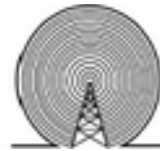


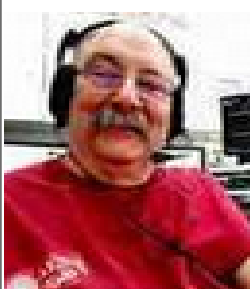
The Ham Arundel News



Providing Fellowship and Community Service through Amateur Radio Since 1951

March 2020

41st Year of Publication



Keith Miller, AE3D

The Prez Sez

I've always thought of myself as a 'big-picture thinker'. But after years of teaching new and prospective hams how to get their licenses, I am beginning to realize my thinking was not nearly big-picture enough. A license does not a ham make.

After each of our Technician Classes there are those who go on to become members of the ham radio community, and there are those who simply get a call sign and drop out. I've run into some two years later who have yet to make a single contact. Zero, zip, zilch!

There are a huge array of things that stand in their way. Really! Some freeze at the thought of having to choose one HT over another. Some have the HT but can't program it. Some get a friendly ham to program their HT for them, but then find it doesn't have the frequencies programmed that they need for things like public service events. Then they feel bad about bugging that person to re-program it for them. Some want to try out HF. They come to the club house on contest or open shack days because we say there will be people to help them, and then nobody says "Can I help you?" They are either embarrassed to ask, or are afraid they are disrupting something if they do. In other words, if you are at all timid, your chance of becoming an active ham go down exponentially.

How do we fix this? First, I have created a committee of mentors or Elmers or whatever you want to call them. Scott DeMatteo, W3GTR is taking charge of this effort. The idea is to have someone from his Committee assigned to each new Technician. Scott will be looking to match Elmers to Technicians so that all new Technicians get socialized into the Amateur Radio community. They have to be a good enough friend to these new hams, that being 'timid' is no longer an option. We have to make them more embarrassed not to ask questions, than to ask them.

Second, whenever we have the shack open, or are part of an operational event, we need to ensure that new Technicians are not just able-to-operate, but are forced-to-operate. No is not an acceptable answer. If I have to assign someone the job of making sure this happens, I will. But I'm asking for your help here. Be belligerent! Twist their arms! Make them do it! They will thank you later.

Third, on week 4, March 21st our Technician Class

holds a "Hands-on, learn to use an HT" workshop following our class. One of the segments of this workshop is about being part of a Tactical Network, just like we use for Public Service Events. It is my hope that enough of our Public Service Event Coordinators can attend this short 2 hour session, noon to 2:00pm, that afterwards the students will be able to put faces to names when they think about volunteering. Make them more embarrassed to not-volunteer, than to volunteer.

Fourth, we are inviting all our Technician Class students to attend the "Club Sale and Modified Dutch Auction" on April 2nd. We hope that some will find HT's they wish to purchase. It helps the seller, and the student can be ready to operate on day-one with their new license.

Fifth, on April 16th we will have a presentation all about how to program an HT. This is 5 days after April 11th testing, and 3 days after those who pass get their call signs. The program will be relatively general, but will explain roughly what CHIRP and RT Systems software does, what needs to be programmed to make a repeater or simplex entry work, and the basics of programming an HT by hand. I say the basics because the exact commands vary so much by manufacturer. But we don't end there.

Two days later, Saturday, April 18th we hold a 'Bring your HT and get it Programmed' workshop. For this one we will amass as many programming cables, pieces of software, and 'cheat sheets for programming various radios manually' as possible. I am also looking for volunteers to help pull this off, some familiar with the software approach, others with manual programming experience.

Further, for that presentation and the workshop to follow, we will be inviting any ham, from any club, or no club at all, to attend. We plan to, at a bare minimum, program each radio with a host of local repeaters, one or two national simplex calling frequencies, and a group of frequencies used for our club's public service events. Nothing stops someone from taking part in a public service event quicker than an HT that needs programming. If we want their help we need to help them first.

So that's my new big picture. Socialize hams, make sure they meet people and can identify those heading up events, make sure they get an HT, learn how to use it, and how to program it. Oh, and maybe when its all over the Elmers can set up on-air schedules, forcing them to use their new skills. Of course, if this all works, we remember what we did so we can repeat the process.

73

Keith , AE3D
President

LETTERS: Amateur Radio and Medical Communications at Running Events

The University of Southern Mississippi "NCS4" program publishes best practices, holds events, and offers training courses for sporting event organizers. In late 2019, I was invited to represent Amateur Radio at the National Marathon and Running Events Safety and Security Summit in Orlando. I asked for a show of hands - about half the audience used Amateur Radio and about half also had taken the FEMA ICS-100 course on the Incident Command System.

The larger US marathons were represented -- New York, Boston, Chicago and Marine Corps -- and I talked to each representative, one on one. Responses were generally that their events probably use Amateur Radio operators/volunteers (but not always frequencies) in a direct medical communications tasking.

Our event is the large Medtronic Twin Cities Marathon. I explained that we support the following functions:

- Medical Command Center, staffed 100% by radio amateurs. All non-911 volunteer resources are in our scope. We also monitor 911 radio traffic using authorized volunteers to ensure our reports are accurate; e.g., the right bib number and runner cross street location.
- Provision of a fully redundant "lights out" backup radio system. This is a specific, requested function.
- Assignments on Command trucks, which house some of our net controls who provide liaison to government radio systems and are under our direction.
- At our events and others, 350 rented trunked radios are the backbone of event communications (a best practice). We provide net controls for the medical channels - the Incident Commander checks in and is on our rented radio nets all race.
- Transport tracking and hospital capacity management -- using secure systems and authorized officials we ensure families know where runners are transported. We do not share medical condition information.
- Family reunification -- if runners drop off the course or are injured, we reunite runners with their families.
- Wheel chair and medical electric cart dispatching.
- Aid station support on the course.
- Hams every mile for dropped out runner reporting and situational awareness.
- Shadows for key officials as requested.
- Medical tent runner check-in and check out.
- Support student EMTs, Medical Reserve Corps and volunteer resources, such as mutual aid at the sprawling finish line area.
- Support published disaster and evacuation plans.
- Support bike medics.

- Track SAG (Supplies and Gear) bus location and passengers.
- Train users on medical applications.
- Provide input to the development of ICS 205/206 frequency lists and Incident Action Plan (IAP).

The concept of redundant and backup communications came up regularly. There was even an idea floated of a backup EOC. Several presenters mentioned the importance of live video for situational awareness. This was tested by us on our area wide mesh network in 2019. -- [Erik Westgard, NY9D](#) [Westgard is the Medical Communications Coordinator for the Medtronic Twin Cities Marathon]

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Net Control Radio Operators

ARE NEEDED for the HOLLY NET

during the work-weekdays -

from 0700 to 0900 am.

Contact: Jim Wallace, N3ADF

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ARRL Expands Its Roster of Online Discussion Groups

ARRL's Committee on Communication with Members has launched three new online discussion forums as part of its ongoing efforts to enhance and improve communication between ARRL leadership and members or prospective members. The new forums, which focus on antenna law, regulatory issues, and support for new amateur radio licensees, will go live on Thursday, January 30, at 0400 UTC.



The committee launched the three new discussion groups on the basis of requests from the amateur radio community, to support ARRL's efforts to provide more resources for beginner-to-intermediate operators.

The online discussion program launched last fall with three forums -- contesting, awards, and the International Amateur Radio Union ([IARU](#)) -- all open to the amateur radio community. The program was based on the success of the online ARRL-LoTW Group, which, for the past several years, has served to answer questions and generate discussions about ways to improve the service.

- ARRL New England Division Director and attorney Fred Hopengarten, K1VR, will moderate the [Antenna Law and Policy Forum](#). Hopengarten is the author of *Antenna Zoning for the Radio*

Amateur.

- ARRL Regulatory Affairs Manager Dan Henderson, N1ND, will moderate the [Regulatory Affairs](#) forum.

- QST Editor and ARRL Publications Manager Steve Ford, WB8IMY, will moderate the [New Hams](#) forum.

ARRL IT Manager Michael Keane, K1MK, worked with **Groups.io** to set up the new groups. Those wishing to subscribe must use a **Groups.io** username and password, if they have one, or create a **Groups.io** account if they don't.

The new groups join an ARRL discussion forum lineup that already includes:

- [ARRL-Contesting](#), moderated by ARRL Contest Advisory Committee Chairman Dennis Egan, W1UE.

- [ARRL-Awards](#), moderated by ARRL Radiosport and Field Services Manager Bart Jahnke, W9JJ.

- [ARRL-IARU](#), moderated by IARU Secretary David Sumner, K1ZZ.

- [ARRL-LOTW](#), moderated by ARRL IT Manager Michael Keane, K1MK.

Everyone who subscribes to an ARRL Group is automatically subscribed to "ARRL Groups," an administrative feature that allows ARRL to convey routine announcements to subscribers of all ARRL groups, such as planned system outages.

ARRL expects to create additional online groups that focus on other areas of interest to radio amateurs, including ARRL activities, services, initiatives, and policies.

ARRL currently hosts some "members-only" online forums that include the topics of Awards and Contesting.

While these forums will continue to operate, participants are being encouraged to post new topics in the new groups.

All questions will be welcome, no matter how many times they have already been asked and answered, or how obvious the answers might be. Neither

personal attacks nor foul language will be tolerated. Violators will immediately be placed on "moderated" status, meaning their subsequent posts will require Moderator approval. Civility and courtesy are expected, even when disagreeing.

The Committee believes that providing more opportunities for two-way discussion between the organization's leaders and the entire ham radio community will assist ARRL in truly serving the needs of this community. -- *Thanks to ARRL Communications Manager Dave Isgur, N1RSN*

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20/20 Vision in 2020

As a PIO, EC, DEC, or AEC, our job is not only to lead and direct our ARES organization, but to keep our eyes open for ways to promote our organizations to the public, to our served agencies, and to potential new members. When promoting our organization to the public, we need to have 20/20 vision in looking for events in which we can participate to show the public what we do.

Here are some ideas:

- Set up a table at the mall. Many malls will let you set up a table to promote your public service organization and not charge for the space.

- Set up a table at the local library.

- Check every community calendar that you can find - many of them are online. Set up tables at community events.

- Our served agencies need to know we have 20/20 vision in our support for them. We need to meet regularly with their representatives to understand what they need, want and expect from us. Participate in their exercises.

- Promote your organization to potential new members. Recruit amateur licensees who are new residents of your area. Recruit new licensees in your area. ARRL HQ can send you lists and mailing labels of potential members. Contact them!

What are your 2020 goals and 20/20 vision to promote your organization? Let's make 2020 the Year of Outreach! --

Scott Roberts, KK4ECR,
ARRL Public Information Officer

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Coronavirus Outbreak Postpones Swains Island W8S DXpedition

The [W8S DXpedition](#) to Swains Island in the Pacific, set to take place in mid-March, has been postponed until September as a result of travel restrictions imposed on individuals entering American Samoa, stemming from the recent coronavirus outbreak. The Department of Health allows non-residents to enter American Samoa only via Hawaii after a 14-day mandatory quarantine, and the DXpedition was unable to accommodate that requirement.

"Everything is prepared for our DXpedition, and we are eager to go, but unfortunately the coronavirus outbreak is out of our control," the DXpedition team said in announcing the delay. "Although this is a disappointment for everyone, the W8S DXpedition is not cancelled, just postponed for later this year."

The DXpedition said it would alert the DX community as soon as it has new firm dates for the trip.

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New Amateur Extra-Class Question Pool Released

The new Amateur Extra-class license examination question pool, effective from July 1, 2020, through June 30, 2024, has been released and is available at the National Conference of Volunteer Coordinators ([NCVEC](#)) website.



The [2020 - 2024 Extra-class pool](#) incorporates significant changes compared to the current 2016 - 2020 question pool, which expires on June 30. The number of questions in the pool was reduced from 712 to 622. The result was 239 modified questions, 49 new questions, and 139 questions removed due to changes in what was felt to be an abundance of outdated questions, while areas of new technology and subjects were added.

In addition, an effort was made to balance the difficulty level, removing or replacing some questions deemed too easy or too difficult compared to the rest of the pool.

The 2020 pool has 10 diagrams, which have been renumbered because the new question pool has two fewer than the 2016 question pool.

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HuskySat-1 With VHF/UHF Linear Transponder Set to Deploy Soon

The University of Washington's [HuskySat-1](#) 3U CubeSat, launched November 2, 2019, is set to deploy on January 31 after the vehicle that carried it to the International Space Station undocks. HuskySat-1 has remained stowed aboard a Northrop Grumman Cygnus supply vehicle. Within 24 hours after Cygnus' departure from the ISS, HuskySat-1 and [SwampSat 2](#) will be deployed into orbit.

After deployment, HuskySat-1's 1,200 bps BPSK beacon on 435.800 MHz should be active and decodable with the latest release of AMSAT's [*FoxTelem*](#) software. HuskySat-1 is expected to carry out its primary mission before being turned over to AMSAT for amateur radio operation.



University of Washington graduate student Paige Northway with HuskySat-1. She has been involved in the project since its inception.

HuskySat-1 features a 30 kHz wide V/U linear transponder for SSB and CW. The uplink passband will be 145.910 - 145.940 MHz LSB/CW. The downlink passband will be 435.840 - 435.810 MHz USB/CW (inverting). Telemetry will be transmitted on 435.800 MHz, 1k2 bps BPSK with an experimental downlink at 24.049 GHz. The

"Fox-in-a-Box" *FoxTelem* software has been updated for HuskySat-1 operation at its [download website](#). The new release now contains the SD card image, FIAB-distro8-V1.08w.zip. This file, when unzipped and written to a 16 GB SD card, will provide the latest software for *FoxTelem* and will run on a Raspberry Pi 4. The 1.08 versions can switch bands between listening on VHF and UHF, based on which Fox and Husky satellites are overhead at the time.

The linear transponder and telemetry system carried aboard AMSAT's Fox-1E was designed for use in different CubeSats merely by adding an interface adapter for connection to the host bus. Noting the prevalence of CubeSats built and launched by universities and other organizations, AMSAT adopted a goal of "amateur radio in every CubeSat."

Additional information is posted on the University of Washington [Husky Satellite Lab site](#). -- Thanks to AMSAT News Service via the HuskySat-1 Team, AMSAT Engineering, AMSAT Operations, the Fox Telemetry Team, and NASA

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State QSO Party Challenge Announced

The [State QSO Party Challenge](#) is a competition comprised of other contests, namely state and provincial QSO parties. As explained on the website, the annual cumulative score program is open to any radio amateur who participates in any approved state QSO parties (SQPs). Participants just need to submit their QSO party scores to **3830scores.com** to enter the challenge.

Participants' cumulative scores will be calculated by totaling up the number of reported contacts and multiplying by the number of SQPs entered in the year to



date. Periodic
standings will be
posted to
3830scores.com, the
QSOParty_Groups.io
forum, and the
StateQSOParty.com
website.

"Using the number of QSO parties entered as a multiplier is expected to encourage radio amateurs to enter more state/province QSO parties," the program's organizers said. "The first SQPs in 2020 are the Vermont, Minnesota, and British Columbia QSO Parties in the first weekend of February."

Entrants must make at least two contacts in a QSO party for it to count as a multiplier. The full details are available on the State QSO Party Challenge website.

Challenge sponsors expressed appreciation to Bruce Horn, WA7BNM, for developing the [SQP Activity Tracker](#) on [3830scores.com](#).

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[illegible]

AARC STAFF – 2020 Officers

| | | |
|-----------------------|-----------------------------------------------------|--------------|
| President | Keith Miller / AE3D president@w3vpr.org | 240 758 0423 |
| Vice President | Jim Wallace, (N3ADF) vice.president@w3vpr.org | |
| Secretary | Bernie Coletta / NK3PS secretary@w3vpr.org | |
| Treasurer | Bill Mooney / KA3UQQ treasurer@3vpr.org | |
| Director A | Eric Berman / KC3GDV eric.board20@w3vpr.org | |
| Director B | Doug Ellmore, (NA1DX) doug.board20@w3vpr.org | |
| Director C | Scott DeMatteo, (W3GTR) scott.board 20@w3vpr.org | |

Support Staff

| | | |
|-----------------------------|------------------------------------------------|--------------|
| Membership Secretary | Lambert Matias / KK3WOW | |
| 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 |
| Fox Hunt | Jim Wallace / N3ADF fox.hunt@w3vpr.org | |
| Joint 440 Comm | Gordon Davids / WJ3K joint440@w3vpr.org | 410 647 2956 |
| MD Slow Net | (T B A) | |
| MDC Section Manager | Marty Pittinger / KB3MXM arri.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 t.rustee@w3vpr.org | |

Committees

| | |
|--------------------------------|------------------------------------------------------------------------------------|
| APRS | Jon Graefe / AE3JG aprs@w3vpr.org |
| Beverage Supply | Jim Myrich / W3JLM beverage@w3vpr.org |
| Club Sale & Auction | Ike Lawton / W3IKE club.sale@w3vpr.org |
| Club Picnic | Jim Myrick / W3JLM picnic@w3vpr.org |
| Digital Networking | Ted Ruddy / KC3LMV net.leader@w3vpr.org |
| Facilities | Eric Berman / KC3GDV facilities@w3vpr.org |
| Field Day | Brian Mary / K3HMX field.day@w3vpr.org |

| | | |
|-------------------------|--------------------------------------------------------|--------------|
| Station Manager | (TBD) station.manager@w3vpr.org | |
| Holly Net | Jim Wallace / N3ADF holly.net@w3vpr.org | |
| HAMM-MESH | (TBD) hsmm.mesh@w3vpr.ORG | |
| Kit building | '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 |
| Photography | Ed Santilli / KB3YMU photo@w3vpr | |
| Presentation | Jim Wallace / N3ADF presentation@w3vpr.org | |
| Public Service | Erick Graves / WA3G public.service@w3vpr.org | 410 987 7670 |
| Repeater Ops | John Williams / K8JW repeater@w3vpr.org | 410 647 7406 |
| Rules | Chuch Tanner / K3ACT rules.chair@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 learn@w3vpr.org | 240 758 0423 |
| VE Team | David Rawley / N3AT ve.team.leader@w3vpr.org | |
| Video | Ed Santilli / KB3YMU video@w3vpr.org | |
| Webmaster | Mark Bova / W2PAW webmaster@w3vpr.org | 240 274 6294 |
| Wed. Nite Net | Mike Waterson / K3MAW wednesday.night.net@w3vpr.org | |
| Winter Field Day | Rick Steer / AB3XJ winter.field.day@w3vpr.org | |
| Workshop | (TBD) workshop@w3vpr.org | |

Groups

| | |
|-------------------------------|-----------------------|
| Board of Directors | board20@w3vpr.org |
| Kit Building Committee | kitbuilding@w3vpr.org |
| Rules Committee | rules@w3vpr.org |



VE Testing Schedule

**Second Saturday of each month
– Noon – AARC –**

David Rawley, N3AT 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)

W1AW 2019/2020 Winter Operating Schedule

Morning Schedule:

| Time | Mode | Days |
|------|------|------|
|------|------|------|

| | | |
|---------------------|-----|----------|
| 1400 UTC (9 AM EST) | CWs | Wed, Fri |
| 1400 UTC (9 AM EST) | CWf | Tue, Thu |

Daily Visitor Operating Hours:

1500 UTC to 1700 UTC - (10 AM to 12 PM EST)
1800 UTC to 2045 UTC - (1 PM to 3:45 PM EST)

(Station closed 1700 to 1800 UTC (12 PM to 1 PM EST))

Afternoon/Evening Schedule:

| | | |
|----------------------|----------|---------------|
| 2100 UTC (4 PM EST) | CWf | Mon, Wed, Fri |
| 2100 " " | CWs | Tue, Thu |
| 2200 " (5 PM EST) | CWb | Daily |
| 2300 " (6 PM EST) | DIGITALD | Daily |
| 0000 " (7 PM EST) | CWs | Mon, Wed, Fri |
| 0000 " " | CWf | Tue, Thu |
| 0100 " (8 PM EST) | CWb | Daily |
| 0200 " (9 PM EST) | DIGITALD | Daily |
| 0245 " (9:45 PM EST) | VOICE | Daily |
| 0300 " (10 PM EST) | CWf | Mon, Wed, Fri |
| 0300 " " | CWs | Tue, Thu |
| 0400 " (11 PM EST) | 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 2330 UTC (6:30 PM EST), 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 0100 UTC (8 PM EST) Thursdays and 0100 UTC (8 PM EST) Fridays.

Audio from W1AW's CW code practices, CW/digital bulletins and phone bulletin is available using EchoLink via the W1AW Conference Server named "W1AWBDCT." The monthly W1AW Qualifying Runs are presented here as well. The 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.

All licensed amateurs may operate the station from 1500 UTC to 1700 UTC (10 AM to 12 PM EST), and then from 1800 UTC to 2045 UTC (1 PM to 3:45 PM EST) Monday through Friday. Be sure to bring your current FCC amateur radio license or a photocopy.

The W1AW Operating Schedule may also be found on page 100 in the November 2019 issue of QST or on the web at,

<http://www.arrl.org/w1aw-operating-schedule>

Used with permission

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The Northeast HamXposition

The [Northeast HamXposition](#) -- formerly known as "Boxboro" -- is moving and will take place this year **July 24 - 26 in Marlborough, Massachusetts**. The new venue, the Best Western Royal Plaza Hotel and Trade Center, is about 15 miles from Boxboro off Interstate 495 (Exit 24A). The Northeast HamXposition, which had been held in early September in past years, hosts the ARRL New England Division Convention. "The new venue offers



Northeast HamXposition

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CONGRATULATIONS

| | | |
|----------------------------|--------|--------------------|
| STOCKER, ERICH F | N3OXM | Upgrade to General |
| BECK JR, ROBERT W | KC3OOC | Upgrade to General |
| WILSON, ANDREW | AC3FK | New Amateur Extra |
| KURP, MICHAEL E | KI5IDA | New Technician |
| MEGGINSON, WILLIAM C | KD4BSL | New Technician |
| BUTCHKO, DANIEL J | KE8NVM | New Technician |
| CURREY, BENJAMIN C | KC1MPM | New Technician |
| CHUMLEY-SOLTANI, KAMERON A | KC3OVN | New Technician |
| ORTIZ, RYAN C | KI5ICZ | New Technician |
| PLANTIN, STEVEN Q | KO4BSK | New Technician |

*Good job! Well done! Welcome to the Amateur Radio.
Please join us in all the activities of the
Anne Arundel Radio Club.*

*President and board of Directors
Anne Arundel Radio Club
February 2020*

Mississippi ARES® Responds to Tornado Destruction, Supports County EOC, NWS

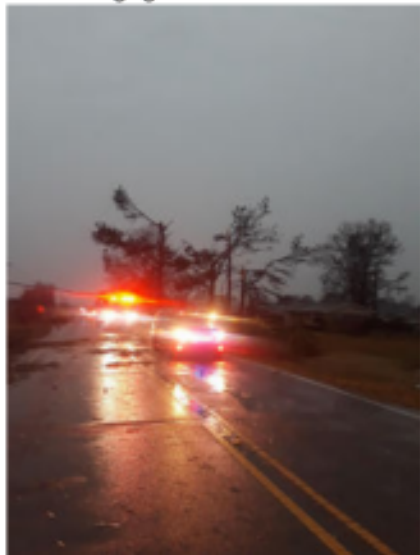
At 3 AM on Saturday, January 11, 2020, Desoto County (Mississippi) Emergency Coordinator Ricky Chambers, KF5WVJ, Assistant EC Gene Adams, KF5KVL, Assistant EC and Tate County EC Brad Kerley, KG5TTU, and Andy Luscomb, AG5FG, reported to the county's Emergency Operations Center (EOC) Communications Room to start the SKYWARN® weather watch. At 4:45 AM, a Tornado Warning was issued for the county and Chambers activated the emergency net on the 146.91 MHz repeater and began taking check-ins. Ten minutes into the net, the repeater was off the air and the net was switched to simplex with District EC Ken Johnson, KB0ZTX, relaying and announcing the move, followed by a subsequent move to the 147.35 MHz repeater.

At 5:01 AM, the team received the first report of downed trees blocking roads and an eyewitness report of a possible tornado southwest of Hernando. Emergency Management Agency (EMA) Director Chris Olson departed the EOC for damage assessment. The ARES team at the EOC began taking damage reports, answering phone calls, and monitoring and taking calls from public safety dispatch.

At 5:15 AM, the Deputy EMA Director radioed in that traffic control was required in Lewisburg. Chambers informed Olson, and Chambers and Kerley picked up a county vehicle with warning lights and departed for Lewisburg. Adams was left in charge of the EOC, with Luscomb in charge of the net.

Upon arriving in Lewisburg, Chambers and Kerley stopped at the command post where an ambulance driver requested an assessment of road conditions. Complying, the pair came across trees and power lines down, with fire apparatus and personnel engaged in traffic control. Chambers and Kerley assumed the traffic control function, and at 6:30 AM, EMA Director Olson requested Chambers to put a call out on the net for ARES/RACES/EMA reservists to report to the EOC, with Luscomb, the net control station, putting out the call.

At 7 AM, a citizen called the EOC and requested a welfare check on his



father. Kenneth Johnson, KB0ZTX, took the assignment, reporting to the address where he found numerous trees across the driveway and residence. Johnson confirmed that the man was okay and relayed the information to his son.

Chambers and Kerley proceeded to a location where horses were reported to be trapped in a barn. Kerley approached the scene, offered assistance, and Chambers stayed with the radio in the county vehicle. Another welfare check was made, and after the secondary search of both affected areas was complete, the team performed windshield damage assessments.

The ARES, RACES personnel and reservists contributed 16 members to the effort on Saturday. They returned with 12 members on Sunday to perform door knock damage assessments. For the next ten days, the Desoto County groups contributed personnel to answer phones in the EOC. All told, they contributed 514 man-hours, freeing up first responders to fulfill their job of protecting life, property and saving lives.

Chambers said "I attribute our effective response to the training we have conducted on a monthly basis." The training includes the recommended ARRL courses. "We were able to see how the Incident Command System worked on a first hand basis as the incident unfolded, based on the ICS training courses we have taken." Chambers added, "My group went from 0 to 110 MPH in seconds, never missing a beat," and "everyone performed on a professional level." He thanked his team for its excellence in service. - **SOURCE:** Ricky Chambers, KF5WVJ, ARRL Emergency Coordinator, Desoto County, Mississippi; and county EMA Reserve Coordinator

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W9DXCC ARRL Specialty Operating Convention

The location of the **W9DXCC** ARRL Specialty Operating Convention has changed. The event will take place September

11 - 12 at the Chicago Marriott Hotel in Naperville, Illinois. Registration and hotel

reservations will open in the spring. W9DXCC

is sponsored by the Northern Illinois DX Association. This year's event will include a Contest University and DX University. Saturday's events will include forums, QSL card checking, a CW pileup contest, an evening reception, and a banquet. For more information, visit the [W9DXCC website](http://www.w9dxcc.com). - Thanks to Kermit Carlson, W9XA; [The Daily DX](http://www.thedailydx.com)



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KX9X Offers Five Tips on Satellite Operating Etiquette

Former ARRL Contest Branch Manager and Media and Public Relations Manager Sean Kutzko, KX9X, shared "Five Tips on Etiquette and Good Manners on the FM Ham Radio Satellites" on the DX Engineering blog, *On All Bands*. Kutzko said the transient nature of satellite availability can lead to "a natural sense of urgency" among operators trying to operate through it.

"Satellite operating comes with several challenges, not the least of which is that it is one of the ultimate shared resources in the hobby," Kutzko wrote.

"While there are now several satellites to choose from, a given satellite is only above the horizon for a maximum of 15 minutes or so. Lots of people trying to access a satellite during a short window of opportunity can create problems, and that can bring out some undesirable behavior."

In terms of operating etiquette for satellites, Kutzko advised that the "big one," is "Don't transmit if you can't hear the satellite first." He



Sean Kutzko, KX9X.

notes that whistling or saying such things as "hello" and "check one-two" are bad form.

"If you don't hear other activity, you're probably not going to hear yourself, either," Kutzko explained. "Blindly calling or whistling may cause unintentional interference to other stations that can properly hear the satellite."

Next on the list is to wait your turn. "Given the rapid nature of satellite contacts, you shouldn't have to wait very long for your chance during a pass," Kutzko wrote.

Kutzko also advised to always use phonetics when operating on the FM satellites. "Phonetics help ensure your call [sign] is copied correctly the first time and can save a lot of precious moments during a short pass," he said.

Also, avoid making repeat contacts with a station you've worked previously and resist the temptation to greet an old friend. "[E]ach contact you make with a person you've already had several contacts with prevents another person from making a contact," Kutzko pointed out.

Finally, he said, "It may be best to let the rare station have the pass and try to work as many stations as they can. In some cases, the rare station may only be audible for a portion of the pass you're on, with the station moving out of the satellite's footprint before it moves out of range for you," Kutzko recommended.

"Satellite activity is at an all-time high, with new sats being launched on a regular basis and more operators discovering how much fun there is to be had."



Sean Kutzko, KX9X.


he concluded. "By being mindful of others trying to make contacts and thinking of others on the pass, we can all contribute to a better satellite environment for everyone."

Kutzko won the June 2018 QST Cover Plaque Award for his article, "Get on the Satellites for ARRL Field Day." He steered satellite newcomers to his earlier [blog posts](#) to help them get started.

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^Radio Amateurs of Canada Announces a New Section

The number of Sections needed for a clean sweep in the ARRL November Sweepstakes (SS) will rise to 84 in 2020, with the addition of a new Prince Edward Island (PE) Section. Radio Amateurs of Canada ([RAC](#)) has announced that the new Section will become effective  on April 1.



Prince Edward Island has been in the Maritimes (MAR) Section. RAC said its Prince Edward Island members have been working for some time to create a separate Section for RAC ARES activities there. The provinces of Nova Scotia and New

Brunswick will remain in the Maritimes Section.

In addition to Field Day and Sweepstakes, the new Section in Canada will affect the ARRL 160-Meter Contest but *not* the ARRL 10-Meter Contest, which uses individual states/provinces for US and Canadian multipliers. The change will mean that logging software developers will have to update their software to include the PE Section as a valid exchange element for any affected operating events.

RAC also announced an adjustment in two of its Ontario Sections. Effective April 1, radio amateurs in the City of Hamilton and in the Regional Municipality of Niagara will shift to the Greater Toronto Area (GTA) Section from the Ontario South (ONS) Section.

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How The National Bureau Of Standards Helped Make “Radio”

This was originally published as “NIST’s Role in the Early Decades of Radio (1911-1933)” on the National Institute of Science and Technology’s blog, Taking Measure.....Dan

Even if you weren't able to watch the recent Super Bowl on TV, you could still listen to the play-by-play commentary on the radio. But radio does more than just broadcasting sporting events or playing music. It plays a major role in emergency response, navigation and science.

The word “radio,” however, didn’t become part of our regular vocabulary until 1911, and it happened thanks in part to J. Howard Dellinger, a radio scientist at the National Bureau of Standards (NBS), the agency that became the National Institute of Standards and

At the time, “wireless” was used as the term for radio communication, especially by the British. However, NIST was charged with revising standards in preparation for the conference, and Dellinger suggested that the professor use “radio,” which was already becoming a popular word in the U.S., instead of “wireless.” The professor agreed, and the word “radio” went on to become the universally accepted term.

A New Type of Radio Receiver

A black and white photograph of a man in a suit sitting at a desk, operating a large, complex electronic device. The device is labeled 'AMPLIFIER UNIT' and 'RECTIFIER UNIT'. A microphone is positioned in front of the device.

Francis W. Dunmore, at NBS in 1922. They called their invention the “mousetrap.”

Lowell and Dunmore filed two more patents

Praise From a Famous Inventor

As these and other examples show, NIST had a significant influence on radio research between 1911 and 1933. However, NIST's radio work didn't end with the first blind landing. NIST would continue to contribute to the field leading up to and during World War II, and research continues to this day in areas such as 5G, public safety communications and spectrum sharing.



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Maryland-DC SECTION MANAGER MOMENT

MDC SECTION ARES CONNECT is Ready

ARES Connect is a volunteer management system providing ARES to manage your information, manage members, roster, events, and track progress. ARRL Section and ARES groups have unique web-portal page with appropriate Admin for ARES Emergency Coordinators. Please view and sign up for available opportunities below. When you volunteer with ARRL, you help: educate the public about the Amateur Radio Service, welcome newcomers, encourage self-training and skill advancement and bolster a nationwide emergency communications network. Please designate an ARES Connect facilitator for your ARES Team to engage your members and community opportunities

<https://arrl.volunteerhub.com>

73,
Marty, KB3MXM
Maryland / DC Section Manager, ARRL

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MARYLAND GOVERNMENT - MD House Bill 1225 - Amateur Radio Antennas 2020

MARYLAND GOVERNMENT - MD House Bill 1225 - Amateur Radio Antennas 2020 Local Government - Regulation of Amateur Radio Station Antenna Structures. Sponsored by Delegates Boteler, Ciliberti, Grammer, and Impallaria Status Is In the House - Hearing 3/03 at 1:00 p.m.

Synopsis - Declaring the intent of the General Assembly to codify a certain federal regulation concerning preemption of local regulation of amateur radio station antenna structures; establishing certain requirements that apply to a county or municipal ordinance regulating amateur radio station antenna structures; applying the Act to all counties and municipalities; etc.

Details - Introduced in a prior session as: HB1177 Session: 2019 Regular Session Bill File Type: Regular, Effective Date(s): October 1, 2020 Introduced in a prior session as: HB1177 Session: 2019 Regular Session

<http://mgaleg.maryland.gov/mgaweb/site/Legislation/Details/HB1225?ys=2020RS>

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ARRL MDC Section Yahoo Reflector

<https://groups.yahoo.com/neo/groups/MDCQRV/info>.

The new ARRL MDC Section Yahoo Reflector is now available. If you are not a member, you should be!! I encourage you to use this to stay informed or keep in touch with the rest of your fellow ARES members. With the wide distribution of this newsletter coming out only once a

month, this Yahoo Site will keep you up to date with late breaking news, including a possible disaster call up. There is very little traffic to clog your in box.

I don't know if all the DEC's and EC's subscribe to the Yahoo Reflector. If you are not, please do. This will be the fastest way possible to notify MDC Section ARES of current incidents and impending disasters.

Please do it now.

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SECTION TRAFFIC MANAGER'S REPORT

FOR THE MDC WEB SITE 2001

MDC NTS NETS:

MEPN 2001 W3YVQ QND/31 QNI/419 QTC/43 MINS/721
BTN 2001 AB3WG QND/31 QNI/298 QTC/39 MINS/497
MDD 2001 AA3SB QND/60 QNI/264 QTC/74 MINS/437
MSN 2001 N3AEA QND/28 QNI/113 QTC/10 MINS/468

PSHR: KK3F 140, W3YVQ 135, K3IN 110, AA3SB 100,
WB3FTQ 100, AB3WG 92, NI2W 48;

TFC: KK3F 858, K3IN 159, W3YVQ 120, WB3FTQ 61,
AA3SB 54, AB3WG 40, NI2W 8

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HF PROPAGATION

MEPN: The net NVIS propagation was functional in January, 2020, with good signals most evenings. Due to the low solar activity, the afternoon propagation suffered with less effective NVIS propagation between 1630L and 1700L, often with the residual E layer from the daytime sun angle partially obscuring the F1-F2 layers overhead. The MEPN DTS stations continue to provide liaison with the national digital messaging services including DTN and Winlink.

MDD: January NVIS propagation for local MDC stations on MDD early was fair to good on nights when the MUF was above net frequency (fxi). When the MUF dropped below 3.557MHz, the NVIS prop failed totally unless some residual E-layer provided some help. If the MUF remained that low without E-layer help, both early and late MDD and the 3RN nets failed. The MUF sometimes recovered for the Region nets and MDD late, but JAN is likely to see more failed nets, both early and late, without help from the sun. Last winter we saw MUFs down to 2 MHz some nights. It will be an interesting winter. During late January a new trend was developing with more acceptable early MDD nets but with less improvement for the Region nets and late MDD. John, WB3GXW-L, continues to make that Echolink resource available for MDD use on nights when propagation fails. 160m may need to be used as winter progresses. Check out your antennas. Outbound traffic to 3RN may be handled by DTS representatives as needed for posting on the Digital Traffic Net (DTN) when prop permits. DTN stations operate 24/7 so traffic will flow across the country as prop permits, day or night.

CW OPERATORS NEEDED - Additional CW operators are needed for liaison from MEPN and BTN 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.

MEPN/BTN/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). The conference bridge is available for MEPN, MDD, BTN, MSN, and 3RN stations during periods of failed propagation.

MSN CW TRAINING - The MSN net continues to operate and serve nightly at 1930L on 3563 kHz. Ron, N3AEA, is stepping up to fill the Net Manager's role. Thanks, Ron. Show your support by checking in even if you do not take training. MSN needs NCS stations and liaison stations to early and late MDD. Ron could use your help.

BTN LOCAL NTS TRAFFIC AND TRAINING NET - The BTN continues to meet on 145.33/R (no tone) daily at 6:30PM local time. The BTN was established to provide a welcoming place for newcomers to the Amateur Service, and their first exposure to directed traffic nets and message handling. 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 are in effect. A new cooperative effort has been launched between ANAR ARES(r) and the BTN as well.

Thanks to all the Section's traffic net NCS stations, RRI/DTN 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.

A very happy and healthy New Year to all.

73, W3YVQ, MDC ASM, STM
w3yvq atsign arrl dot net
w3yvq atsign winlink dot org from WL2K

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Using advanced solid-state S-band radar technology, Space Fence is located on Kwajalein Atoll in the Marshall Islands. Such critical space-based technologies as weather forecasting, banking, global communications, and GPS navigation are under threat from space junk orbiting Earth. Collisions already are frequent, and defunct satellites and rocket boosters have increased the amount of space debris.

The Air Force Space Surveillance Network tracks about 25,000 objects. When Space Fence comes online, the catalog will expand considerably, and when fully operational, it will be the world's largest and most advanced radar system, offering unprecedented space

Dayton Hamvention 2020 Web Portal Opens

Dayton Hamvention 2020 Web Portal Opens for Tickets, Exhibit Space Online orders for [Dayton Hamvention](#)® 2020 tickets, inside exhibit spaces, and flea market spots can now be placed online. Those who ordered online in 2019 should have their user IDs and



passwords available when placing orders. Hamvention's all-volunteer staff will work as quickly as possible to respond to orders. If you encounter difficulties, email the appropriate committee: [Tickets](#), [Inside Exhibits](#), or [Flea Market](#). Hamvention announced in December that it would be increasing the cost of admission and its booth fees. General admission is now \$26 in advance or \$31 at the gate for all 3 days. The cost of flea market spots has risen by \$5 per space, and inside exhibitors will pay \$30. Hamvention 2020 takes place May 15 - 17 at the Greene County Fairgrounds and Exhibition Center, 210 Fairground Road, Xenia, Ohio.

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ARRL Podcast Schedule

ARRL's "On the Air" podcast's second episode (February 13) focuses on building the ground plane antenna featured in the first issue of *On the Air* magazine, a discussion of open-wire feed lines, and an interview with a relatively new public service volunteer. New "On the Air" podcast episodes are available monthly.

The first episode of the "Eclectic Tech" podcast (February 13) includes a discussion of amateur radio activity on the Qatar-OSCAR 100 satellite, an interview with Assistant ARRL Lab Manager Bob Allison, WB1GCM, about handheld transceiver testing at Dayton Hamvention and other conventions, and an interview with Carl Luetzelshwab, K9LA, about propagation conditions. New episodes will be available biweekly.

Both podcasts are available on iTunes (iOS) and Stitcher (Android) as well as on Blubrry -- [On the Air](#) | [Eclectic Tech](#).

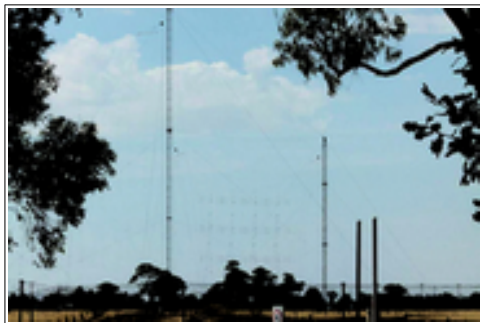
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A Down Under Special Event

A Down Under special event will use former Radio Australia international broadcast antennas. Over the March 14 - 15 weekend, members of the Shepparton and District Amateur Radio Club ([SADARC](#)) in



Australia will be on the air as VI3RA (Radio Australia), connecting their transceivers to the curtain array and rhombic antennas at the former Radio Australia site in

Shepparton. Radio Australia ceased transmitting from the site in 2017. VI3RA will operate on 40, 30, 20, 17, and 15 meters. "Local amateurs will be given the unique opportunity to explore the use of high-gain antennas whilst giving amateurs throughout the world a unique opportunity to contact a station using such high-gain antennas," said SADARC President Peter Rentsch, VK3FPSR (Australia's call sign structure accommodates four-letter suffixes). "This is a rare opportunity for amateur radio operators, who are only allowed a peak output power of 400 W in Australia when compared to 100 kW of Radio Australia transmitters to hopefully achieve some remarkable communication outcomes. We expect to get a gain of 15 dB on the lower frequencies and at least 20 dB on 21 MHz." The special event is being conducted in cooperation with BAI Communications (Broadcast Australia). More information is on the club's website.

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Fox-1a, Has Gone Silent

AMSAT reports that the pioneering AMSAT-OSCAR 85 (AO-85) CubeSat, also known as Fox-1A, has gone silent.

"Having not been heard throughout the most recent period of full illumination, it is reasonable to believe the batteries have deteriorated to the point of no longer being able to power the transmitter," AMSAT said this week. "Should some future event cause a cell to open, it is possible the satellite may be heard



again, but for now, it is time to declare end-of-mission. AO-85 was conceived as the first AMSAT CubeSat and designed to be a successor to the popular AO-51 Microsat. AO-85 was launched on October 8, 2015. Its success led to further Fox satellites AO-91, AO-92, AO-95, and RadFxSat2/Fox-1E, which will be launched later this year. The Fox-1E transponder was also spun off into a radio system now in orbit on board HuskySat-1, and soon to be in several other university CubeSats. -- Thanks to AMSAT News Service

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France Has Authorized Use Of 60-Meter Band.

France has authorized use of 60-meter band. Telecommunications regulator ARCEP has authorized the use of a 60-meter band -- as agreed upon at World



Radiocommunication Conference 2015 -- for French radio amateurs. The formal announcement was published in the *Official Journal of the Republic of France (JORF)* on February 13, IARU member-society REF (Réseau des

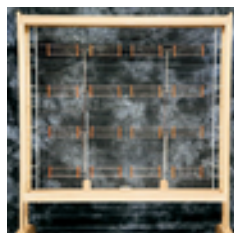
Émetteurs Français) has reported. The 5351.5 - 5.366.6 MHz band will be available at a maximum EIRP of 15 W.

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A Working Scale Model Of An Hf Curtain Array Antenna

A working scale model of an HF curtain array antenna is on display at the [National Voice of America \(VOA\) Museum of Broadcasting](#) in West Chester, Ohio. The model, which operates on 70 centimeters, is a 4 x 2 design with a screen reflector, and is the same style



of antenna the VOA Bethany Relay Station used until its final transmission in November 1994. West Chester Amateur Radio Association (WC8VOA) members Richard Kreuter, WC8RK, and Joe Burke, WA8OGS, designed and constructed this curtain array.

EZNEC Pro 4 models indicates the antenna has a gain of 21.35 dBi at 8° at a half-wavelength above ground. The club thanked Roy Lewallen, W7EL, for modeling the array. The museum and WC8VOA will be open for extended hours during Dayton Hamvention® for those interested in seeing the model.

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The NEMO-1 WSPR Buoy

The NEMO-1 WSPR buoy launched by AMSAT-Argentina (AMSAT-LU) on January 30 was retrieved 12 days later by a fishing vessel. The buoy transmitted WSPR on 14.095.6 MHz and APRS on VHF FM using the call sign LU7AA. The captain of the tuna vessel *Juan Pablo II* considered that the buoy was partially submerged, decided to retrieve it, and informed AMSAT-LU.



The NEMO-1 traveled another 8 days aboard the tuna vessel, arriving at Mar del Plata on February 19, where members of the Mar del Plata Radio Club were holding it

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 |
| Maryland Slow Net | 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.*

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 |

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