K3HCR Quartermaster WASH FM Net Manager Chuck Bihun KC3ELA WASHFest 2021 Committee Carol Danko KB3GMN, Chairman Bill Hill W3WH, Co-Chair

Rick Bell KB3IAC Activities & Operating Events Ways & Means Carol Danko KB3GMN WASH 2M Contest Chair Chuck Bihun KC3ELA Field Day 2021 Coordinator Glen Roberts KE7FD

Club-Affiliated Repeaters, Beacons, & Digipeaters:

Mt. Lebanon N3SH/R 146.955 MHz (-) PL 131.8 North Side N3SH/R 442.550 MHz (+) PL 131.8 443.650 MHz (+) Canonsburg N3FB/R PL 131.8 NP2SH / B St. Johns, VI 28.276 MHz Propagation Beacon N3SH APRS Digipeater 144.390 MHz Canonsburg

N3SH / WA3SH WASHNet, the weekly on-air net of WASH, meets every Monday Night, 8:00 PM ET, on the 146.955 & 443.650 repeaters. All radio amateurs, WASH members or not, are welcome to join in!

THE LEGAL STUFF

"The WASHRag TM" (formerly "The Mariner TM") is the Official Newsletter of the WIRELESS ASSOCIATION OF SOUTH HILLS, INC. (WASH), a 501.C.3 not for profit organization.

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Editor & Publisher: Ron Notarius W3WN

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Ron Notarius W3WN

3395 Rosewood Drive, Castle Shannon, PA 15234-2546 newsletter at n3sh dot org or w3wn at arrl dot net e-mail:

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The Wireless Association of South Hills, Inc. was founded on August 23rd, 1993, as the original **South Hills Amateur Radio Club**, and operated under that name through 1998. WASH was also known briefly in late 1998 as the N3SH AMATEUR RADIO CLUB. It is not in any way affiliated with the "South Hills Amateur Radio Club, Inc." and is not responsible for that group, it's members, or it's actions in any way, shape, or form.

As always, special thanks to the owners & operators of both the N3SH/R Repeaters and the N3FB/R Repeater System for permitting the WIRELESS ASSOCIATION OF SOUTH HILLS, Inc. and it's members to use their repeaters for club purposes.

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WASH Amateur Radio Club News Briefs

Next WASH VE Test TBA

We still haven't been able to schedule any VEC Sessions for the year, due to the COVID-19 crisis.

But we do have people indicating that they'd still like to get

The VE Team is looking into holding some small sessions to try and accommodate as many as we can . Finding a venue has been... challenging... so we may have to do it at someone's kitchen table.

More details on this will be forthcoming on the club email reflector, as we work out the details.

Tony's Musings

Happy New Year!!! I hope this finds everyone in good health.

Here is to a brighter future in 2021!

And let's start that out with the 2 Meter Contest on January 9th!!

Most likely the next few meetings will be via Zoom Thanks and everyone STAY SAFE and HEALTHY!!

> — 73, Tony Romano KB3BYA President, Wireless Association of South HILLS, Inc.

N3SH / WA3SH / NP2SH

Reminder: The January WASH Meeting will be held online as a Zoom Meeting. If you would like to attend the meeting but did not receiving an invitation, please contact Tony Romano KB3BYA immediately.

If you do not have or cannot install the Zoom app, you can attend by telephone: Tony will get you the phone number.

WASHFest 2021 Cancelation Notice

The Wireless Association of South Hills Officers have been monitoring fallout from the COVID-19 pandemic, particularly large-gathering guidance and mandates from the CDC and the Governor of Pennsylvania Tom Wolf along with Dr. Rachel Levine, Secretary of the Department of Health.

As our world turned upside down last March we held out hope that we could anticipate a brighter picture this coming February for WASHfest. However, due to strict capacity limits on indoor gatherings, WASHfest 2021 this February would not be feasible for safety reasons.

With deep sadness the WIRELESS ASSOCIATION OF SOUTH HILLS has voted to cancel WASH test 2021. We make this decision for The health and safety of all WASH club members, The safety of our Visitors, Vendors, and Volunteers and family is of the highest priority, I urge everyone to maintain proper social distancing please be safe everyone! We expect to be constantly monitoring the situation and looking for any opening that would let us resume normal club activities.

73, Tony Romano KB3BYA, President, WIRELESS ASSOCIATION OF SOUTH HILLS, Inc.

With regards to the above announcement... Not exactly the way we wanted to start off the new year, was it? Most unfortunate, to say the least. But we as a group will survive. The deposit has been rolled over to 2022. And we simply move on to 2022 as our next hamfest. We simply will roll with the proverbial punches, and move on.

Chuck KC3ELA has announced the date for the 2021 WASH 2 Meter Simplex Contest, which will be on Saturday, January 9th. The 2021 rules will be on the club web site in the near future, and are printed on Page 9. Looking forward to another fun event!

There's not really a lot to add. 2020 was a rough year for everyone. 2021 promises to be better, but time will tell.

Continue to be safe. Follow the precautions. Get the vaccine when you can. And before you know it, Hamfests, Field Days, Corn Roasts and picnics, and all the things we've been missing out on the last few months will be back. (Unfortunately, yes, you are going to have to interact with certain hams again, especially THAT guy — you know who he is... It's a small price to pay for normalacy)

Join WASH or Renew your Membership Today! Membership Application on Page 13

Minutes, December 3rd Meeting

Dan Campbell K3CMU, Vice President.Secretary, WASH

Note: Due to the Pandemic Quarantine, this was a Zoom virtual meeting

Call to Order: 19:12. Presiding Officer: Tony Romano (KB3BYA)

Pledge of Allegiance, Moment of Silence for Silent Keys and others Deserving.

Roll Call: Members Present: 18

Committee Reports:

Treasurer: Mark Stabryla, (N3RDV): Report via email. Motion to accept: Bill (W3WH), Second: Ron (W3WN), Carried.

Secretary: Dan Campbell (K3CMU): No corrections to the minutes. Motion to accept: Carol (KB3GMN), Second: Tony (KB3BYA), Carried.

Repeaters: Frank (N3FB): Repeating. Paul NØVLR reporting short outage on 2 meters.

WASHNet: Charles (Chuck) Bihun, III (K3CELA): Going well. Volunteer NCS secured to act during Chuck's upcoming move.

Tuesday Night Net: Glen Roberts (KE7FD): Well attended last week.

Contests: Larry (K3VX): Refer to WASHRag & ARRL.

Public Service: Ron (W3WN): KDKA Centennial event considered very

successful; 5000 QSOs reported.

Newsletter: Ron Notarius (W3WN): Published.

Volunteer Examiners: Grant Olsen (KC3MLC): No report.

Ways & Means (including Member Contributions): Carol Danko (KB3GMN):

Reminder to forwared dues to Mark (N3RDV)

President's Report - Tony Romano (KB3BYA): (no report)

Nominations for 2021 Club Officers: Floor opened for additional nominations. No new nominations advanced. Motion to have the Club Secretary cast one vote for President: Tony (KB3BYA); Secretary: Dan (K3CMU). Seconded. Motion carried.

Old Business: Paul (NØVLR) has the Tower Trailer. He is willing to store until alternative storage site can be found. Members are requested to explore storage options.

New Business: Following discussion, Motion by Dan (K3CMU), Second by Bill (W3WH) that **WASHFest 2021** be cancelled due to the high probability that very few people will be permitted into the facility. (County has currently capped maximum occupancy of the hall at 50). Motion carried. Rental deposit will be held as a credit towards **WASHFest 2022**.

Good of the Order:

- Suggestion: Look for call-sign badges to distribute.
- It was decided to suspend Scholarship discussion until the matter is better understood. ARRL Foundation will not permit input on how donation is used; Foundation for Amateur Radio remains unresponsive. Alternatives will be looked into.

Adjournment: Motion Carol (KB3GMN); seconded Larry (K3VX). Carried **Adjourned**: 20:15 hours











WASH Spotlight: Told Ya

Ye Editor has been telling you for years... for YEARS now... send content, or you're going to end up seeing pictures of my daughter and my dog.

We weren't bluffing.

Sadly, we must report that this will be Lucy Furr K9FURR's last appearance in the newsletter, as she closed her eyes for the last time on December 31st, due to old age. She was 14.

Photo courtesy of and © Copyright 2020, 2021 Ron Notarius W3WN



Every month we're going to feature a *WASH* club member, something about them, something they're involved in or a club-related activity that we're involved in, in the *WASH Spotlight*.

Submissions for the Spotlight should be sent to Ron W3WN at newsletter at

Monthly WASH Breakfast



Please join us for the next **WASH** Breakfast! We usually get together on the LAST Saturday of every month for a chance to informally sit down, shoot the breeze, compare notes, drink lots of coffee, and just have a good time!

Join us this month at *Eat'n Park*, 3380 Washington Road (US 19), McMurray. Start time is about 8 AM until ???? Monitor 146.955 & 443.659 for talk-in or any last minute changes.

All are welcome, **WASH** members or not, amateurs or

WASH FL

W4ZE

KA3UPY/M

Wireless Association of South Hills Membership

2021
K3CMU
K3GW
K3JDS
K3SGT
KA3VXM
KC3NPJ
KC3OCT
KE7FD
N3RDV
WA3PYU
W3WN

2020 AE3DL K3HCR K3VX K6DWR KB3BYA KB3CMT

N3RDG KB3DCO N3SBF KB3GMN N7TDX KB3GMU N8NEU KB3JHR KB3YCX N9SOJ NY9H KC3ELA KC3GMM W3LE KC3MLC W3WH WA3VSS KC4WTT WA3WXR NØVLR WB4GCS N3DFK

N3FR

N3KFD

WASHTN
K3OL
KE3XB
N3YPB
WASHTX
NB3C
K3LGM
KB3IJX
Jane Wagner
WASH VI
NP2JF

If your call should be listed here & isn't, please contact Mark N3RDV

Through December 29th, 2020 List complied by Mark Stabryla N3RDV, Vice President/Treasurer

Silent Keys

AB3KA AB3ED K3EED K3LIF **KA3NMG** KB3ENX KB3FNM KB3FQT KB3JHQ N3BPB N3CZZ N3FZ N3HKQ N3KEH N3OBD N3RNX N3SKR N3SRC N3ZEL

N3XFE

W371 K

WA3JPP

2021 WASH Upcoming Events Calendar

Club Meetings & Other Significant Events — Subject to Change

January 7 th	WASH Meeting	ZOOM MIEBTING	
January 9 th	WASH 2 Meter Simplex Contest	http://www.n3sh.org	
January 16 th	Allegheny County ARES Meeting 10:00 to 11:00 AM	ZOOM MIEITING Contact NU3Q for Meeting ID & Passcode	
February 4 th	WASH Meeting	ZOOM MIETIING	
February 13 th	Breezeshooter's Groundwave Contest — CW	https://breezeshooters.org	
February 20 th - 21 st	ARRL International DX Contest CW	http://www.arrl.org/	
February 28 th	WASHFest 2021	CANCELLEID	
March 4 th	WASH Meeting	ZOOM MIEETING	
March 6 th	Breezeshooter's Groundwave Contest — Voice	https://breezeshooters.org	
March 6 th - 7 th	ARRL International DX Contest SSB	http://www.arrl.org/	
March 13 th	Breezeshooter's Groundwave Contest — Digital	https://breezeshooters.org	
March 27 th - 28 th	CQ WPX Contest SSB	https://www.cqwpx.com	
April 1 st	WASH Meeting	ZOOM MEETING	
May 6 th	WASH Meeting	ZOOM MEETING	
May 21 st - 23 rd	Hamvention 2021	Greene County Fairgrounds, Xenia, OH	
May 29 th - 30 th	CQ WPX Contest CW	https://www.cqwpx.com	
June 3 rd	WASH Meeting	ZOOM MEETING	
July 1 st	WASH Meeting	ZOOM MEETING	
August 5 th	WASH Meeting	ZOOM MIEITING	

What Is Contesting All About?

Bill Hill W3WH

Chartiers Township, PA, December 7th, 2020 – The 2020 160 meter contest just ended a few hours ago. It's occurred to me that my view of contesting is probably a lot different than some or most of us who are active in our hobby. Actually my view of the myriad of contests available every weekend of the year changes from event to event.

For instance in Field Day(I know it's not a contest) my goal is to achieve the best score in our category within our section and division. In Sweepstakes I like to run QRP and do the best I can with 5 watts. In the 160 contest this weekend my goal was to check propagation and see how my antenna is working. Well I was able to hear(on 160 this is very important) both the west coast and Europe although the number of Europeans I heard was way down compared to previous years. Another thing was I wanted to check how my K1EL keyer was working since it's kind of finicky.

The highlight of the contest for me was working 52 stations in about 30 minutes which told me that my signal is decent and my skills are still acceptable. I only spent a couple of hours in the contest and worked 122 stations but that was plenty for me this weekend

The point of this little article is that you don't necessarily have to work an entire contest to have fun and make it worthwhile

for you. Use them to test your station, your skills or your performance vs past years or whatever. For me the most important thing is to have fun and enjoy our wonderful hobby.

Experiments with an NVIS Antenna

James A. Sanford WB4GCS, PE

Eighty Four, PA, December 20th, 2020 – Over 20 years ago, a friend in Virginia introduced me to the concept of Near Vertical Incidence Systems (NVIS) for short-range communications. Conventional wisdom has it that on the HF bands you want as low an angle of radiation (9-degrees, according to many) for best DX. This is best obtained with an antenna which is 1/2-wavelength, or better yet according to some, 5/8-wavelength, above ground. The impracticality of this is what convinced me, not enough years ago, to experiment with vertical antennas on the lower bands.

The NVIS concept holds that for short-range communications, you want near vertical radiation so that the signal refracted by the ionosphere will come back to earth at a much shorter distance. This is desirable if you're trying to work someone between 100 and 300 miles; the MVIS antenna does a nice job of filling in the "skip zone" between ground-wave and long-range sky-wave. The literature is full of such examples; one anecdote that I remember vividly is about two guys in Colorado who were one hundred miles apart trying to communicate on 80 meters over a significant mountain range in between. One of them put up an NVIS antenna, and reportedly, signals went from S7 to S9+20 due to the high angle radiated signal coming back close-in. Note that the NVIS idea is most relevant to our lower HF bands.

I communicate most Sundays on 75 meters with a group I met through Chas W4HFZ, currently Commander of STRATCOM. They are less than 300 miles away in MD, NJ, and Northern VA, see table below. The capabilities of the Software Defined Radio allow me to hear them pretty well; they have not always heard me, whether I'm running 100 watts or a KW.

As an aside, to the point about verticals mentioned above, for several years I ran a 30-foot top-loaded vertical that Glenn KE7FD, gave me, and they heard me with only 100 watts. I did have 36 radials (dog fence wire) under this antenna. After a windstorm destroyed this antenna, I went back to the random-length, random-height offset-fed dipole. Several of the Sunday group hear me with 100 watts, most of the group hear me at a KW.

Two years ago for reasons I don't remember, I got very interested in the NVIS concept and decided to try it with the Sunday morning group. With the help of Nathan KC3GMM, I put up a dipole consisting of a pair of Hustler mobile masts and KW-rated 80 meter resonators arranged horizontally. I did this instead of a full-length resonant dipole because there was no easy way to put up a full-length dipole at my location. That's why I have the random-length offset-fed dipole – using what I can.

SO, I looked into the idea of NVIS antennas. Based on an article from DXEngineering on a military antenna (a version of which they sell), I concluded that 15 feet altitude is a good height for an NVIS antenna on 80 meters. So, Nathan and I put the Hustler dipole up at 15-feet. (As an aside, I built the the DXE-designed antenna and tried it out in the last few hours of PAQSO Party. Very pleased at 80 meters, disappointed at 40 meters.)

I spent the next year and a half comparing signal-to-noise ratio (S/N) when receiving on that NVIS antenna against the random offset dipole antenna when talking with with the Sunday morning group. The display format, the averaging function, and the peak display function on the Software Defined Radio (SDR) make capturing and comparing detailed S/N very easy. In particular, the visual display is in dbm, which makes determination of S/N in db easy. The SDR also has a traditional S-meter.

The signal received on an NVIS antenna will be lower than on a more traditional antenna. However, most *noise* comes from long-range signals, which the NVIS antenna receives poorly. As a result, the *signal* may be lower, but the *noise* will be *much* lower. As a result, the S/N will be better. At least that is the theory.

The group I speak with on Sunday and which provided the data for this evaluation is located as indicated in the below table:

Station	Distance
Station 1	178.4 miles (qrz.com)
Station 2	180.9 miles (qrz.com)
Station 3	183.8 miles (qrz.com)
Station 4	232.5 miles (from google maps)
Station 5	272.6 miles (qrz.com)

I recorded detailed data on the engineering paper that I use (a holdover from my days at USNA) in felt-tip pen. I intended to publish the explicit data as an appendix to this article on the WASH website (to save Ron pages in the WASHRag). Alas, one Sunday, a coffee spill rendered much of my data illegible, so I will have to report perceptions.

Over the course of at least a year-and-a-half, the NVIS antenna consistently provided a *better S/N* than the more traditional antenna. In several cases, the NVIS antenna S/N was *20 or 25 db* better than the other antenna. As expected, signals were lower, but noise was *much* lower. As I expected, stations 4 and 5 showed less of a difference, but were almost always better on the NVIS antenna than the traditional one. In that entire time, there were only two widely separated occasions (when the band was truly *weird!*) where there wasn't much difference between the two antennas.

Conclusions? I'm convinced of the NVIS concept.

So, I would encourage you to think about what you are trying to accomplish on 160, 80, and 40, and think about whether or not a NVIS receiving (or transmit!) antenna might be a useful addition to your toolbox. It can be done in a smaller physical space than a Beverage or Beverage-on-Ground receiving antenna. It is not as compact as a Loop-on-Ground, with which I have yet to experiment – but will.

The astute reader will note that I only report received results. That was for two reasons. First, I decided that to get explicit, detailed data, my ability to read received signal and noise in dbm made it easy to calculate S/N in db. Second, few commercial radios (YaeComWood) have S-meters that are truly calibrated; they are really relative indications. So, I decided to go with easily measured receive data.

Future work? I'm going to try to come up with a way to put up a resonant dipole at 15 feet. Nathan has offered to tromp around my yard in the snow and Frank, N3FB, has offered to bring over his "launcher". I will then repeat the receive comparisons, and, given that I have multiple tuners, may try some transmit comparisons. After collecting sufficient receive data, I'll try transmit comparisons and accept the data I get and whatever it tells me. I also intend to pursue the loop-on-ground antenna in the spring.

More to follow, will advise .

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The Time Has Come (2)

Bill Hill W3WH

Chartiers Township, PA December 30th, 2020 - Since Linda and I are moving in 2021, due to the lack of Hamfests, here a partial list of equipment that I won't have room for after the move. Send me an email w3wh@comcast.net or 724-747-4685.

More to come later. If you're looking for something specific ask; maybe I have what you need? And thanks for looking.

- Kenwood TS 590SG- Perfect Condition. Very light use. Will include RSP1a SDR RX to enable the user to have a bandscope. \$1,000. Plus shipping (if any). Anyone interested is welcome to visit my shack to "kick the tires".
- Butternut HF6-V never been used. \$250.
- Ameritron RCS-4 Remote control antenna switch. Will handle up to four antennas. \$100
- DX Engineering NCC-1 Antenna Phasing System- \$350
- MFJ 994 BRT 600 watt automatic antenna tuner \$250
- Zenith Wave Magnet Radio- \$75.
- Signal Link Sound Card Interface-New \$75.
- Hallicrafters Collector Radios: An S38C, an S38EM, and an S41W. They all light up and the S38C at least hears on the AM Broadcast Band. This group is available for \$100
- Hallicrafters S-120. Hears on the AM Broadcast band (at least). Yours for \$50



FCC Reduces Proposed Amateur Radio Application Fee to \$35 American Radio Relay League

Newington, CT, December 30th, 2020 - The FCC has agreed with ARRL and other commenters that its proposed \$50 fee for certain amateur radio applications was "too high to account for the minimal staff involvement in these applications." In a Report and Order (R&O), released on December 29, the FCC scaled back to \$35 the fee for a new license application, a special temporary authority (STA) request, a rule waiver request, a license renewal application, and a vanity call sign application. All fees are per application. There will be no fee for administrative updates, such as a change of mailing or email address.

This fall, ARRL filed comments in firm opposition to the FCC proposal to impose a \$50 fee on amateur radio license and application fees and urged its members to follow suit.

As the FCC noted in its R&O, although some commenters supported the proposed \$50 fee as reasonable and fair, "ARRL and many individual commenters argued that there was no cost-based justification for application fees in the Amateur Radio Service." The fee proposal was contained in a Notice of Proposed Rulemaking (NPRM) in MD Docket 20-270, which was adopted to implement portions of the "Repack Airwaves Yielding Better Access for Users of Modern Services Act" of 2018 — the so-called "Ray Baum's Act.

"After reviewing the record, including the extensive comments filed by amateur radio licensees and based on our revised analysis of the cost of processing mostly automated processes discussed in our methodology section, we adopt a \$35 application fee, a lower application fee than the Commission proposed in the NPRM for personal licenses, in recognition of the fact that the application process is mostly automated," the FCC said in the R&O. "We adopt the proposal from the NPRM to assess no additional application fee for minor modifications or administrative updates, which also are highly automated.

The FCC said it received more than 197,000 personal license applications in 2019, which includes not only ham radio license applications but commercial radio operator licenses and General Mobile Radio Service (GMRS) licenses.

The FCC turned away the arguments of some commenters that the FCC should exempt amateur radio licensees. The FCC stated that it has no authority to create an exemption "where none presently exists."

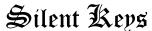
The FCC also disagreed with those who argued that amateur radio licensees should be exempt from fees because of their public service contribution during emergencies and disasters.

"[W]e we are very much aware of these laudable and important services amateur radio licensees provide to the American public," the FCC said, but noted that specific exemptions provided under Section 8 of the so-called "Ray Baum's Act" requiring the FCC to assess the fees do not apply to amateur radio personal licenses. "Emergency communications, for example, are voluntary and are not required by our rules," the FCC noted. "As we have noted previously, '[w]hile the value of the amateur service to the public as a voluntary noncommercial communications service, particularly with respect to providing emergency communications, is one of the underlying principles of the amateur service, the amateur service is not an emergency radio service.'

The Act requires that the FCC switch from a Congressionally-mandated fee structure to a cost-based system of assessment. The FCC proposed application fees for a broad range of services that use the FCC's Universal Licensing System (ULS), including the Amateur Radio Service, which had been excluded previously. The 2018 statute excludes the Amateur Service from annual regulatory fees, but not from application fees.

"While the Ray Baum's Act amended Section 9 and retained the regulatory fee exemption for amateur radio station licensees, Congress did not include a comparable exemption among the amendments it made to Section 8 of the Act," the FCC R&O explained.

The effective date of the fee schedule has not been established, but it will be announced at least 30 days in advance. The FCC has directed the Office of Managing Director, in consultation with relevant offices and bureaus, to draft a notice for publication in the Federal Register announcing when rule change(s) will become effective, "once the relevant databases, guides, and internal procedures have been updated."





December was designated as YOTA month. It is an annual initiative sponsored by Youngsters on the Air that wants to demonstrate amateur radio to youth to encourage them to get licenced, and for younger radio amateurs, to get active on the ham bands.

An awards program is available for those interested.

For more information visit events.ham-yota.com/awards

- Oscar Reves VK3TX, WIA National News



Robert Timmons AB3ED, 73, Pleasant Hills, December 20th

FCC Enforcement Bureau Warns Property Owners & Managers of Significant New Financial Penalties for Allowing Illegal Broadcasting On Their Property Notice Could Precede Fines of Up To \$2 Million Under the PIRATE Act

Daily Digest, Federal Communications Commission DOC-368836A1.pdf

Washington, DC, December 17th, 2020 — The FCC's Enforcement Bureau today announced it has begun targeting property owners and managers that knowingly tolerate pirate broadcasting on their properties, exercising the Commission's new authority under the recently enacted PIRATE Act. Parties that knowingly facilitate illegal broadcasting on their property are liable for fines of up to \$2 million.

"Pirate radio is illegal and can interfere with not only legitimate broadcast stations' business activities but also those stations' ability to inform the public about emergency information," said Rosemary Harold, Chief of the Enforcement Bureau. "It is unacceptable - and plainly illegal under the new law - for landlords and property managers to simply opt to ignore pirate radio operations. Once they are aware of these unauthorized broadcasts, they must take steps to stop it from continuing in their buildings or at other sites they own or control. If they do not do so, they risk receiving a heavy fine, followed by collection action in court if they do not pay it. In addition, our enforcement actions will be made public, which may create further unforeseen business risks."



Under the new authority, the Enforcement Bureau will provide written notice to property owners and managers the agency has reason to believe are turning a blind eye to - or even helping facilitate - illegal broadcasting. These new Notices of Illegal Pirate Radio Broadcasting also will afford parties a period of time to remedy the problem before any enforcement action moves forward. In the first such notices, issued today to property owners regarding their buildings in New York City, the respective parties were given 10 days to respond. The Bureau will consider any response before taking further action.

Commission investigations have found that landlords and property managers too often are aware of this illegal activity taking place on their premises. The Commission has previously sent warnings to landlords and even sought cooperation from national property owners' organizations in raising awareness. With pirate broadcasts persisting despite these efforts, Congress took action and empowered the Commission to penalize property owners and managers that knowingly permit pirate broadcasters to remain operating from the landlord's buildings or unbuilt areas. Landlords and property managers also may be found liable if a pirate station ceases operation for some period of time but later resumes at the same site.

Separately, the Enforcement Bureau and the Office of the Managing Director also released today an Order amending the Commission's rules to implement the new enforcement authority granted by Congress through section 2 of the PIRATE Act, as codified in 47 U.S.C. § 511.

Notices of Illegal Pirate Radio Broadcasting are available at: https://docs.fcc.gov/public/attachments/DOC-368827A1.pdf, https://docs.fcc.gov/public/attachments/ DOC-368817Ā1.pdf, https://docs.fcc.gov/public/attachments/DOC-368826A1.pdf

The PIRATE Act is available at: https://www.congress.gov/116/plaws/publ109/PLAW116publ109.pdf.

Ham-Com Folds Bill Nelson AB5QZ, President, Ham-Com Inc.

Richardson, TX, December 30th, 2020 - It is with a heavy heart that I write this letter about the future of Ham-Com. After 41 years, Ham-Com has decided to close its doors in lieu of the restrictions in place for COVID-19 and the rising costs of putting on a show. The decision was not made lightly, but the safety and wellness of our volunteers, vendors, clubs, presenters, and attendees is our paramount concern.

We sincerely thank each and every person for their support over the past years. This starts with clubs who have participated in offering forums, transmitter sessions, VE sessions, talk-ins, and many more things through the years. Next, to the commercial and flea market vendors who have helped new hams get their first radio to established hams who are building the ultimate ham shack, we thank you for returning year over year. To the volunteer staff, functional directors, and access control, your dedication and hard work have contributed to the continued success of the show for 41 years. Finally, to our attendees. Without you, there is no show.



Over 41 years, we have met a variety of people with one common passion, amateur radio. Ham-Com is proud to contribute to bringing people together to enjoy this passion. We will definitely miss this gathering of the broader community.

Our thoughts and best wishes to you and your families and "see you on-the-air".

(Ham-Com was held every June in Plano, TX, and was the largest Amateur Radio gathering in Texas)

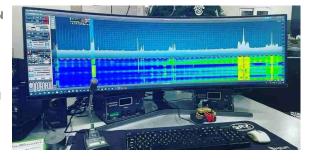
WSJT-X 2.4.0 Introduces Q65

American Radio Relay League

Newington, CT, December 31st, 2020 - WSJT-X version 2.4.0 has introduced a new digital protocol called Q65, which is designed for "minimal two-way QSOs over especially difficult propagation paths," the Quick Start Guide says.

"On paths with Doppler spread more than a few hertz, the weak-signal performance of Q65 is the best among all WSJT-X modes. Q65 is particularly effective for tropospheric scatter, ionospheric scatter, and EME on VHF and higher bands, as well as other types of fast-fading signals.

The new protocol uses 65-tone frequency-shift keying and builds on the demonstrated weak-signal strengths of QRA64, introduced in 2016. User messages and sequencing are identical to those in FT4, FT8, FST4, and MSK144. Q65 employs a "unique tone" to sync time and frequency. "As with JT65, this 'sync tone' is readily visible on the waterfall spectral display," the Guide said. "Unlike JT65, synchronization and decoding are effective even when meteor pings or other short signal enhancements are present.



Transmit/receive sequence lengths of 15, 30, 60, 120, and 300 seconds are available. According to the Guide, "Q65 will enable stations with a modest Yagi and 100 W or more and to work one another on 6 meters at distances up to ~1600 kilometers at most times, in dead band conditions.'

21st Annual WASH Two Meter Contest Rules

This January will mark the Twenty-First Annual WASH 2 Meter Contest. We're looking forward to a chance to stretch our legs, our wheels, and our antennas once again!

Unfortunately, there's no way to know if we're having *WASH*fest at this time, so we can't guarantee the typical door-prize ticket awards, but you can still expect a fun operating event where you can hear some old friends, and maybe make some new ones! See you on the air!

- 73, Chuck Bihun III KC3ELA

Date & Times: Saturday, January 9th , 2021 from 7 to 11 PM EST. (That's January 10th 0000-0400 UTC to the purists!)

Objectives:

- To make as many contacts as possible
- To have fun!

Band, Mode & Frequencies: The contest will take place solely on 2 meter hand

 FM: FM simplex only, no repeater contacts. The FM frequencies are all standard 2 Meter simplex frequencies, as per the ARRL 2 Meter Band Plan, every 15 kHz, from 146.505 to 146.595 MHz, and 147.450 to 147.580 MHz.

Use of simplex frequencies in the "FM Experimental Simplex" band of 145.510 to 145.670 are not recommended. See list of recommended simplex channels at the end of the rules.

- **CW:** 144.05 to 144.1 MHz Only. (See ARRL 2 Meter band plan)
- SSB & AM: 144.2 to 144.275 MHz Only. (See ARRL 2 Meter band plan).
- Digital (including RTTY): 144.51 to 144.55 MHz. (See ARRL 2 Meter band plan) Multiple digital modes may be used, and participants are free to use any generally accepted Digital mode, but only ONE Digital QSO with a given station regardless of mode
- → Note: Listen for CW QSO's around 144.1 MHZ 15 minutes after the hour
- → Listen for SSB & AM QSO's around 144.2 MHz 30 minutes after the hour
- → Listen for Digital QSO's around 144.51 MHZ 45 minutes after the hour

In the event of accidental QRM with nets and non-contest QSO's in progress, please respect their right to the frequency and QSY.

Power Limit: Maximum 100 watts output.

Exchange: Callsign, contact number, ZIP Code.

For the purposes of the contest, the 5 Digit ZIP Code for your location is sufficient — do not use the "Zip +4" code. Mobiles and portables should use the ZIP code of their location as determined to the best of their ability. Canadian stations will use their 6 digit postal code

Example 1: "N3ZCG from W8XK, please copy Number 3, 15347."

Example 2: "K3VX from K3CM, please copy Number 21, 16801"

Example 3: "W3WH from W3OC, please copy Number 7, 15137"

Contacts: Work as many different calls and locations as possible, giving Exchange as noted above. Work each station once per mode, and once per ZIP Code — Mobiles can be reworked whenever they change locations. Remember hilltops work best!

Disqualification: Remember, this is a friendly "for fun" contest. Stations may be disqualified for infractions of the rules and for unacceptable operating practices. While not an inclusive list, stations may be disqualified for: • FM signals transmitted on simplex channels below 146.505 MHz. • Intentional interference to non-contesters, nets, & QSO's • Intentional interference to other contest operators • The committee reserves the right to verify QSO's. QSO's that can not be verified may be removed from the log without penalty.

Scoring: Each Contact:

Phone (FM, SSB, AM): 1 point CW: 2 points Digital (any mode): 2 points

Multipliers:

Locations (Number of different ZIP Codes)

Power:

Stations running 10 watts output or less: 3
Stations running over 10 up to 30 watts output: 2
Stations running over 30 watts output: 1

Final Score: Total Points x Locations x Power





After the Contest: Fill out all the log information. In the upper left corner check whether "base" or "mobile." In the upper right corner be sure to enter your callsign and club affiliation (or "none" if not a member of any club). Please number all log sheets consecutively. Log sheets can be downloaded from the WASH web site, www.n3sh.org, no later than January 1st.

Submit Log Sheets: Check your log sheets carefully for dupes. Verify that all information is entered.

Send the logs to: ** Correct Address for 2021 **

WASH 2 Meter Simplex Contest c/o Charles Bihun KC3ELA 4144 Lebanon Church Road West Mifflin, PA 15122

Enclose a #10 SASE for return of results.

Entry Deadline: February 1st, 2021

Each log submitted on or before the deadline will receive one (1) main prize ticket to WASHFest 2021 (Unless cancelled.)

Logs submitted with an SASE will have their ticket mailed to them, otherwise, the tickets will be available at the WASH Club table

Recommended FM Simplex Frequencies:

 146.505 MHz
 146.580 MHz
 147.510 MHz
 146.520 MHz (*)

 147.450 MHz
 147.525 MHz
 146.535 MHz
 147.465 MHz

 147.540 MHz
 146.550 MHz
 147.480 MHz
 147.555 MHz

 146.565 MHz
 147.495 MHz
 147.570 MHz

Simplex channels below 146.505 MHz are not to be used, as many of these are in use in WPa as repeater input frequencies.

(*) The National Simplex Frequency, 146.520 MHz, may be used.

However, many stations use 52 for casual conversation or as a calling frequency. If the frequency is in use or becomes used by non-participants, please permit them to use the frequency unimpeded.

To avoid interference to other contestants and other users of the bands, please do not operate on 5 or 10 kHz "offsets" from these recognized FM channels.

More information about the frequency selection can be found in the FAQ section on Page 5 of the Contest Rules, Log Sheets, and other information found on the **WASH** web site, http://www.n3sh.org.





VK Hams Denied 60 Meters

Paul Gaskell G4MWO / The 5 MHz Newsletter courtesy of the American Radio Relay League

Newington, CT, December 9th, 2020 – After considering several options for a 5 MHz amateur allocation, the Australian Communications and Media Authority (ACMA) has come down in favor of national government interests. Following a formal consultation (a "proceeding" in FCC parlance), ACMA has decided not to permit ham operation on the 5351.5 – 5366.5 kHz band. The 15 kHz-wide band was allocated to the amateur service on a secondary basis in 2017, but as ACMA explained, "unresolved sharing issues" prevented ham radio use of the band, operated on by more than 500 other licensed services (mostly land mobile and aeronautical services), as well as by the Australian military.

Options ranged from Australia-wide access to the whole band or part of the band, to a segmented or channelized amateur allocation, to no amateur access. ACMA decided that national defense and security use of the allocation were "of high importance" in determining maximum public benefit and decided on the last option.

"In balancing Defence's existing use of the 5351.5 – 5366.5 kHz band against the impacts of introducing use by the amateur service, the ACMA has decided not to support amateur use in the band," the agency said. "Public and non-public submissions from the Department of Defence showed that expanding the use of the 5351.5 – 5366.5 kHz band to potentially several thousand amateur operators could impact important radiocommunications operations. The ACMA recognizes the high level of interest shown by the amateur community in adding this band and understands there will be disappointment. However, we are confident the decision is appropriate and consistent with the objects of the Radiocommunications Act. In particular, this includes supporting defence and national interest objectives."

Australia's International Amateur Radio Union (IARU) member-society, the Wireless Institute of Australia (WIA), argued for amateur access to 5351.5 – 5365 kHz as a compromise. A WIA survey showed most Australian radio amateurs preferred that choice. WIA noted that because the band was agreed upon at World Radiocommunication Conference 2015 on a shared secondary basis, as well as allowing low-power, such as 15 W EIRP (effective isotropic radiated power) operation, "amateur radio operators in over 80 countries around the world have been granted access to the band, including many of our near Pacific neighbors, New Zealand and Indonesia."

"Australian amateur operators therefore have a strong desire to be able to commence communications on this band with these countries," WIA concluded. Two spot 5 MHz frequencies are allocated to the Wireless Institute Civil Emergency Network (WICEN) "to provide emergency and safety communications."

New Zealand is putting wireless power transfer (WPT) systems using 148.5 kHz to 30 MHz into the General User Radio Licence for Short Range Devices (GURL-SRD) category. The GURL-SRD notice has been updated to include several amendments.

These include new provisions to permit the use of the frequency range 0.1485 – 30 MHz for WPT and induction loop systems used to detect foreign objects; to permit the use of the frequency range 1785 – 1805 MHz for wireless microphone, in-ear monitors, or wireless audio transmitters; to implement WRC-19 Resolution 229 regarding the 5150 – 5350 MHz band to permit wireless local area network (LAN) outdoor use and a power level up to 0 dBW, and to permit the use of the frequency range 13.553 – 13.567 MHz for radio frequency identification (RFID) transmitters.

A General User Radio Licence permits transmitting without the need to get a license or paying licensing fees.

Finnish International Amateur Radio Union (IARU) member-society **SRAL** is asking for amateur radio privileges on 220 – 225 MHz as a replacement for the 1240 – 1300 MHz band, which was deleted last April 24, except for use by special permit. SRAL's initial request for 902 – 928 MHz was turned down.

The request is to provide spectrum for Amateur Television (ATV) operation. The special permits for the 1.2 GHz band will expire when the Galileo GNSS (GPS) constellation becomes fully operational. Concerns have arisen in Europe regarding the potential of amateur radio interference to one Galileo frequency.

The European Conference and Telecommunications Administrations (CEPT) Working Group SE 40 (Space Service compatibility issues) met in early December to discuss the 1240 – 1300 MHz frequency band. 1240 – 1260 MHz is used by the Global Navigation Satellite System (GLONASS) of the Russian Federation, and 1260 – 1300 MHz is used by Europe's Galileo system, China's BeiDou system, and Japan's QZSS, and is planned to be used by Korea's KPS.

DX News Briefs

The Rebel DX Group posted a cryptic message on their Facebook page on December 31st: "Hi Rebel followers... We wish everyone (including clowns) all the best in 2021... After several months of doing nothing (read preparation) We are going forward. Some of the

team members are on the way to South Africa... And this is not a vacation trip. News will be provided shortly on Facebook and Rebel DX Group web page." Whether or not this means that the oft-postponed **3YØI** trip is now "on" again remains to be seen; their last post on November 3rd stated that they still had a budget shortfall to make their last payment, and were waiting on travel restrictions to South Africa to be lifted.

8Q7MM is currently QRV from AS-013 for an unknown time, mainly digital modes. QSL via IZ5KID

3D2AG/R remains QRV from Rotuma (OC-060 through 8 January, departing on 10 January. He has been QRV primarily on 160 – 6 FT 8, with some CW. QSL direct

CN1M remains QRV through 10 January (time extended). QSL via RW6HS

CT1FJZ is QRV as **D2FJZ** through September, 80 – 10 SSB as time permits. QSL via CT1FJZ

WW6RG should be QRV as V25RA from 3 – 4 January. He then plans to be QRV as ZD8RA starting 5 January, primarily on 20 and 17 SSB. He hopes to be QRV from VQ9 Diego Garcia (call TBA) on or about 18 January. QSL all via WW6RG.

VP8DOI will be QRV in January & February from the Halley VI British Antarctic Research Station. More information at https://vp8doi.com . QSL via MØZXA or as directed.

ZF2PG will be QRV 10 – 17 January, 40 – 10 meters, looking for DX on 160 – 40 in the evenings. QSL vial K8PGJ

P44AA will be QRV during the CQ 160 CW contest, 29-31 January. Outside of the contest, he will be QRV as **P4/DL4MM** 23 January – 3 February, mainly on the low bands. QSL both via DL4MM

W2GD will be back as **P4ØW** in February, 10 – 12 and 160 as time permits. During the ARRL DX CW contest, he will be QRV as **P44W**. QSL via N2MM

8Q7CQ will be QRV 6-22 March from Filaidhoo Island (AS-013), 80-10, SSB & digita. QSL via MØOXO

UT8UU will be QRV as **5H3UU** in the first half of August 2021. More information forthcoming.

W5JON states that due to COVID related government quarantine rules, his 13 February – 5 March operation (only) from V47JA has been cancelled. His trips later in the year are still "on."

Recent activity on 60 meters FT 8 by JD1BMH is a pirate. The actual JD1BMH states that JA stations do not currently have access to 60 meters.

QSL Routes

4T.1P.T via N4GNR 4L1WL via 4L1BR 404T via YU1FW 407CC via UA4CC 5H3UU via UT8UU 5Q2J via OZ2JBC 5UAIHM via F4IHM 5Z4PA via MØURX 8Q7CQ via MØOXO 8Q7MM via IZ5KID CN1M via RW6HS CN8GDO via EA7FTR CO8LY via EA7ADH CP4BT via IK2DUW CP5HK via EC6DX CQ75ØRSI via CT7AQD D2FJZ via CT1FJZ D44PM via IZ4DPV DR165TESLA via DK8ZZ EG4CSH via EA4DCU EM2ØØLDS via UR6LF EM9ØLU via UR4LWN HC1M via EA5GL

HC3RJ via EA5GL HF1J via SP1NEN HK10 via EA5KB J79WTA via HB9MFM LZ1263AN via LZ1KCP LZ5R via LZ1YQ LZ5ØGU via LZ1GU OD5TX via W4JS OE1ØØBL via OE4JHW OL7ØKRT via OK2UYU OP4SPES via ON4CGW OP5T via ON4DS OO5M via ON5ZO OSØS via ON4ZD OZ4WWFF via OZ1GDI P44AA via DL4MM PA44FF via PHØNO PA515ØEVH via PF1SCT PJ4EL via MØURX R2021NY via RO7L R21HNY via R07L RA21NY via RQ7L

RD21NY via RO7L RG21NY via RO7L RK21NY via RQ7L RL21NY via RO7L RN21NY via RQ7L RO21NY via RO7L RY21NY via RQ7L SE5L via SM5ALJ SNØDUCH via SP5PPK SOØMORSE via SP1EG SQ1X via SQ1EIX TC3SAV via TA3X TM2ØMIA via F5PTA TR8CA via F6CBC UAØJFG via RW6HS UI2K via UA2FZ UN9L via LZ1YE V25RA via WW6RG Z34K via Z32ZM ZC4GR via 2M1DHG ZD8RG via WW6RG

ZF2PG via K8PGJ

Thanks to the NJDXA *DX News* Reflector, the *DX-QSL* Reflector, *425 DX News*, *OPDX News*, *DX Coffee*, *DX World.Net*, *ICPO Bulletin*, & *ARRL DX Bulletin* for our *DX News* information. Thanks also to the ARRL DXCC Desk, & Bernie McClenny W3UR / *The Daily DX* for confirmations & additional information.

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WASH Classifieds

Information shown here is as supplied to the WASHRag. Condition as stated, and all sales should be considered "as-is" unless otherwise noted. All subject to prior sale or withdrawal from sale at the owner's discretion. All responsibility for this information lies with the source and not the WASHRag or the WIRELESS ASSOCIATION OF SOUTH HILLS, INC.

HAM RADIO INSURANCE ASSOCIATES, INC. P.O. Box 201 Canonsburg, PA 15317-0201 Toll-Free 1-800-545-8881



Insurance Plan for: Radio Equipment

Computer Equipment Antennas Rotors & Towers Computer Media & Software Mechanical Breakdown & Electrical Damage Coverage

Antenna Zoning or PRB-1 Issues?

Contact: Michael S. Lazaroff K3AIR, Esquire

Lazaroff & Suhr, Attorneys at Law

277 West Main Street, Saxonburg, PA 16056

Phone: 724-352-4905

The WASHRag Masthead is courtesy of Jeff Murray K1NSS, creator of DASHToons & Dash the Dog Faced

Find the online cartoons and stories of Dash the Dogfaced Ham & more at https://www/jeffk1nss.com!

Shop for Dash items at his online store on Café Press, www.cafepress.com/shopdash



US Amateurs by Class as of January 1st, 2021:

Novice 8,338 Technician 423,383 General 190,465 Advanced 39,258 Extra 156,743 Club 12,581 **Total** 830,768 12/30/2020 830,439

Last 90 Days: **New Amateurs** 8.085

All-Time High

Callsign Changes 2,867 Class Changes 3.027 5,330

No Longer Licensed All Updates (*) 29,486

(*) Includes renewals, address changes, etc.

Information gathered from FCC Daily Updates, courtesy of Hamdata.com

Latest Region 3 Sequential Calls Issued as of January 1st, 2021:

Group A AC3GY Group B KF3EU

Group C (none available / all issued)

Group D KC3QXJ

Information gathered from FCC Daily Updates, courtesy of Hamdata.com

If you've downloaded the WASHRag from the N3SH web site, or picked up a copy from a friend... you can sign up to have the PDF copy sent directly to your email You do NOT have to be a member of WASH!

Just send an email to w3wn73@gmail.com and we will take care of the

Has Roadway found the tower yet?



CNEWS FEE NOWS

Courtesy of the American Radio Relay League

Newington, CT, December 31st, 2020 - Effective on June 29th, 2021, amateur radio licensees and candidates must provide the FCC with an email address on all applications. If no email address is included, the FCC may dismiss the application as "defective."

On September 16th, the FCC adopted a Report and Order (R&O) in WT Docket 19-212 on "Completing the Transition to Electronic Filing, Licenses and Authorizations, and Correspondence in the Wireless Radio Services."

The R&O was published on December 29th in the Federal Register. The FCC has already begun strongly encouraging applicants to provide an email address. Once an email address is provided, the FCC will email a link to an official electronic copy of the license grant. An official copy will also be available at any time by accessing the licensee's password-protected Universal Licensing System (ULS) account.

Licensees can log into the ULS License Manager System with their FRN and password at any time and update anything in their FCC license record, including adding an email address. For questions or password issues, call the CORES/ FRN Help Line, (877) 480-3201 (Monday - Friday, 1300 - 2300 UTC) or reset the password on the FCC website.

The only way to refrain from providing an email address on an application would be to submit a request to waive the new rule, providing justification for the request. (The FCC would not be obliged to grant such a request.)

Under Section 97.21 of the new rules, a person holding a valid amateur radio station license "must apply to the FCC for a modification of the license grant as necessary to show the correct mailing and email address, licensee name, club name, license trustee name, or license custodian name." For a club or military recreation station license, the application must be presented in document form to a club station call sign administrator who must submit the information to the FCC in an electronic batch file.

Under new Section 97.23, each license must show the grantee's correct name, mailing address, and email address. "The email address must be an address where the grantee can receive electronic correspondence," the amended rule will state. "Revocation of the station license or suspension of the operator license may result when correspondence from the FCC is returned as undeliverable because the grantee failed to provide the correct email address."

Did You Know:

courtesy of Hamdata.com

Over the past year:

- The Novice class has decreased at an average rate of 2 / day.
- The Technician class has increased at an average rate of 15 / day.
- The General class has increased at an average rate of 3 / day.
- The Advanced class has decreased at an average rate of 6 / day.
- The Extra class has increased at an average rate of 6 / day.
- Club Stations have increased at an average rate of <1 / day.

OH8X RBN Node Active

Courtesy OPDX and Southgate Amateur Radio News

As part of the Yasme Foundation (yasme.org) project to provide additional Reverse Beacon Network (reversebeacon.net) nodes in underserved areas, equipment has been provided to a team in northern Finland. The latest node to become active is currently hosted by Radio Arcala OH8X, very close to the Lapland (OH9) Region..

A mysterious propagation mode called Polar Path exists in Northern Europe during the winter season. At and above the Arctic Circle in the middle of the night this propagation offers a footprint covering the entire North American continent for many hours.

This occurs in spite of the stations being within the Aurora Oval. Only 100 miles to the south, there is no such propagation at all. A few far- northern stations have taken advantage of this opportunity, such as SJ2W holding the 20 meter CQ WW record and OH8X winning CQ WW Europe on 20 meters ten times straight.

The RBN node receiver is currently located at the Radio Arcala station OH8X; 65 11 03N & 26 14 53E, but may later move even farther north to be at the heart of this unique Auroral Region of the Arctic Circle.



ASHfest 2022

The South Hills Hamfest — Now in our Twenty Sixth big year! Sponsored by the Wireless Association of South Hills Amateur Radio Club, Inc.

Sunday, February 27th, 2022 8:00 AM until 3:00 PM Rain or Shine (or Snow!)

Home Economics Building, South Park

3735 Buffalo Drive, South Park Township, PA 15129 Behind the Allegheny County Police Station on Brownsville Road Talk-In on 146.955(-) and 443.650(+) 131.8 PL Donation \$5



(800) 545-8881





FREE Coffee for the entire Hamfest courtesy of HAM RADIO INSURANCE ASSOCIATES of Canonsburg, PA

MAIN PRIZES — *You've Got to Play to WIN!*

To Be Announced First Prize: Second Prize: To Be Announced Third Prize: To Be Announced

Additional Hourly Door Prizes! 2 Special Black Box Prizes (Separate Drawing)! Main Prize tickets are \$2.00 each, 3 for \$5.00, 7 for \$10, 15 for \$20, 40 for \$50, 90 for \$100 **All Prizes Subject to last-minute changes**

For Table Reservations, or More Information, Please Contact: Carol Dan E-mail us directly at

Please Note: Early Table Reservations must be paid in full <u>on or before</u> January 31st, 2022.

Reservations received after February 1st, 2022 must include payment in full.

Reserve now... we have sold out in advance eleven years running!

1KO KB3GMIN at (412) (884-1466 <u>n3</u>	<u>SDT@Comca</u>	<u>ist.net</u>	
washarc@yahoo.com	Check out our	r website too!	www.n3sh.org	
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Han	Hamfest Table Reservation Form—Please PRINT LEGIBLY ALL INFORMAT			
Name:		Email:		
Address:		Phone: ()	
City:	_ State: Zip:			
Call Sign:			Please make all cl WIRELESS ASSOCIATI	
Tables WITH Electricity:	X \$15.00 =		Please Mail R <i>WASH</i> FI	
Tables WITHOUT Electricity:	X \$12.00 =		c/o Carol Da 4246 Set	
5 Or More Tables w/o:	X \$10.00 =		Pittsburgh, P	

Please make all checks payable to: WIRELESS ASSOCIATION OF SOUTH HILLS PLEASE MAIL RESERVATION TO: WASHFEST 2022 C/O CAROL DANKO KB3GMN 4246 Seton Drive Pittsburgh, PA 15227-1244



Signature:

WIRELESS ASSOCIATION OF SOUTH HILLS, INC.

Membership Application, New or Renewal

I would like to join WASHI I am interested in the following type of membership:

ATTON ON THE STATE AND THE STA

□ Now Momborchin □ Momborchin Ponowa

I Would like to join W/ torn: I am interested in		the following type of membership.		new membersinp	inclination of the second
	(check quarter)	□ 1st Qtr Jan-Mar	☐ 2nd Qtr Apr-Jun	☐ 3rd Qtr Jul-Sept	☐ 4th Qtr Oct-Dec
	☐ (F1) Full Membership:	\$20.00	\$15.00	\$10.00	\$5.00
	\Box (F2) Full Membership < 18 or > 65 yrs of age:	\$10.00	\$7.50	\$5.00	\$2.50
	☐ (A1) Associate Membership:	\$10.00	\$7.50	\$5.00	\$2.50
J (FM1) Family Membership (\$3.00 x No. of household fa	amily members): \$			<u> </u>
١	Name(s):	<u> </u>			
lame:		_	Call Sign:		
Address:		_	License Class:		
City, State:		_	Expires On:		
lome Phone:		<u> </u>	Work Phone:		
mail Address:		<u> </u>	Birthday:		
lew Members Only:			ARRL Member? \square Yes \square No Family ARRL Member? \square Yes \square No		
☐ I do NOT want to be added to the Club E-Mail Reflector ☐ I do NOT want to be added to the Electronic Newsletter Mailing List [If you have an Email address, you Will be added to both lists UNLESS you choose to Opt-Out]		Date:			
			Amount Enclosed: \$	\$	

N3RDV has requested that all membership requests and renewals include an application so that his information is up to date

Please make your check or money order payable to the club treasurer, Mark Stabryla.

The Wireless Association of South Hills, Inc. reserves the right to accept or reject new memberships or renewals.

Please return completed membership form along with check/money order to the club treasurer or mail to:

WIRELESS ASSOCIATION OF SOUTH HILLS, INC. c/o Mark Stabryla N3RDV, VP/Treasurer 1120 McKnight Drive Bethel Park, PA 15102-2456



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Arghh!
What
Mightst
We
Draw
For Ye,
Matey?

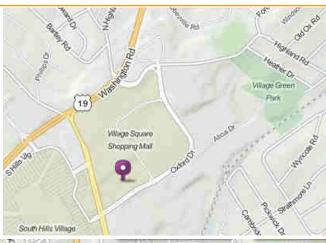




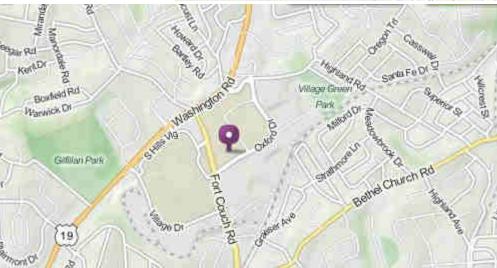
2021 WASH Meeting Location

St. Clair Hospital Outpatient Center Conference Room

2000 Oxford Drive, Bethel Park PA 15102 Adjacent to Village Square Mall, across Ft. Couch Road from South Hills Village Mall, just off of US Route 19







The WASHRag

Wireless Association of South Hills, Inc. Ron Notarius W3WN, Editor 3395 Rosewood Drive Castle Shannon, PA 15234-2546





N3SH / WA3SH NP2SH/B www.n3sh.org www.washarc.org

