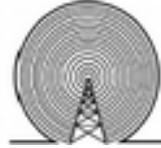


The Ham Arundel News



Providing Fellowship and Community Service through Amateur Radio Since 1951


May 2019

40th Year of Publication



Keith Miller, AE3D

The Prez Sez



Keith Miller, AE3D

By tradition, not the Bylaws, we only budget for things that are both yearly and reoccurring. So our budget is not based on how much money we are likely to take-in, but more based on how much we spent last year. Yes typically we take in well more than we budget, which is a good thing. I wouldn't change that either.

But it does leave the Board without any way to fund anything out of the ordinary, without going to the Membership with a spending Motion, which must roughly follow the same multi-week procedure it took to approve the budget. This means from when the idea was first presented, it takes a minimum of three weeks. And if it's done at Business Meeting only, that goes up to six weeks. If that Motion involves making purchases, add another two weeks for delivery, and maybe two more for testing. So from 'proposed purchase' to 'available for use', the process can take 7 to 10 weeks.

This means if something is needed for Field Day one better ask for it at the April Board Meeting.

By May it is too late. Its why we need the Field Day Team Leader named so early. This also means your Board has to think 10 weeks ahead on everything else that requires non-budgeted money. That's two and a half months!

What I suggest is that we consider a budgeting system that includes non-reoccurring expenses along with what we include now. Last August when the Board first saw the Budget for 2019, we knew we were going to finish the Ham Shack Project, and that it would cost over \$1000. So here we are 8 months later essentially asking for just over this same amount for the same reason. Similarly this year we know we need to fix the base on one tower and the rotor on another. We could have budgeted these items last fall for a reasonable amount. Instead we may have to come up with another spending Motion by June 6th to be ready for the MDC QSO Party.

73

Keith Miller, AE3E

President

AA

American Honda Has Announced A Voluntary Recall

American Honda has announced a voluntary recall of some 200,000 portable generators sold in the US, due to a potential fire and burn hazard. The recall



includes the EU2200i, EU2200i Companion, and EB2200i generators. The US Consumer Product Safety Commission (CPSC) says the affected portable generators can leak gasoline from the fuel valve. Users should stop operating the recalled generator and contact an authorized Honda dealer for a

free repair. Honda is also contacting users directly. For more information, [visit the CPSC website](#). A similar recall has been issued in Canada.

Used with permission The ARRL Letter, Apr 18, 2019

[illegible]

Membership to Vote

The Board has essentially approved the next phase of the Ham Shack Project. To finish construction of the Ham Shack itself we need to pass the following two Motions, up for vote at the May 2nd Business Meeting.

At the end of this phase of the Ham Shack Project our attention will move outside where we will need an antenna system capable of bringing this ambitious plan to life.

They are:

MOTION 1

I Move that the Anne Arundel Radio Club authorize spending in an amount not to exceed \$600 for completion of the tables in the AARC Ham Shack. (This includes \$200 for the purchase of four dual monitor mounts, \$300 for clear surface materials to sit atop the tables, and \$100 for paint and other supplies as needed.)

MOTION 2

I Move that the Anne Arundel Radio Club authorize spending in an amount not to exceed \$600 for the purchase of equipment for the AARC Ham Shack. (This will include \$240 for two Signalinks, \$200 for two WinKeyers, and \$160 for other hardware and cable to complete the installation.)

When I read them to the Membership at our most recent meeting I said I would post them on the web site, on the Listserv and in the Ham Arundel News so that everyone has a chance to look them over before the vote. I don't want anyone to say they didn't know after the funds are approved. By the way, between you and me, Mr. Mooney showed me how much money the club actually has on hand. In my first 2 years on the Board Justin never ever gave us the total. Though I do not think we should publicize the total, trust me when I say, we had way more than I thought, and I thought we had a lot. We can afford the \$1200, no problem.

I am already busy writing my "Prez Sez" for May. Its about our budgeting procedure, and how it often slows progress. Meanwhile attached you with a summary version of the Ham Shack Proposal I made to the Board at our last meeting. I will include a full version, should you want to compare them. We are moving ahead to build it, and I think the club members should be kept up to date on our efforts. I already posted the full version of the Proposal online for members to download or look. Due to it's length I suspect few will read it.

Let me know what you think. As always I appreciate your opinion.

73s....
Keith Miller, AE3D
AARC President

Heather Flewelling, WH6FTQ, recently had the honor of lending her name to a newly spotted comet. A planetary defense researcher, Flewelling is a relatively new ham who upgraded to Amateur Extra class at ARRL Field Day 2018. She was working on an asteroid impact early warning system being developed by the University of Hawaii's Institute for Astronomy, funded by NASA, when she saw the comet. The International Astronomical Union (IAU) Minor Planet Center designated [Comet Flewelling](#) (Comet 2019 D1) on March 21.

"I'm a new ham (not yet a year)," Flewelling told ARRL. "I never knew it would be such a fun and exciting year for me!" Flewelling just began working in a small group, called the Asteroid Terrestrial-Impact Last Alert System ([ATLAS](#)). Its two 0.5-meter telescopes are dedicated to surveying the sky and finding near-Earth asteroids. "We occasionally find comets, and, in certain circumstances, you can get one named after you. You have to be first to report it, and it needs to be a new, unknown comet," she explained.



Flewelling is quite active on VHF/UHF, and she enjoys hiking and Summits on the Air activations. "I've helped out multiple times for [SKYWARN](#) activations, and I'm one of the net controls for the daily net on the local repeaters here. I'm starting to get my station together for HF, but it's tricky, and I'm cheap, and I desperately want whatever I do to be the cheapest, weirdest, why-would-you-do-that solution," she said.

One of her greatest accomplishments is working with her team to create the [Pan-STARRS1](#) astronomical database, the world's largest. Flewelling's background is in physics, and she holds a PhD in that discipline from the University of Michigan.

"Ham radio is a hobby I should have gotten into years ago," she said on her QRZ.com profile. "As a kid, I would build crazy antennas at my mom's house, in order to pick up 'far away' FM broadcast stations and TV stations. I don't think I heard about ham radio until I was an adult, and then a combination of either lack of time or lack of money prevented me from getting into the hobby." She said an inexpensive SDR she purchased on the internet and the availability of "cheap" radios is what finally got her into Amateur Radio.

Used with permission The ARRL Letter for April 4, 2019

#####

*We use our voices to help others,
the future of Amateur Radio
is in your hands.*

Used with permission MDC Newsletter April 18, 2019

AARC STAFF – 2019 Officers

President	Keith Miller / AE3D president@w3vpr.org	240 758 0423
Vice President	Tim Nagel / KB3YQK vice.president@w3vpr.org	
Secretary	Steve Grimaud / W3SWG secretary@w3vpr.org	
Treasurer	Bill Mooney / KA3UQQ treasurer@3vpr.org	
Director A	Eric Berman / KC3GDV eric.board19@w3vpr.org	
Director B	Larry Booth / AA3AU larry.board19@w3vpr.org	
Director C	Bernie Coletta / NK3PS bernie.board19@w3vpr.org	

Support Staff

Membership Secretary	Jim Wolfe / NA3C membership.secretary@w3vpr.org	
Information Officer	Ed Santilli / KB3YMU info.officer@w3vpr.org	
Safety	John Bowes / KB3YLY safety@w3vpr.org	443 760 1666
Security	Tom Provenza / N3HLD security@w3vpr.org	

Representatives

ARES/RACES	John Bowes / KB3YLY ares.races@w3vpr.org	
DFRC Rep	Milford Craig / N3WYG dfrc.rep@w3vpr.org	301 218 8867
FAR	Ed Brown / AA3EB far.rep@w3vpr.org	301 856 3317
Fox Hunt	Bruce Strackbein / WR3Q fox.hunt@w3vpr.org	
Joint 440 Comm	Gordon Davids / WJ3K joint440@w3vpr.org	410 647 2956
MD Slow Net	Bruce Stewart / W8CPG chickenfarm9@gmail.com	
MDC Section Manager	Marty Pittinger / KB3MXM ar1l.sec.mgr@w3vpr.org	
Public Relations	Ed Santilli / KB3YMU pr@w3vpr.org	301 261 7561
Resident Agent	Justin Leishman / KC3BJT ra@w3vpr.org	
Trustee	Dick Mayo / WW3R trustee@w3vpr.org	

Committees

Club Sale & Auction	Ike Lawton / W3IKE club.sale@w3vpr.org	
Digital Networking	Scott Rasmus / KC3BFW networking@w3vpr.org	240 758 0463
Facilities	Eric Berman / KC3GDV facilities@w3vpr.org	
Field Day	(TBD) field.day@w3vpr.org	
Station Manager	Rick Steer / AB3XJ ham.shack.coordinator@w3vpr.org	

Ham Shack Renovation	Jamison Phipps / W3KNH ham.shack.renovation@w3vpr.org	
Holly Net	Jim Wallace / N3ADF holly.net@w3vpr.org	
HSMM-MESH	(TBD) hsmm.mesh@w3vpr.org	
Kit building & Repair	'Raven' Weiland / KB3MUV kit@w3vpr.org	203 948 5369
MDC QSO Party	Jim Wallace / N3ADF mdcqsop@w3vpr.org	301 538 6233
Newsletter	Milford Craig / N3WYG newsletter@w3vpr.org	301 218 8867
Packet Radio	Jonathon Grafe / AE2JG packet@w3vpr.org	240 426 2664
Program	Tim Nagel / KB3YQK vice.president@w3vpr.org	
Public Service	Erick Graves / WA3G public.service@w3vpr.org	410 987 7670
Repeater Ops	John Williams / K8JW repeaters@w3vpr.org	410 647 7406
Rules	Chuch Tanner / K3ACT rules@w3vpr.org	301 464 2667
Service Hours	Jim Wallace / N3ADF service.hours@w3vpr.org	301 538 6233
Tower	(TBD) tower@w3vpr.org	
Training	Keith Miller / AE3D training@w3vpr.org	240 758 0423
VE Team	David Rawley / AE5Z testing@w3vpr.org	
Webmaster	Mark Bova / W2PAW webmaster@w3vpr.org	240 274 6294
Wed. Nite Net	Jamison Phipps / W3KNH wednesday.night.net@w3vpr.org	
Winter Field Day	Rick Steer / AB3XJ winter.field.day@w3vpr.org	

Groups

Board of Directors	board19@w3vpr.org
Kit Building Committee	kitbuilding@w3vpr.org
Rules Committee	rules.com@w3vpr.org



VE Testing Schedule

1st day of each month – Noon – AARC –
Rick Steer / AB3XJ testing@w3vpr.org

Third Saturday of each month –
9AM – Laurel ARC – John Creel, 301-572-5124
Fourth Tuesday of each month – 6PM – MMARC –
Mike Montrose / KA2JAI 443-310-4907 web site is
tinyurl.com/marylandmobileers

To all exams bring:

- Picture ID
- Social Security Number or FCC Registration Number (FRN)
- **ORIGINAL** and a **COPY** of current FCC amateur radio license
- **ORIGINAL** and a **COPY** of all element credits (eg., FCC letters, old licenses or unexpired Certificates of Successful Completion of Examination-CSCE)

Can Indoor Antennas Work? Yes!

By Dan Romanchik, KB6NU

Recently, a reader asked:

"I am studying your "No Nonsense" book as I prep for the Technician test. I am also learning CW. I am going to buy a Yaesu FT 450D as my first radio, and I want to use an indoor antenna as my first antenna. What do you recommend for CW?"

I replied:

To be honest, I've never had a lot of luck with indoor antennas. Don't let that dissuade you, though. I have worked many hams with indoor antennas. Just recently, for example, I worked a guy who was using a [Buddipole](http://www.buddipole.com/) (http://www.buddipole.com/) inside his apartment.

If you have an attic, you could easily install a dipole up there. The [ARRL web page on indoor antennas](http://arrl.org/indoor-antennas) (http://arrl.org/indoor-antennas) notes:

"Attics are great locations for indoor antennas. For example, you can install a wire dipole in almost any attic space. Don't worry if you lack the room to run the dipole in a straight line. Bend the wires as much as necessary to make the dipole fit into the available space.

....

"Ladder-line fed dipoles are ideal for attic use—assuming that you can route the ladder line to your radio without too much metal contact. In the case of the ladder-line dipole, just make it as long as possible and stuff it into your attic any way you can. Let your antenna tuner worry about getting the best SWR out of this system."

There are plenty of remote tuners now, too. You could install a doublet with elements as long as you can make them, connect them directly to the remote tuner, and then run coax to your shack.

I have also worked guys who have used Slinky antennas inside a house. The advantage of using a Slinky is that it is electrically longer than a wire of the same length.

An attached garage might also make a good location for an indoor antenna. VE3SO, who I've worked several times, uses a [magnetic loop antenna installed in his garage](https://www.kb6nu.com/magnetic-loop-antenna-at-ve3so/) (https://www.kb6nu.com/magnetic-loop-antenna-at-ve3so/).

If you do a web search for "indoor amateur radio antennas," you'll get many more ideas. Here are a few that looked promising to me:

- [Indoor antenna for 7 Mhz](#)
- (<http://www.iw5edi.com/ham-radio/37/indoor-ntenna-for-7-mhz>)

[An Indoor Reduced Size Rectangular Loop](http://hamuniverse.com/kl7jrindoorloop4010.html) (http://hamuniverse.com/kl7jrindoorloop4010.html)

Another option might be to load up your gutters! I've worked a couple of guys who use gutter antennas, including [WA8KOQ](https://www.kb6nu.com/operating-notes-gutter-antenna-rac-contest-161-countries-worked/) (https://www.kb6nu.com/operating-notes-gutter-antenna-rac-contest-161-countries-worked/) and [K3DY](https://www.kb6nu.com/operating-notes-computer-virus-club-net-gutter-antenna/) (https://www.kb6nu.com/operating-notes-computer-virus-club-net-gutter-antenna/).

This blog post garnered a couple of interesting comments. K2MUN wrote, "For many years I've used an

attic mounted off-center fed 40 meter dipole. With an automatic antenna tuner and a 4:1 balun I've worked lots of dx with both qrp and, more easily, 100 watts! Certainly, outdoors is much superior but an attic is a nice location in bad weather making playing with your antenna a pleasure :-).

John, KD0JPE, said, "If you have an attic available, check out the following 6-band coax trap-based antenna: <http://degood.org/coaxtrap/>. I constructed one of these 9 years ago and have had great results with it.

The bottom line is that indoor antennas can definitely work. They may take more work to put up than outside antennas, but as the saying goes, "Any antenna is better than no antenna."

Used with permission

AA

Getting Loaded (antenna-wise, anyway)

By Dan Romanchik, KB6NU

A couple of years ago, I homebrewed a "Cobra" antenna

(<https://www.kb6nu.com/yet-another-new-antenna-the-cobra/>).

It's a doublet antenna, meaning that it consists of two elements connected to a center insulator, where it connects to a feedline. The unique thing about the Cobra antenna is that each element consists of three parallel conductors connected in series.

My antenna uses a lightweight, three-conductor rotor cable that used to be available from Radio Shack. The feedline is 450 Ω ladder line that connects to an antenna tuner to give me multi-band operation.

Connecting the conductors in this way is supposed to provide "linear loading." Somehow, running the conductors in parallel is supposed to increase the antenna's effective length. My antenna is only 73-ft. long, but it easily tunes up on 80m.



The *ARRL Antenna Book* has a short section on linear loading. It says that linear loading is a "little understood" alternative to inductive loading that can be applied to almost any type of antenna. Furthermore, "...it introduces very little loss, does not degrade directivity patterns, and has low enough Q to allow reasonably good bandwidths."

As I mentioned, I've been using this antenna with good results for a little more than two years now. When I first put it up, someone mentioned the concept of linear loading to me, but not being an antenna guru, I didn't 'give

it much thought. About a week ago, though, I ran across a link to the page Short Ham Antennas for HF (<https://www.hamradiosecrets.com/short-ham-antennas.html>).

That got me thinking about the topic again.

This page describes a way to build a linearly-loaded dipole antenna with a feedpoint impedance of approximately 35 Ω . This allows you to feed it with coax instead of the ladder line that I use. The author uses 390 Ω ladder line for the elements. He says it's commonly available, but I don't think I've ever seen 390 Ω ladder line. You could probably use 450 Ω ladder line by adjusting the element lengths a little.

At that point, I started Googling. The next linear-loaded antenna design that I ran across is a design from MOPZT (<http://www.m0pzt.com/40m-linear-loaded-dipole/>). He built his elements from some sturdy wire and homebrewed spacers made from PVC pipe. He's used this design for the 40m elements of a fan dipole covering the 40m, 20m, 15m, and 12m bands. Only the 40m elements are linear-loaded.

I also found a design for a linear loaded vertical antenna for 40 meter and 80 meter (<https://www.qsl.net/pa3hbb/ll.htm>). This antenna is only 7.736m, or 25.4 ft. tall. Of course, it requires a good radial system to work well, but it will work a lot better for DX than a low doublet or dipole.

Finally, there's an eHam discussion on linear loading (<https://www.eham.net/ehamforum/smf/index.php?topic=84418.0>). Unlike a lot of eHam discussions, this one is quite civil. It's worth reading if you're interested in the topic.

So, if you're thinking of getting loaded, errrrr, I mean loading your antennas, here's a method for you to consider. It works!

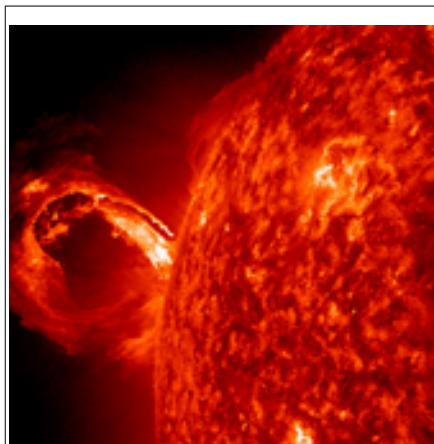
Used with permission

AA

Solar Cycle 25 Predicted to be Similar to Cycle 24

Scientists charged with predicting the Sun's activity for Cycle 25 say it's likely to be much like that of current Cycle 24, which is declining and predicted to

bottom out in 2019 or 2020. Solar Cycle 25 Prediction Panel experts said Cycle 25 may get off to a slow start but is anticipated to peak between 2023 and 2026 with a sunspot range of 95 to 130. This is well below the typical average of 140 to 220 sunspots per solar cycle. The panel expressed high confidence



A 2013 coronal mass ejection. [Photo courtesy of NOAA]

that the coming cycle should break the trend of weakening solar activity seen over the past four cycles. The Solar Cycle Prediction Panel forecasts the number of sunspots expected for solar maximum, along with the timing of the peak and minimum solar activity levels for the cycle. The outlook was presented on April 5 at the [2019 NOAA Space Weather Workshop](#) in Boulder, Colorado.

"We expect Solar Cycle 25 will be very similar to Cycle 24: Another fairly weak cycle, preceded by a long, deep minimum," said panel co-chair Lisa Upton, a solar physicist with Space Systems Research Corp. "The expectation that Cycle 25 will be comparable in size to Cycle 24 means that the steady decline in solar cycle amplitude, seen from cycles 21 – 24, has come to an end and that there is no indication that we are currently approaching a Maunder-type minimum in solar activity."

The solar cycle prediction gives a rough idea of the frequency of space weather storms of all types, from radio blackouts to geomagnetic storms and solar radiation storms. In addition to its effects on Amateur Radio signal propagation, space weather can affect power grids; critical military, airline, and shipping communications; satellites and GPS signals, and can even threaten astronauts through exposure to harmful radiation.

Solar Cycle 24 reached its maximum in April 2014 with a peak average of 82 sunspots. The Sun's Northern Hemisphere led the sunspot cycle, peaking more than 2 years ahead of the Southern Hemisphere sunspot peak. Given that the Sun takes 11 years to complete one solar cycle, this is only the fourth time that US scientists have issued a solar cycle prediction. The first panel convened in 1989 for Cycle 22.

For Solar Cycle 25, the panel hopes for the first time to predict the presence, amplitude, and timing of any differences between the northern and southern hemispheres on the Sun, known as hemispheric asymmetry. Later this year, the panel will release an official sunspot number curve showing the predicted number of sunspots during any given year and any expected asymmetry. The panel will also look into the possibility of providing a solar flare probability forecast.

"While we are not predicting a particularly active Solar Cycle 25, violent eruptions from the sun can occur at any time," said Doug Biesecker, panel co-chair and a solar physicist at NOAA's Space Weather Prediction Center ([SWPC](#)). An example of this occurred on July 23, 2012, when a powerful

coronal mass ejection (CME) eruption missed Earth but enveloped NASA's STEREO-A satellite. A 2013 study estimated that the US would have suffered between \$600 billion and \$2.6 trillion in damages, particularly to electrical infrastructure, if the 2012 CME had been directed toward Earth. The strength of the 2012 eruption was comparable to the famous 1859 Carrington event that caused



widespread damage to telegraph stations around the world and produced aurora displays as far south as the Caribbean.

[Visit](#) the SWPC to obtain the latest space weather forecast. – Thanks to NOAA

Used with permission The ARRL Letter, April 11, 2019



W1AW 2019 Spring/Summer Operating Schedule

Morning Schedule:

Time	Mode	Days
1300 UTC (9 AM ET)	CWs	Wed, Fri
1300 UTC (9 AM ET)	CWf	Tue, Thu

Daily Visitor Operating Hours:

1400 UTC to 1600 UTC - (10 AM to 12 PM ET)
1700 UTC to 1945 UTC - (1 PM to 3:45 PM ET)

(Station closed 1600 to 1700 UTC (12 PM to 1 PM ET))

Afternoon/Evening Schedule:

2000 UTC (4 PM ET)	CWf	Mon, Wed, Fri
2000 " "	CWs	Tue, Thu
2100 " (5 PM ET)	CWb	Daily
2200 " (6 PM ET)	DIGITAL	Daily
2300 " (7 PM ET)	CWs	Mon, Wed, Fri
2300 " "	CWf	Tue, Thu
0000 " (8 PM ET)	CWb	Daily
0100 " (9 PM ET)	DIGITAL	Daily
0145 " (9:45 PM ET)	VOICE	Daily
0200 " (10 PM ET)	CWf	Mon, Wed, Fri
0200 " "	CWs	Tue, Thu
0300 " (11 PM ET)	CWb	Daily

Frequencies (MHz)

CW: 1.8025 3.5815 7.0475 14.0475 18.0975 21.0675
28.0675 50.350 147.555
DIGITAL: - 3.5975 7.095 14.095 18.1025 21.095 28.095
50.350 147.555
VOICE: 1.855 3.990 7.290 14.290 18.160 21.390 28.590
50.350 147.555

Notes:

CWs = Morse Code practice (slow) = 5, 7.5, 10, 13 and 15 WPM

CWf = Morse Code practice (fast) = 35, 30, 25, 20, 15, 13 and 10 WPM

CWb = Morse Code Bulletins = 18 WPM

CW frequencies include code practices, Qualifying Runs and CW bulletins.

DIGITAL = BAUDOT (45.45 baud), BPSK31 and MFSK16 in a revolving schedule.

Code practice texts are from QST, and the source of each practice is given at the beginning of each practice and at the beginning of alternate speeds.

On Tuesdays and Fridays at 2230 UTC (6:30 PM ET), Keplerian Elements for active amateur satellites are sent on the regular digital frequencies.

A DX bulletin replaces or is added to the regular bulletins between 0000 UTC (8 PM ET) Thursdays and 0000 UTC (8 PM ET) Fridays.

Audio from W1AW's CW code practices, and CW/digital/phone bulletins is available using EchoLink via the W1AW Conference Server named "W1AWBDCT." The monthly W1AW Qualifying Runs are presented here as well. The CW/digital/phone audio is sent in real-time and runs concurrently with W1AW's regular transmission schedule.

All users who connect to the conference server are muted. Please note that any questions or comments about this server should not be sent via the "Text" window in EchoLink. Please direct any questions or comments to w1aw@arrl.org.

In a communications emergency, monitor W1AW for special bulletins as follows: Voice on the hour, Digital at 15 minutes past the hour, and CW on the half hour.

FCC licensed amateurs may operate the station from 1400 UTC to 1600 UTC (10 AM to 12 PM ET), and then from 1700 UTC to 1945 UTC (1 PM to 3:45 PM ET) Monday through Friday. Be sure to bring your current FCC amateur license or a photocopy.

The complete W1AW Operating Schedule may be found on page 93 in the March 2019 issue of QST or on the web at, <http://www.arrl.org/w1aw-operating-schedule>.



Department of Defense to Transmit Interoperability Exercise Info via WWV/WWVH

The US Department of Defense (DOD) plans to start making use of a provisional time slot on WWV and WWVH to announce upcoming HF military communication exercises and how the Amateur Radio community can become involved in them. The announcements will occur at 10 minutes past on WWV and at 50 minutes past on WWVH. WWV and WWVH transmit on 2.5, 5, 10, 15, and 20 MHz.

"DOD's use of the broadcast time slot on WWV/WWVH will benefit the MARS program's mission of outreach to the Amateur Radio community," said US Army Military Auxiliary Radio System (MARS) Program Manager Paul English, WD8DBY. "The actual messages to be broadcast are coordinated by the DOD Headquarters that the MARS program supports."



The initial announcements are set for the period from April 20 - May 3, which coincides with the "Vital Connection" interoperability exercise to be held in Wisconsin. Future time slots will coincide with the Vital Connection exercise Ohio in June; DOD COMEX 19-3 in August, and the DOD COMEX 19-4 in October. Following the proof of concept this year, DOD anticipates making use of the WWV/WWVH broadcast time slot full-time, year-round.

At the outset, broadcast messages will likely be static. For future exercises, announcements could be updated throughout an exercise. The messages will direct listeners to a specified website to provide reception reports and feedback.

The reception report will also ask the listener to submit a survey that will be shared among DOD, MARS, and WWV/WWVH personnel. English said that the survey will ask listeners questions about how often they listen to WWV/WWVH signals, how they use them, and what types of messages they would like to hear, but he notes that the survey is still under development.

"We want to provide feedback to WWV/WWVH to improve situational awareness of who is using their service and how it's being used, as well as future considerations," English said.

Used with permission The ARRL Letter for April 4, 2019

Petition for Rule Making Calls for "Amateur Digital Mode Transparency"

The FCC is accepting comments on a *Petition for Rule Making* ([RM-11831](#)) seeking to amend FCC Part 97 rules that require all ham radio digital transmissions to use

techniques "whose technical characteristics have been documented publicly." The *Petition*, filed by Ron Kolarik, K0IDT, of Lincoln, Nebraska, expresses concerns that some currently used digital modes are not readily and freely able to be decoded, and it asks the FCC to require all digital codes to use protocols that "can be monitored in [their] entirety by third parties with freely available, open-source software," per §97.113(a)(4).



Kolarik said his petition also aims to reduce levels of amateur-to-amateur interference from Automated Controlled Digital Stations (ACDS) on HF operating under §97.221(c)(2). Kolarik wants the FCC to delete §97.221(c), which permits automatic control of digital emissions provided the station "is responding to interrogation by a station under local or remote control, and [n]o transmission from the automatically controlled station occupies a bandwidth of more than 500 Hz." The petition does not call for eliminating ACDS, however. Under current rules, ACDS are allowed in specific sub-bands.

In his *Petition*, Kolarik maintains that interference from ACDS continues to be "a major problem on the amateur bands." He suggested that an absence of formal complaints may be due to the fact that such stations are "difficult to identify."

The *Petition* also proposes to amend §97.309(a)(4) to ease monitoring of certain digital transmissions. "Without open, over-the-air interception capability for all transmissions in the Amateur Radio spectrum, there is no way to determine if there is commercial or other prohibited, inappropriate content in ongoing communications..." Kolarik's *Petition* asserts. He said problems arise when "protocols and devices used in commercial, government, and marine services are used in the Amateur Service with no adequate means to fully decode transmissions," thwarting any efforts at self-policing of such transmissions. He said simplifying the language "would remove ambiguity about what constitutes 'publicly documented technical characteristics' by requiring any protocol to be freely decodable," and lead to "amateur digital mode transparency, present and future."

Kolarik contended in his petition that FCC action stemming from ARRL's 2013 "symbol rate" *Petition for Rule Making* could increase congestion (i.e., interference) problems. In July 2016, the FCC in WT Docket 16-239 [proposed](#) to revise the Part 97 rules to eliminate current baud rate limitations for data emissions, consistent with ARRL's *Petition*, but declined to propose a bandwidth limitation for MF and HF digital to replace current baud rate limitations. ARRL had asked the FCC to delete the symbol rate limits in §97.307(f) and replace them with a maximum bandwidth for data emissions of 2.8 kHz on amateur frequencies below 29.7 MHz.

Used with permission The ARRL Letter for April 14, 2019

AARC Repeaters and Nets

2 Meter Repeaters

Location	Frequency	Tone	Notes
Davidsonville	147.105+	107.2	AARC Repeater with morning traffic net.
Glen Burnie	147.075+	107.2	AARC repeater Located in Northern AA County.
BrandyWine	147.150+	114.8	SMARC Repeater.
Prince Frederick	145.350-	156.7	SPARC/CARC Repeater.
Laurel	147.225+	156.7	Laurel ARC Repeater.
Millersville	146.805-	107.2	Repeater.

1.25 Meter Repeaters

Location	Frequency	Tone	Notes
Davidsonville	223.880-	107.2	AARC 1.25M repeater *check to see if tied into 7.105...
Millersville	224.560-	107.2	AARC repeater Located in Northern AA County.

70cm Repeaters

Location	Frequency	Tone	Notes
Davidsonville	444.400+	107.2	AARC 70 cm Repeater.
Annapolis	442.300+	107.2	AARC 70 cm repeater
Laurel	442.500+	156.7	Laurel ARC 70 cm Repeater.
Millersville	449.125-	107.2	<u>Maryland</u> Mobileers Repeater.
Upper Marlboro	443.600+	103.5	SMARC 70 cm Repeater.

Packet Stations

Location	Frequency	Call	Notes
Davidsonville	145.050	W3VPR	AARC Club packet node running JNOS
Davidsonville	145.010	W3VPR-5	Digipeter Relay to EOC Winlink
Millersville	145.010	W3AAC-5	Digipeter Relay to EOC Winlink
Glen Burnie	145.010	W3AAC-10	EOC Winlink system and digipeter

Amateur Radio NETS

Name	Frequency (in Mhz)	Day	Time
The "Holly Net"	147.105+ PL 107.2	Weekdays	0700
AARC Talk Net	147.105+ PL 107.2	Wednesday	2000
AA County ARES Net	146.805- PL 107.2	Sunday	2000
Baltimore Traffic Net	146.670-	Daily	1830
Boating Net	146.805- PL 107.2	Wednesday	1930
Maryland Emergency Phone Net	3.920	Daily	1800
Maryland-DC-Delaware Traffic Net	3.643	Daily	1900 and 2200
<u>Maryland Slow Net</u>	3.563	Daily	1930
React Net	442.300+ PL 107.2	1st Sunday	1930

We use **simplex 146.430 Mhz** frequently enough that you should probably program that into your HT or mobile. This is the go-to frequency for many 5K race/walk volunteering efforts, local communication, Field Day setup, and the like when we're not using a repeater.



**The *Ham Arundel News* is the monthly
official publication of**

The Anne Arundel Radio Club, Inc.
(ARRL Club No. 0484).

Editor: Milford Craig / N3WYG

Send newsletter articles, questions and
information to **Milford** at **newsletter@w3vpr.org**
Deadline for submissions – The Saturday after
the 3rd Thursday of the month

Mailing Address:
Anne Arundel Radio Club
Post Office Box 308
Davidsonville, MD 21035

Meetings:

General Business 1st Thursday at 7:30 PM
Board Meeting 2nd Thursday at 7:30 PM
Program/Activity 3rd Thursday at 7:30 PM

Dues:

\$30 per year, payable December 1st
Discounts available for family members and
students

World Wide Web: **www.w3vpr.org**

**AARC Supports The Maryland Slow Net:
3.563 MHz CW 7:30 P. M. Daily**

AA

Free Money for AARC!
ARRL Membership Reminder

ARRL affiliated clubs receive a commission for every new
ARRL membership and renewal they submit to ARRL
Headquarters. Clubs retain a portion of the dues for each
regular or senior membership submitted to ARRL
Headquarters:

Clubs retain \$15 for each new membership OR lapsed
membership (of two years or more).
Clubs retain \$2 for each renewal,
**A RENEWING MEMBER can renew at any time, even before
their current membership expires.**

**Send your application and payment (made out to AARC)
to the club treasurer.**



Mark Your Calendars

REGULAR ACTIVITIES

Club Meetings are held on the
first and third Thursdays of the
month from 7:30 to 9PM at the
clubhouse located at the
Davidsonville Family Recreation Center in Davidsonville,
MD

**Free License Exams every 2nd Saturday of the
Month - Check in at Noon, Exams at 1PM - At the
clubhouse - Contact David Rawley / AE5Z,
testing@w3vpr.org**

Weekly AARC 2-Meter Net on 147.105 (Typically
linked to 147.075 and 444.400 with CTCSS tone of
107.2 Hz) every Wednesday at 8 PM - All Welcome

2 meter "HOLLY NET" on 147.105 (Typically linked to
147.075 and 444.400 with CTCSS tone of 107.2 Hz)
every morning 7:00 am to 9:00 am. All hams are
welcome.

EVENT SCHEDULE

Thursday, May 2 7:30pm
AARC - Club meeting, newcomers always
welcome.

Saturday, May 4 8:30am
AARC - General License Class

Sunday, May 5 1:00pm
AARC Kit-building, troubleshooting and repair,
at 1 to 4 PM at the clubhouse

Thursday, May 9 7:30pm
AARC - board meeting

Saturday, May 11 8:30am
AARC - General License Class
12:00pm AARC - Free License Exams

Thursday, May 16 7:30pm
AARC - Club meeting, newcomers always
welcome.

Friday, May 17
Hamvention 2019

Saturday, May 18
Hamvention 2019
8:30am AARC - General License Class

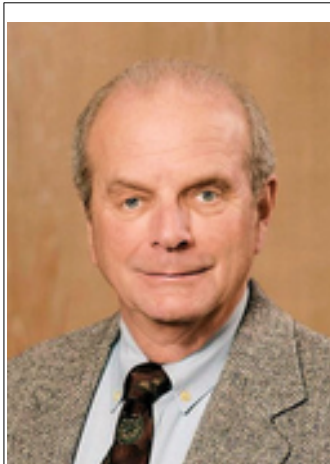
Sunday, May 19
Hamvention 2019
1:00pm AARC - Mesh Networking group, Every
3rd Sunday, 1 to 4 PM at the clubhouse

Sunday, May 26 1:00pm
Open Shack Hours

ARRL and FCC Sign Memorandum to Implement New Volunteer Monitor Program

ARRL and the FCC have signed a *Memorandum of Understanding (MOU)* that paves the way to implement the new and enhanced Volunteer Monitor program. The memorandum establishes the Volunteer Monitors as a replacement for the Official Observers (OO) program. Current OOs have been encouraged to participate in the new program.

"We are excited by the opportunity to codify our partnership with the FCC and to work together to achieve our mutual interests of protecting the integrity of our Amateur Radio bands," said ARRL President Rick Roderick, K5UR. "This *Memorandum of Understanding* will serve as the foundation for a new level of partnership on this very important issue."



Riley Hollingsworth, K4ZDH

ARRL has contracted with retired FCC special counsel and former Atlantic Division Vice Director Riley Hollingsworth, K4ZDH, to oversee the ARRL's role in the development and implementation of the Volunteer Monitor program.

Approved by the ARRL Board of Directors at its July 2018 meeting, the new Volunteer Monitor program is a formal agreement between the FCC and ARRL in which volunteers trained and vetted by the ARRL will monitor the airwaves and collect evidence that can be used both to correct misconduct or recognize exemplary on-air operation. Cases of flagrant violations will be referred to the FCC by the ARRL for action in accordance with FCC guidelines.

The intent of this program is to re-energize enforcement efforts in the Amateur Radio bands. It was proposed by the FCC in the wake of several FCC regional office closures and a reduction in field staff.

"Under this program, the FCC will give enforcement priority to cases developed by the Volunteer Monitor program, without the delay of ARRL having to refer cases through the FCC online complaint process," Hollingsworth said.

Hollingsworth has identified three phases to the program: Development, Solicitation and Training, and Implementation.

- The Development phase will include drafting a mission statement, clearly defining the ARRL's and FCC's requirements and needs as part of the program, writing a job description for volunteer monitors, and developing a training manual for volunteers.

- The Solicitation and Training phase will involve identifying the geographic locations where volunteer monitors will be most needed, soliciting

applications and guidance from Section Managers in reviewing applicants. (Those currently volunteering as Official Observers are invited to apply for appointment as Volunteer Monitors.)

- The Implementation phase will involve having the volunteers provide field reports to ARRL, with staff offering guidance to volunteers to ensure that the information collected meets requirements for FCC enforcement action.

Hollingsworth has committed to FCC and ARRL officials to ensure the adequacy of training for the new positions, to review the quality and utility of Volunteer Monitor submissions to the FCC for enforcement actions, and to advocate for rapid disposition of cases appropriately submitted to the FCC.

ARRL officials estimate that within 6 to 9 months the first Volunteer Monitors will be in place and ready to begin their duties.

Used with permission The ARRL Letter, Apr 18, 2019

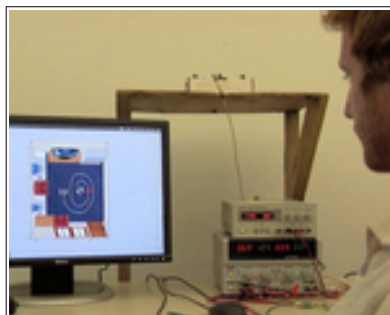
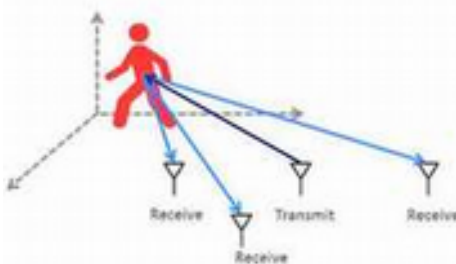
MIT Requests FCC Rules Waiver for Medical Monitoring Device

The Massachusetts Institute of Technology (MIT) is seeking a waiver of some Part 15 rules in order to obtain FCC certification of its WiTrack System, a swept-frequency ultra-wide band (UWB) indoor medical monitoring device. According to MIT, the WiTrack System uses an indoor swept signal of up to 2.5 GHz in the 6 - 8.5 GHz band to passively monitor mobility, breathing, and other physiological signals in patients and senior adults. Because the system would transmit an RF signal and receive its reflection from the environment, it would not require the use of body-worn sensors. MIT has indicated that different versions of the devices would sweep slightly different

frequencies within the 6 - 8.5 GHz range.

According to MIT [publicity material](#), WiTrack tracks the 3D motion of a user from the radio signals reflected off

a person's body. It works even if the person is occluded from the WiTrack device or in a different room. WiTrack does not require the user to carry any wireless device.



the direction of a pointing hand with a median of 11.2

"WiTrack localizes the center of a human body to within 10 to 13 centimeters in the x and y dimensions (about the size of an adult hand), and 21 centimeters in the z dimension. It also provides coarse tracking of body parts, identifying

degrees. It can also detect falls with 96.9% accuracy. WiTrack can be incorporated into consumer electronics and has a wide set of applications," MIT says.

Section 15.503(d) of the FCC's rules defines a UWB transmitter as an intentional radiator that, at any point in time, has a fractional bandwidth equal to or greater than 0.20 or has a UWB bandwidth equal to or greater than 500 MHz, regardless of the fractional bandwidth. The WiTrack System would not satisfy this definition, because each frequency step is less than 500 MHz in bandwidth "at any point in time," MIT says, even though the total bandwidth needed for optimal performance exceeds 500 MHz. MIT states that the waiver it seeks is similar to those previously granted by the Commission, and that grant of a waiver for the WiTrack System would be in the public interest.

The waiver request has been folded into ET Docket 19-89, and interested parties have until April 18 to comment and until May 3 to file reply comments.

Used with permission The ARRL Letter Apr 11, 2019

Florida ARES, State of Florida Considering Memorandum of Understanding

Amateur Radio Emergency Services (ARES®) Section Emergency Coordinators (SEC) from the ARRL Northern, West Central, and Southern Florida sections met recently with state Emergency Management Communication leaders to discuss improved integration of Amateur Radio during emergencies. A draft *Memorandum of Understanding (MOU)* between ARES and the State of Florida was presented for further consideration.

If agreed upon, the MOU would make ARES and Amateur Radio a valid resource that can be easily requested during an incident.

"For the first time ARES will be integrated into the state communication team," said West Central Florida Section Emergency Coordinator (SEC) Ben Henley, KI4IGX.

To facilitate deployment of communication resources more effectively, the three Sections have previously agreed to

work as a single entity during an incident. Also discussed was the necessity of changing the way ARES volunteers are credentialed, trained, and deployed.

"This is a team effort," said Northern Florida SEC Karl Martin, KG4HBN. SECs and state leaders anticipate



From left to right: Florida Telecommunications Specialist III Bob Little, N4RGL; West Central Florida Section Emergency Coordinator (SEC) Ben Henley, KI4IGX; Florida Department of Emergency Management Telecommunications Administrator Ben Bass, KI4OEE; Northern Florida SEC Karl Martin, KG4HBN; Southern Florida SEC John Wells, W4CMH; West Central Florida Assistant SEC Brad Haag, KM4VRU, and FDLE Statewide Communications Coordinator Nick Simoncini, KG4NJS.

working together in the future to overcome shortcomings in disaster and emergency preparation to ensure an effective response when Amateur Radio support is requested.

Used with permission The ARRL Letter, Apr 11, 2019

QSL Service Fee Structure (to change effective May 15, 2019)

ARRL members — including foreign members, QSL Managers, or managers for DXpeditions — should enclose payment as follows:

Through May 14, 2019, the rate structure is:

\$1.15 per ounce, plus \$7.00 QSL Bureau service fee.

For example, a package containing 1.5 pounds of cards — 24 ounces, or about 225 cards — will cost \$34.60. Please see the information below for additional pricing details. The minimum charge is \$8.15 for one ounce or less. DXCC credits cannot be used towards the QSL Service fee.

Effective May 15, 2019, the new rate structure will be:

\$2 for 10 or fewer cards in one envelope.

\$3 for 11-20 cards in one envelope, or 75 cents per ounce, for packages with 21 or more cards.

For example, a package containing 1.5 pounds of cards -- 24 ounces, or about 225 cards -- will cost \$18. No transaction service fees.

Any cards received before May 15 will be charged the current rate. There will be no adjustments for cards received before May 15.

You should use an accurate scale to weigh your cards. Most post offices have scales that you may use.

Please pay by check (or money order) and write your call sign on the check. Send cash at your own risk. DO NOT send postage stamps or IRCs. Please make checks payable to: "The ARRL Outgoing QSL Service."

Packages received with insufficient payment will not be processed until the balance is paid in full. The outgoing QSL bureau does not keep money on account.

Used with permission The ARRL Letter Apr 18, 2019

AARC Mesh Networking Group

1:00 to 4:00 PM monthly,

on the 3rd Sunday of the month

AARC Clubhouse, Davidsonville, MD

(Next Meeting will be May 19, 2019.)

REPEATER FREQUENCIES

Davidsonville	Millersville	Glen Burnie	Annapolis
147.105+		147.075+	
223.880-	224.560-		
444.400+			442.300+

PL: 107.2 for all repeaters

The 147.105 and 147.075 repeaters are frequently linked. Please leave an extra second after the courtesy beep to allow the link to reset as well.

Visitors are welcome to all meetings and nets.

*Meetings are held in the Clubhouse at the
Davidsonville Family Recreation Center,
 Queen Anne Bridge and Wayson Roads off
 MD Route 214 near Davidsonville, MD.*

For en-route directions, make initial contact on the 147.105 repeater.

Copyright © 2011 Anne Arundel Radio Club



Wednesday Night Talk Net -- All are welcome

8PM, On the AARC Repeater 147.105

Other Amateur Radio nets

Name	Frequency	Day	Time
The "Holly Net"	147.105+Mhz PL 107.2	Weekdays	0700
AA County ARES Net	146.805- Mhz PL 107.2	Sunday	2000
Baltimore Traffic Net	146.670- Mhz	Daily	1830
Maryland Emergency Phone Net	3.820Mhz	Daily	1800
MD-DC-DE Traffic Net	3.557Mhz	Daily	1900 and 2200
Maryland Mobileers Net	146.805 PL107.2	Monday	1930
Maryland Slow Net	3.563 MHz	Daily	1930
REACT Net	442.300+Mhz PL107.2	1st Sunday	1930

Cherry Pit Race Needs Radio Ops.

Forum topic by KA2JAI Mike Montrose

[
Annapolis Striders Cherry Pit race, Sunday morning May 5, 2019. Start time depends on assignment. Start & finish are at South River HS in Edgewater.

Radio ops organizer is Mike KA2JAI

Contact Mike at ka2jai@arrl.net if you are available to join the radio team

AA

UPCOMING HAMFESTS

This is a list of Hamfests in the Maryland-DC Section and nearby Pennsylvania, northern Virginia, West Virginia and Delaware [... and nearby] as a courtesy to our neighboring Section Managers.

We hope to see you there and bring a fellow Ham and friends.

Delaware State Convention (Delmarva Radio & Electronics EXPO)

Date: 04/27/2019 - 6AM to 1PM

Location: Cheer Community Center, 20520 Sand Hill Road, Georgetown, DE 19947

Sponsor: Sussex Amateur Radio Association

Website: <http://radioelectronicsexpo.com>

Sponsor: Sussex Amateur Radio Association

Talk-In: 147.090+ (PL 156.7)

Contact: Herbert KF3BT, Phone: 302-629-4949,

Email: herb@hamiltongraphics.com

VHF Super Conference

Date: 04/28/2019

Location: Holiday Inn Washington-Dulles Intl Airport, 45425 Holiday Drive, Sterling, VA 20163

Sponsor: Southeastern VHF Society, North East Weak Signal Group, Mt. Airy VHF Radio Club

Website: <https://vhfsuperconference.com/>

Talk-In: none

Contact: Marjorie K4MEP, Phone: 703-754-3876,

Email: info@directivesystems.com

The Great Hagerstown Hamfest

Date: 05/04/2019 - 7AM to 2 PM

Location: Washington County Ag-Center, 7313 Sharpsburg Pike, Boonsboro, MD 21713

Sponsor: Antietam Radio Association

Website: <http://w3cwc.org/hamfest>

Talk-In: 147.090+, 146.940- (PL 100.0)

Contact: Herman, K2AVA, Phone: 301-791-5841,

Email: k2ava@myactv.net

Eastern Pennsylvania Section Convention (Warminster ARC Hamfest)

Date: 05/05/2019 - 7AM to 2PM

Location: Bucks County Community College - Lower Bucks Campus, 1304 Veteran Highway, Bristol, PA 19007

Sponsor: Warminster ARC

Website: <http://www.k3dn.org/hamfest/>

Talk-In: 147.090+ (PL 131.8)

Contact: George N3HBT, Phone: 267-702-4355,
Email: hamfest@k3dn.org

Memorial Day Hamfest

Date: 05/26/2019 - 8AM to 2PM

Location: Howard County Fair Grounds, 2210 Fairgrounds Road, West Friendship, MD 21794

Sponsor: Maryland F. M. Association

Website: <http://www.marylandfm.org>

Talk-In: 146.76-, 224.76-, 444.00+ (PL 107.2)

Contact: John, WA3MNN, Phone: 301-641-5313,

Email: marylandfm@verizon.net

Used with permission MDC Section News, April 18, 2019

AA

Amateur Radio License Exam Session In MDC Section

http://www.arrl.org/exam_sessions/search/page:1/

Location.section_id:MDC/model:Event

<http://www.laurelvec.com/>

05/04/2019 | Catonsville MD 21228
05/04/2019 | Rising Sun MD 21911
05/05/2019 | White Marsh MD 21162
05/08/2019 | Fort Washington MD 20744
05/11/2019 | Cumberland MD 21502-4242
05/11/2019 | Davidsonville MD 21035
05/11/2019 | Rockville MD 20850
05/18/2019 | Laurel MD 20707
05/25/2019 | Centreville MD 02161
05/28/2019 | Linthicum Heights MD 21090
06/01/2019 | Catonsville MD 21228
06/08/2019 | Davidsonville MD 21035
06/12/2019 | Fort Washington MD 20744
06/15/2019 | Forest Hill MD 21050
06/15/2019 | Laurel MD 20707
06/22/2019 | Essex MD 21221
06/22/2019 | Rising Sun MD 21911
06/25/2019 | Linthicum Heights MD 21090

Look for these radio, educational and science events:

ARRL Event Website:

http://www.arrl.org/special_events/search/page:3/model:Event

Daily posts via MDC Section Twitter @MDCARRL

<https://twitter.com/MDCARRL>

Used with permission MDC Section News, April 18, 2019

AA

Folgers got it wrong.
The best part
of waking up is
going back to
bed after you pee.

Hamvention Opening Gates to All on Final Day of 2019 Show

Hamvention® has announced that it will open the gates to all, without charge, on the final day of the annual gathering at Greene County Fairgrounds and Expo Center in Xenia, Ohio. Hamvention 2019 General Chair Jack Gerbs, WB8SCT, said the idea is to encourage the curious to see what attracts some 30,000 visitors to Hamvention each spring.



Hamvention General Chair
Jack Gerbs, WB8SCT

"We have decided to open the doors to Hamvention to the public on Sunday, May 19, without buying a ticket," Gerbs said. "This will make it a little easier and cheaper for someone with just a little interest in Hamvention to see what all the excitement is about."

In addition to the features and equipment that attract radio amateurs, non-ham visitors will get to see vendors selling a variety of other electronic equipment, including computers and accessories, security devices, networking supplies, tools and other items of interest to the general public. Those visiting the flea market area may be surprised at what's available, often at a small fraction of its original cost.

Gerbs pointed out that Sunday is Hamvention's lightest traffic day, making it convenient for anyone who just wants check out what's there. Many vendors offer last-minute specials on a variety of items. The many food trucks offer a wide selection of menus, providing attendees with an opening to make Hamvention 2019 a family outing.

Hamvention will be open on Sunday from 9 AM until 1 PM. On Friday and Saturday, the gates will be open from 9 AM until 5 PM. While some parking will be available at the Fairgrounds, much of it is weather dependent. Visitors are urged to use one of the remote lots with free shuttles. These are located at Hobson Freedom Park, 2910 Trebein Road, in Fairborn; Xenia High School, 303 Kinsey Road, Xenia; Warner Middle School, 600 Buckskin Trail, Xenia, and Xenia Towne Square, 84 Xenia Towne Square, Xenia. Shuttles are in operation from 7 AM until 6 PM on Friday and Saturday, and from 7 AM until 4:30 PM on Sunday.

Greene County Sheriff Gene Fischer, KX8GCS, arranged to make text alerts possible again this year. Those who want to receive up-to-the-minute mobile phone alerts regarding weather, traffic, parking, and other useful information affecting the event are encouraged to sign up by texting "Hamvention19" to 888777. Those who signed up for the text alerts in 2018 already are registered for this year's event.

The Media Committee is working to make winning prize numbers available on the alert system soon after they are drawn, in order to help winners claim prizes and

to decrease the number of unclaimed prizes. Hourly prize drawing also will be posted on Twitter and Facebook as well as displayed on monitors throughout the fairground's buildings. All prizes **will be posted** following the event.

The text alerts supplement the Hamvention talk-in station that has operated for many years on the Dayton Amateur Radio Association 146.94 repeater (123.0 Hz tone) to give directions and other assistance. Last year a traffic bulletin station was also added on 145.525 to periodically repeat needed information. Amateurs with 2-meter capability are encouraged to program those frequencies before heading to Hamvention.

Used with permission The ARRL Letter, Apr 18, 2019

SECTION TRAFFIC MANAGER'S REPORT

MDC NTS NETS:

MEPN 1903 W3YVQ QND/31 QNI/476 QTC/57 MINS/821
 BTN 1903 AB3WG QND/31 QNI/422 QTC/56 MINS/625
 MDD 1903 AA3SB QND/60 QNI/264 QTC/134 MINS/570
 MSN 1903 W3CPG QND/31 QNI/88 QTC/12 MINS/429
 PSHR: W3CB 140, KK3F 140, W3YVQ 135, K3IN 110,
 AA3SB 100, NI2W 96, WB3FTQ 90, AB3WG 75, N3JET
 71:

TFC: KK3F 2718, K3IN 323, W3YVQ 121, AA3SB 95,
W3CB 55, WB3FTQ 47, N3JET 31, AB3WG 27, NI2W 16

=====

MEPN TIME CHANGE:

On Sunday, March 10, 2019, the MEPN switched back to the summer schedule meeting one hour later than during the winter. MEPN pre-net is now at 1730L, formal call at 1800L. No changes to BTN, MDD, 3RN/C2, or 3RN/C4 times.

HF PROPAGATION:

MEPN: The net NVIS propagation was functional throughout MAR, 2019, with good signals until well after the formal net call. Outbound traffic to MDD may be routed via the Digital Traffic Net if it is anticipated that MDD may not be able to conduct a net, a tricky prediction at best; or may be carried by the MDD liaison to an MDD EchoLink session, if held, for DTN; or outbound traffic may be sent to one of the MDC DTS stations via WL2K (as advised by the MDD NM) if MDD or 3RN/C4 fails.

MDD: NVIS propagation for local MDC stations on MDD early and late, and on RRI/3RN/C4 nets, was nearly or totally non-existent for some evenings in early MAR, 2019. On some of those nights the propagation recovered enough by 2130L 3RN and/or 2200L late MDD for net sessions to be run. As March progressed the higher sun angle allowed the MUF to remain above the net frequency on more nights. Late in the month, early MDD and early 3RN NVIS propagation was good, and the late nets fair to good. Outbound traffic may be posted via WL2K to one of the MDC DTS stations as advised by the MDD NM if the net fails. If 3RN fails and the MDD rep cannot go to RRIE, the outbound traffic may be posted with one of the MDC

DTS stations as advised by the MDD NM. In April we should experience good NVIS on all four Cycle 4 CW nets barring any unusual solar flare or CME activity.

CW OPERATORS NEEDED:

Additional CW operators are needed for liaison to MDD and to the higher nets, and Net Control Stations are also needed on MDD and 3RN/C4. The evening NTS and RRI nets in Cycle 4 nation-wide are conducted on CW, a very efficient mode for traffic handling. All the letters, figures, slant-bars, and spaces are sent one at a time. No spelling of Radiogram content is required - everything is spelled out. Experienced operators may achieve a message throughput twice that of voice nets. Operational commands are often simply a "Q" signal group (see the famous "Pink Card" from the ARRL, FSD-218) or a few letters/figures of direction. Stations typically handle messages on a stack frequency off the net, hence stations with no pending business may be excused expeditiously. Although experienced operators may use speeds from 18 to 25 wpm on these nets, they are all willing to slow down for the newcomer. That's what "QRS" is all about. Grab your key, join in on MSN to help sharpen your skills, have some fun QSOs to help build confidence, and come participate in the evening nets.

MEPN/MDD/3RN ECHOLINK:

MEPN representatives check for EchoLink check-ins starting at net call daily via the WB3GXW-L link node (or *WASH_DC* conference node backup if the -L node is not available). A number of BTN and MEPN members, as well as stations outside the area, have used EchoLink to check in when HF is not available to them. MDD operators are also welcome. Thanks to all. WB3GXW has kindly given permission for the MDD and 3RN operators to coordinate message handling on the WB3GXW-L conference bridge as needed during this solar minimum period.

EchoLink on WB3GXW-L may also be used to coordinate the movement of traffic to Digital Traffic Net liaisons, or such traffic may be sent to such stations via WL2K for posting that night or the following morning for daytime distribution nation-wide. 160m at 1857 kHz +/- may also be used as an alternative as notified by the NM or NCS. Moving traffic by DTN HF PacTor is still an on-air activity for SAR reporting. Moving traffic via Winlink between stations or to DTN hubs is permitted and may be done via HF radio, Packet radio, or internet, on one or both ends as necessary. Email may be used when no other paths are available. Only the radio paths qualify for SAR sent and received points.

MSN CW TRAINING:

Remember that the MSN provides CW training daily for newcomers to the mode, or those wishing to refresh their skills, daily at 7:30 PM Local on 3563 kHz. Each trainee works with an assigned instructor off the net frequency to receive Radiograms containing training information. Instructors work with each student at their own desired speed and check-in schedule. All are encouraged to master the art of CW via this net or personal training in order to support and join the ranks of our MDD Section CW net. Robin, AA3SB, MDD NM, and the veteran staff, will be glad to help you advance to the evening CW full Cycle 4 RRI. By the end of March, the NVIS propagation

improved enough to allow local stations to participate in MSN with good signals.

BTN LOCAL NTS TRAFFIC AND TRAINING NET:

The BTN continues to meet on 145.33/R (no tone) daily at 6:30PM local time and continues to welcome new amateurs. The availability of an active directed traffic net of the NTS on VHF is exactly why the BTN was established, providing a welcoming place for newcomers to the Amateur Service. Thanks to all the BTN stations checking into the MEPN via EchoLink. The NM, AB3WG, has initiated plans for broader cooperation between BTN and MSN to foster more awareness between operators using the respective modes. Instructive message swapping and liaison duties should be in work in April, 2019.

MESSAGE TYPES:

MDC NTS and RRI handle:

- 1) The traditional Radiogram (all-cap letters, figures, and slant-bars, with spelled out punctuation);
- 2) The Hybrid Radiogram (which is formatted in the Preamble, Address, and Signature, plus any OP NOTES, the same way as the traditional Radiogram but with an "email-formatted" text with upper/lower case, figures, plus all the standard email punctuation symbols, permitted between the breaks in order to carry ICS and other form content - handled by RRI's Digital Traffic Network); and
- 3) Operators use the Winlink Radio-email system for transport of both types of Radiograms as well as regular email-formatted messages. FL MSG also provides for ICS form entry and export of content to facilitate handling such texts within Amateur Radio; and it also provides an attachment export which may be used to print out ICS forms on the receiving end including the form's box borders.

Please encourage newcomers in your clubs and areas to learn how to format the various message types; participate in our directed traffic nets; and become familiar with the equipment, software, and operational experience needed. These are critically important skill sets to bring to all NTS, RRI, ARES(r), RACES, and NIMS/ICS support activities; and are now required in ARES(r) guidance. The Section's NTS staff will be glad to provide introductory and advanced training via EchoLink to help you. As mentioned on our Section EchoLink conferences, it is efficient to do this for the "instructors" in reasonable class sizes. ARES(r) ECs, etc., or designated specialists in your jurisdictions, are good candidates for this. Rank and file training should continue on local ARES(r) and club nets. The training references for many of the topics are on the Section's web site under "General Information" (www.arrrl-mdc.net). Thanks to all the Section traffic net NCS stations, DTN/RRI and WL2K stations, liaisons, and traffic handlers for the continuing effort to keep the nets running and traffic moving.

Thank you for your continued support of MDC integrated ARES(r), RRI, and NTS operations.

73,

W3YVQ, MDC ASM, STM

Used with permission MDC Section News, April 18, 2019

The Anne Arundel Radio Club

We are pleased to receive any donations over your yearly dues.

World Amateur Radio Day 2019 Marks International Amateur Radio Union Founding



Thursday, April 18, is World Amateur Radio Day ([WARD](#)), this year marking the 94th anniversary of the International Amateur Radio Union ([IARU](#)), which was founded in Paris in 1925. Each year, WARD celebrates Amateur Radio's contribution to society. Groups in the US and around the world will celebrate WARD 2019 with on-air activities.

"I am pleased to extend my greetings for World Amateur Radio Day," IARU President Tim Ellam, VE6SH, said. April 18 is the day for all of Amateur Radio to celebrate and tell the world about the science we can help to teach, the community service we can provide, and the fun we have. I would encourage all radio amateurs to join in the celebrations and promote Amateur Radio on the air or in your community. "Amateur Radio experimenters were the first to discover that the shortwave spectrum was not the wasteland experts of the time considered it to be, but a resource that could support worldwide propagation. In the rush to use these shorter wavelengths, Amateur Radio was "in grave danger of being pushed aside," the IARU's history notes. Amateur Radio pioneers met in Paris in 1925 and created the IARU to support Amateur Radio around the globe.

Two years later, at the International Radiotelegraph Conference, Amateur Radio gained allocations still recognized today -- 160, 80, 40, 20, and 10 meters. More bands have followed, and the IARU has been working to defend and expand Amateur Radio frequency allocations ever since.

From the 25 countries that formed the IARU in 1925, the IARU has grown to include 160 member-societies in three regions. IARU Region 1 includes Europe, Africa, the Middle East, and northern Asia. Region 2 covers the Americas, and Region 3 is comprised of Australia, New Zealand, the Pacific island nations, and most of Asia.

The International Telecommunication Union ([ITU](#)) has recognized the IARU as representing the interests of Amateur Radio.

Groups are encouraged to promote their WARD



activity on social media by using the hashtag **#WorldAmateurRadioDay** on Twitter, Instagram, and Facebook. [Visit](#) the IARU World Amateur Radio Day web page for a listing of on-the-air activities.

Used with permission The ARRL Letter, Apr 11, 2019

AA

Operating: The Upside of Remote Control

If you've ever worked Hal Offutt, W1NN, in a contest and thought he was in Ohio, the more likely possibility is that he was in Japan (he is also 7J1AAI), operating his station in Ohio remotely via the internet. A philosophical debate continues as to whether operating a station from one place (e.g., Japan) that is physically in another (e.g., Ohio) is *really* Amateur Radio. We'll leave that for the reflector pundits to resolve among themselves. Fact is, the ability to remotely control a distant station is not all that new, and it's gaining in popularity, with remotely controlled, specially sited contest stations now available on a rental basis.

Some hams have done it over the POTS (plain old telephone service) or a cell phone in years past, but the typical arrangement these days is via the internet, and some very sophisticated hardware and software (it takes a combination of both) has been cobbled together to make it work.

In his "Remote Contesting" column in the November/December

2018 issue of [NCJ](#), Mark Aaker, K6UFO, notes:

"Remotely operated contest stations are appearing in greater numbers with each passing contest." Aaker said he's noticed four effects of remote stations on contesting: 1. Remote stations are being used to win, and place highly, in major contests; 2. Remote

stations provide valuable contacts and multipliers for other contest participants; 3. Remote stations are allowing operators to get on the air who might otherwise not be able to participate, and 4. Remote stations are developing technology that's useful for all station builders. W1NN explained how it works for him.

"Like most Tokyo residents, I live in an apartment where it is not practical to put up a ham antenna," he told [NCJ](#). "For much of the contest season I was off the air, missing contests that I had come to like. Dan, WA6URY, helped me through the process of setting up a remote station. I made my first contacts from Japan via my Ohio station in the winter of 2011, so I have been at this now for 7 years. My station in Ohio is quite modest, but it is a lot better than having no station, and [operating remotely] allows me to contest as much as I want while in Japan."

Used with permission The ARRL Letter, April 25, 2019

AA



Hal Offutt, W1NN, at his remote station control point in Tokyo. [Hal Offutt, W1NN, photo]

The Radio Amateur Operator is...

CONSIDERATE

...He/[She] never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL

...He/[She] offers loyalty, encouragement and support to other amateurs, local clubs, the IARU Radio Society in his/[her] country, through which Amateur Radio in his/[her] country is represented nationally and internationally.

PROGRESSIVE

...He/[She] keeps his/[her] station up to date. It is well-built and efficient. His/[Her] operating practice is above reproach.

FRIENDLY

...He/[She] operates slowly and patiently when requested; offers friendly advice and counsel to beginners; kind assistance, cooperation and consideration for the interests of others. These are the marks of the amateur spirit.

BALANCED

...Radio is a hobby, never interfering with duties owed to family, job, school or community.

PATRIOTIC

...His/[Her] station and skills are always ready for service to country and community.

- adapted from the original Amateur's Code, written by Paul M. Segal, W9EEA, in 1928
The Radio Amateur's Code