

# *The Ham Arundel News*



Providing Fellowship and Community Service through  
Amateur Radio since 1951



January 2021

43rd Year of Publication



## Prez Sez

I want to thank everyone for their support and look forward to working with all of you this next year. This last year was extremely

challenging for all of us. Not being able to meet in person required us to cancel or severely limit how we had done business in the past.

We had also lost a few of our friends this year. They will be missed. Their impact on all of us will forever be a lasting memory. They all had a tremendous impact on all of us and their memories will be with us always.

This year even with all of the things we had to go through, we still managed to hold three Technician classes, one General class, and a morse code class. Then we were able to hold testing so many of the students were able to get licensed.

Most of all I feel we need to recognize Keith AE3D. Not only did he hold things together this year, but he also moved us forward. He did all of the training classes he had scheduled and even added one more. He made sure we still had Field Day and MDC QSO parties. We could not hold the annual Auction, but a list of equipment for sale was on the website. So even though we had restrictions due to the pandemic the club still completed way over 90% of our planned activities and increased

membership to an all-time record. The only things we had to cancel were the Picnic and Holiday Party. Keith did well over a thousand hours of service which was three times as many as the next person. (We did ask for a recount, just to make sure) The really remarkable thing was that Keith had done this all while battling Covid himself.

73 and looking forward to working with all of you this coming year.

Eric  
KC3GDV



## FCC Fees Announced

On December 30 the FCC announced that it will begin collecting fees on the amateur radio service. Amateurs will be required to pay a fee of \$35 for new licenses, modifications (upgrades?), renewals and for vanity licenses.

The fees appear to be effective on or about January 29, 2021.

Check [www.w3vpr.org](http://www.w3vpr.org) for additional details.

## 2021 Officers

### President



Eric Berman, KC3GDV

### Board Member at Large



Bernarr 'Bernie' Coletta, NK3PS

### Vice President



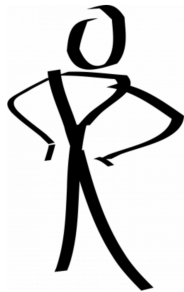
Joe Conover, KL4QG

### Board Member at Large



William 'Bill' Ryan, NX2II

### Secretary



Michael Hunt, KC8GIJ  
(photo not available)

### Board Member at Large



Mark Heron, KC3JTF

### Treasurer



Richard 'Rick' Steer, AB3XJ

## Anne Arundel Radio Club Service Awards Recipients

The following members were recognized with the following nametag endorsements on December 17 for their service during 2020.



### White

*Jon Binstocki, NK3D, 46.50 hours*  
Ron Boller, N3WOF, 46 hours  
*Richard Colarco, KE0IOW, 39 hours*  
*Doug Ellmore, NA1DX, 43.75 hours*  
Steve Grimaud, W3SWG, 25 hours  
Paul Mills, KB3KWT, 36.25 hours  
*'Ted' Rudie, KC3LMV, 36.25 hours*  
Les Silva, KH6CUJ, 48 hours  
Chuck Tanner, K3ACT, 25 hours  
Huey Treadwell, AB3GS, 42 hours  
John Williams, K8JW, 25.25 hours

### **Bronze**

John Bowes, KB3YLY, 53.5 hours  
*Scott DeMatteo, W3GTR, 51 hours*  
*Lambert Matias, W3LAM, 67.5 hours*  
Mike Montrose, KA2JAI, 56.5 hours  
Andrea Montross, K3YLW, 57 hours  
Tim Nagel, KB3YQK, 44.5 hours

### Silver

Chip Dahle, K3AWD, 91 hours  
Kelly Fast, N3XUJ, 87 hours  
Will Mooney, KA3UQQ, 97 hours

### **Gold**

Eric Berman, KC3GDV, 396 hours  
Rich Boyd, KE3Q, 117 hours  
Bernarr Coletta, NK3PS, 126.5 hours  
Charlie Gross, KC3JQW, 146 hours  
Ike Lawton, W3IKE, 139 hours  
Keith Miller, AE3D, 1037 hours  
Jim Myrick, W3JLM, 133.5 hours  
David Rawley, N3AT, 113 hours  
Bill Ryan, NX2II, 132 hours  
Richard Steer, AB3XJ, 246 hours  
Jim Wallace, N3ADF, 339.75 hours

*New name tags were issued to those members whose names are italicized.*



# Calendar

## Club

Due to social distancing requirements, club meetings are being held on Zoom and there have been some changes. The meeting schedule for January - April is:

January 7 - Membership Meeting, 7:30 PM

January 21 - Membership Presentation Meeting, 7:30 PM

February 4 - Membership Meeting, 7:30 PM

February 18 - Membership Presentation Meeting, 7:30 PM

March 4 - Membership Meeting, 7:30 PM

March 18 - Membership Presentation Meeting, 7:30 PM

April 1 - Membership Meeting, 7:30 PM

April 15 - Membership Presentation Meeting, 7:30 PM

Invitations to the membership meetings will be emailed to the membership before the meetings. You must request meeting information from the President for Board meetings or the Rules Committee Chairman for the committee meeting

## Testing

At press time testing is only tentatively scheduled in Catonsville (9th) and Rosedale (16th) due to the pandemic. Both sites require pre-registration and do not accept walk-in testing. Information is available on the ARRL website. Catonsville is through the Laurel VEC and free.

The club is hoping to resume testing soon. Follow either the website or newsletter for information.



## Contesting

**January 2**, 1800 - 2359 UTC Saturday; ARRL Kids Day. Information at <http://www.arrl.org/kidsday>

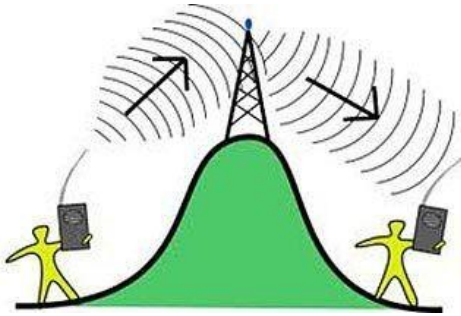
**January 2-3**, 1800 UTC Saturday, ends 2359 UTC Sunday; ARRL RTTY Roundup. Information at <http://www.arrl.org/rtty-roundup>

**January 9-10**, 1800 UTC Saturday to 0559 TC Sunday; North American QSO Party, CW. Information at <http://www.ncjweb.com/>

**January 16-18**, 1900 UTC Saturday to 0359 UTC Monday; ARRL VHF Contest. Information at <http://www.arrl.org/january-vhf>

# AARC REPEATER FREQUENCIES

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



**PL 107.2 is active for all repeaters**  
**The 147.105, 147.075 and 444.400 repeaters are frequently linked. Please allow 2-3 seconds after the courtesy beep to allow for the link to reset.**

## Visiting AARC

Visitors are welcome at all meetings and on all nets.

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

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

## AARC Service Frequencies



**When assisting in community events, Field Days or races, AARC uses 146.430 MHz as the primary communications frequency. In the event the frequency is busy, the backup is 146.475 MHz.**

# Repeaters

## 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.
Barstow	145.350-	156.7	SPARC Repeater
Baltimore	147.030+	156.7	BRATS Repeater.
Westminster	145.410-	114.8	CCARC Repeater
Sykesville	147.285+	107.2	CCARC Repeater
Columbia	147.135+	156.7	Columbia ARC Repeater
Cooksville	147.390+	156.7	Columbia ARC Repeater
Bladensburg	146.610	N/A	GMRS Repeater
Greenbelt	146.880	N/A	GMRS 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.
Barstow	223.960-	186.2	Southern MD Digital Group, analog
Baltimore	224.960-	N/A	BRATS Repeater.

## 70cm Repeaters

Location	Frequency	Tone	Notes
Davidsonville	444.400+	107.2	AARC 70 cm Repeater.
Annapolis	442.300+	107.2	AARC 70 cm Repeater
Millersville	449.125-	107.2	Maryland Mobileers Repeater.
Upper Marlboro	443.600+	103.5	SMARC 70 cm Repeater.
Sunderland	444.950+	156.7	CARC 70 cm Repeater
Baltimore	448.325-	N/A	BRATS 70 cm Repeater
Westminster	449.875-	127.3	CCARC 70 cm Repeater, FM and C4FM
Baltimore City	448.275-	156.7	Columbia ARC Repeater
Columbia	449.475-	156.7	Columbia ARC Repeater

## Packet Stations

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

N/A - no tone required

## Amateur Radio NETS

Day	Name	Frequency (MHz)	Time
Daily	Baltimore Traffic Net	146.670	1830
Daily	Maryland Emergency Phone Net	3.820	1800
Daily	Maryland-DC-Delaware Traffic Net	3.643	1900 and 2200
Daily	Maryland Slow Net	3.563	1930
Weekdays	The "Holly Net"	147.105+ PL 107.2 147.075+ PL 107.2 440.400+ PL 107.2	0700
Sunday	AA County ARES Net	146.805- PL107.2	2000
Sunday	Columbia Group Net	147.135+ PL 156.7 147.390+ PL 156.7 448.275- PL 156.7 448.275- PL 156.7	2100
Sunday (1st)	REACT Net	442.300+ PL 107.2	1930
Monday	Calvert ARA Net	145.350- PL 156.7	1930
Monday	Maryland Mobileers Net	146.805 PL 107.2	1930
Monday	Queen Anne's ARC Net	146.940- PL107.2	2000
Monday	Delmarva Amateur Radio Enhancement Net	146.820- PL 156.7	2100
Tuesday	Kent Amateur Radio Society 2-meter Net	147.375+ PL 156.7	1900
Tuesday (3rd)	Anne Arundel - CERT	442.300+ PL 107.2	1900
Wednesday	Boating Net	146.805- PL 107.2	1930
Wednesday	Elmer Net	145.350- PL 156.7	1930
Wednesday	AARC Talk Net	147.105+ PL 107.2 147.075+ PL 107.2 440.400+ PL 107.2	2000
Wednesday (2nd)	AERO 440 Net	449.575- PL 123.1	2000
Wednesday (4th)	AERO 140 Net	147.240+ PL 123.1	2000
Wednesday (odd)	Laurel Bi-weekly Club Net	147.225+ PL 156.7	2030

**The Ham Arundel News is the official  
publication of  
The Anne Arundel Radio Club**  
(ARRL Club No.0484)

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Davidsonville, MD 21035-0308

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Send newsletter articles, information and  
questions to: [newsletter@w3vpr.org](mailto:newsletter@w3vpr.org)

**Mailing Address:**  
Anne Arundel Radio Club  
Post Office Box 308  
Davidsonville, MD 21035-0308

**Meetings:**  
Business Meeting 1st Thursday at 7:30 PM  
Program/Activity 3rd Thursday at 7:30 PM  
Board Meeting - see calendar

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

World Wide Web: [www.w3vpr.org](http://www.w3vpr.org)

AARC supports the Maryland Slow Net:  
3.563 MHz CW 7:30 PM

ARRL articles used by permission

**The Anne Arundel Radio Club**

**Is a registered 501(c)(3)  
Organization**

**We appreciate any contribution  
Over your dues**

## Ham Arundel News February Deadline

The deadline for the February 2021 issue of the newsletter will be Monday, January 25. If you have something you wish to share or contribute, please email [newsletter@w3vpr.org](mailto:newsletter@w3vpr.org) and include "NEWSLETTER" in the subject line.

Other members may appreciate hearing of your experiments, projects and ideas. While you may have shared these on the Holly Net or the Wednesday 2-meter net, others may be inspired by your story. Items that may be dated should be received as close to the publication date as possible.

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## Calling Frequencies

Many amateur bands have a recommended calling frequency. These are:

80 meters: 3.885 MHz

40 meters: 7.290 MHz

20 meters: 14.286 MHz

10 meters: 29.600 MHz

6 meters: 50.110 (SSB DX); 50.125 MHz (SSB);  
50.400 MHz (AM); 50.62 (packet)

2 meters: 146.200 MHz; 146.52 MHz (National Simplex)

1.25 meters: 222.1 MHz (SSB, CW); 223.5 MHz (National simplex)

70 centimeters: 432.10 MHz; 446.00 MHz (National simplex)

33 centimeters: 902.500 MHz; 903.100 MHz (SSB, CW)

23 centimeters: 1294.500 MHz; 1296.100 MHz

## Special Event Stations

**Check ARRL or QRZ for additional information**

### History Related

January 1-10; **Battle of Princeton**; 0000Z-2359Z, W2P, Trenton, NJ. Delaware Valley Radio Association. 14.250. Certificate & QSL. DVRA, PO Box 7024, Trenton, NJ 08628. Info on [www.w2zq.com](http://www.w2zq.com) or on [qrz.com](http://qrz.com)

January 8-9; **206th Anniversary of The Battle of New Orleans**; 1800Z-0000Z, W5IR, Metairie, LA. The Mystic Knights of The Louisiana Roundtable. 18.145 14.275 7.270 7.045 . QSL. FT8 on the usual freq.

January 9-10; **120th Anniversary of the Lucas Gusher**; 0900Z-1500Z, K5S, Beaumont, TX. Beaumont Amateur Radio Club. 14.0025 14.250 7.025 7.250. Certificate. BARC, 4839 Hwy 326N, Kountze, TX 77625. Celebrate the discovery of oil in Texas. Look it up on QRZ for certificate instructions.

January 23-25; **California Discovery of Gold**; 1700Z-0000Z, AG6AU, Placerville, CA. El Dorado County Amateur Radio Club. 21.348 14.248 7.248. QSL. El Dorado County ARC, P.O. Box 451, Placerville, CA 95667. [edcarc.net](http://edcarc.net)

### Miscellaneous

January 2-31; **15th Annual Straight Key Month**; 0000Z-2359Z, K3Y, Ellicott City, MD. SKCC - Straight Key Century Club. 3.550 7.055 14.050 21.050. Certificate & QSL. Jeremy Downard, KD8VSQ, 511 W. Pottawatamie St., Tecumseh, MI 49286. K3Y/0 thru 9 plus KH6, KL7, KP4 and DX member stations in six WAC areas operating straight key, bug and cootie keys. QSL card confirms one QSO per area, up to 19 for all-area sweep. See URL for sched, map, stats, etc. [www.skccgroup.com/k3y](http://www.skccgroup.com/k3y)

January 9 - February 14; **2021 Daytona 500/Speedweeks**; 0001Z-2359Z, N4DAB, Daytona Beach, FL. Daytona Beach CERT ART. 14.255 14.070 7.255 7.070. Certificate & QSL. Operating hours dependent on propagation and availability. Phone, CW, and Digital modes scheduled. [www.n4dab.com](http://www.n4dab.com)

January 15 - February 15; **Alaska "RST" QSO Party**; 0000Z-2359Z, KL7RST, various, AK. North Country DX Association. 28.450 21.350 14.250 7.250. QSL. John F. Reisenauer, Jr, 2573 Old Georgetown Rd. W., Kershaw, SC 29067. KL7RST, KL7RST/KL7, VY1RST/KL7, VE8RST/KL7 and VY0RST/KL7. Certificate by email for working any 3 of the above when you QSL. [www.qrz.com/db/k7ice](http://www.qrz.com/db/k7ice)

January 16; **Woronoco Heights Outdoor Adventure/SCOTA**; 1300Z-1900Z, W1M, Russell, MA. Western Mass. Council - BSA. 14.290 14.060 10.115 7.190. QSL. Tom Barker, 329 Faraway Road, Whitefield, NH 03598. All logging is done on paper and then uploaded to LoTW and eQSL. A QSL card can be had for a 4x6 SASE.

January 23; **1st Annual Lone Star Frozen POTA Event**; 1700Z-2100Z; Deep East Texas Amateur Radio Club Inc.. all modes, all bands. QSL. Dayton Jones, KG5TKF, Email or see website for Information. [www.parksontheair.com](http://www.parksontheair.com) or [kg5tkg.radio@gmail.com](mailto:kg5tkg.radio@gmail.com)

February 1-28; **JY1 Special Event Memorial Station 2021**; 0000Z-2359Z, N9SES, Lake Station, IN. ArabQrz Club. 14.250 14.030 7.185 7.030. QSL. Ayman Azar, 2861 Decatur St, Lake Station, IN 46405. See website for participating stations from other countries. All HF/VHF/UHF, All Modes. Hamsphere Users can also participate in the event [www.n9ses.com/?page\\_id=18](http://www.n9ses.com/?page_id=18)

## ARRL Newswire

### FCC to Require Email Addresses on Applications

Amateur radio licensees and candidates will have to provide the FCC with an email address on applications, effective sometime in mid-2021.

If no email address is included, the FCC may dismiss the application as defective.

The FCC is fully transitioning to electronic correspondence and will no longer print or provide wireless licensees with hard-copy authorizations or registrations by mail.

A Report and Order (R&O) on "Completing the Transition to Electronic Filing, Licenses and Authorizations, and Correspondence in the Wireless Radio Services" in WT Docket 19-212 was adopted on September 16. The new rules will go into effect 6 months after publication in the Federal Register, which hasn't happened yet, but the FCC is already strongly encouraging applicants to provide an email address.

When an email address is provided, licensees will receive an official electronic copy of their licenses when the application is granted.

The Report and Order can be found in PDF format online at, <https://www.fcc.gov/document/fcc-adopts-electronic-licensing-report-and-order>

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

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

*ARRL Bulletin 38, December 2, 2020*

### Winter Field Day

Winter Field Day is right around the corner, January 30-31, 2021. [View the rules](#). From the Winter Field Day Association (WFDA): The WFDA "is a dedicated group of amateur radio operators who believe that emergency communications in a winter environment is just as important as the preparations and practice that is done each summer but with some additional unique operational concerns. We believe as do those entities of ARRL organizations such as ARES...that maintaining your operational skills should not be limited to fair weather scenarios."

*The ARES Letter, December 16, 2020*

### 2020 SKYWARN™ Recognition Day a Success

Judging by the large list of over 700 registered participants - NWS Offices, amateur radio operators, non-amateur radio spotters, and non-SKYWARN™ spotters - SKYWARN Recognition Day 2020 (December 5) met its goal of celebrating the contributions that SKYWARN volunteers make to the NWS mission, the protection of life and property. Amateur radio operators comprise a large percentage of the SKYWARN volunteers across the country; they provide vital communication between the NWS and

emergency management if normal communications become inoperative. Hams were the first SKYWARN spotters.

The NWS Milwaukee Forecast Office reported more than 150 contacts logged across 35 states for SKYWARN Recognition Day, and thanked all SKYWARN spotters. The NWS office in Springfield, Missouri, tweeted, "What would SKYWARN Recognition Day be without a special thanks to the net control operators?" The NWS Chicago office tweeted, "SKYWARN Recognition Day has come to an end, thanking everyone for attending and to all of our spotters across the nation."

SKYWARN Recognition Day (SRD) planner and organizer Michael Lewis, KG4KJQ, Warning Coordination Meteorologist, Northern Indiana NWS Forecast Office, thanked the SRD Planning Team and the Facebook Live Stream Presenters for making it happen. "Personally, I learned a lot, had fun and made it through the 24 hours relatively unscathed," said Lewis, SRD-IWX-1587, adding "I even know how to do a live stream on Facebook now." There were 34 radio amateurs registered under the Northern Indiana Forecast Office, which serves 37 counties in Northern Indiana, Southwest Lower Michigan and Northwest Ohio.

Lewis said, "The planning team chose to try something new this year, but to keep as much of the past as we safely could and charge forward." He added, "Were all the rules for engagement perfected? Nope; but really that's the challenge of working in the world of weather; sometimes the rules don't apply." Normally radio amateurs participate from home stations and from stations at National Weather Service (NWS) forecast offices, with the goal of making contact with as many NWS forecast offices as possible during the event. However, this year, due to COVID-19 restrictions, participation from NWS forecast offices was

minimal. The focus was shifted to contacting as many SKYWARN trained spotters as possible during the event. New for this year, SKYWARN Recognition Day was opened to all SKYWARN Spotters. Additionally, a SKYWARN™ Recognition Day Facebook page was created, hosting a variety of live and recorded segments throughout the day. As more reports are filed, they will be summarized in the January issue.

*The ARES Letter*, December 16, 2020

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### **Australian Radio Amateurs Denied Access to 60 Meters**



After considering several options for a 5 MHz amateur allocation, the

Australian Communications and Media Authority ([ACMA](#)) has come down in favor of national government interests. Following a [consultation](#), ACMA decided not to permit ham operation on the 5351.5-5366.5 kHz band. The 15 kHz-wide band was allocated to the amateur service on a secondary basis in 2017, ACMA says, "unresolved sharing issues" have prevented ham radio use of the band, used by more than 500 other licensed services as well as by the Australian military."

"The ACMA recognizes the high level of interest shown by the amateur community in adding this band and understands there will be disappointment," the agency said.

Australia's International Amateur Radio Union (IARU) member-society, the Wireless Institute of Australia (WIA), argued for amateur access to 5351.5 - 5365 kHz as a compromise. The WIA pointed out that more than 80 countries have been granted access to the band.

Radio amateurs in New Zealand lost access to 60 meters in late October. Use of this band by radio amateurs there was provisional, allowing hams to use two frequencies in the band -- 5353.0 kHz and 5362.0 kHz -- as part of a trial.

In the US, ARRL proposed amateur access to a new, contiguous secondary band at 5 MHz in a 2017 *Petition for Rule Making*. ARRL also asked the FCC to retain shared access to four of the current five 60-meter channels (one would be within the new band) as well as current operating rules, including the 100 W PEP effective radiated power (ERP) limit. The federal government is the primary user of the 5 MHz spectrum in the US. -- *Thanks to The 5 MHz Newsletter Editor Paul Gaskell, G4MWO, for some information.*

ARRL Letter, December 10, 2020

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### Transatlantic Tests Mark 99th Anniversary

On December 11, 1921, radio history was made when a signal from amateur station 1BCG in Greenwich, Connecticut, was heard in Ardrossan, Scotland, marking the first successful transatlantic radio transmission using shortwave frequencies. Between 1921 and 1924, radio amateurs experimented with transmitting across the Atlantic. Sponsored by ARRL, the Transatlantic Tests aimed to prove that shorter wavelength frequencies could propagate long distances using transmitters running less than 1 kW. The initial run of the Transatlantic Tests was a failure. For the second Transatlantic Tests, ARRL dispatched receiver designer Paul Godley, 2ZE, considered one of the best of operators the day, to Europe to listen for participating stations. His nine-tube receiver employed the latest superheterodyne technology.

In one of those historical coincidences, during his voyage to England, Godley met Harold Beverage, who convinced him to use a specially designed, highly sensitive, directional 1,300-foot antenna, still referred to as the Beverage antenna.

During a pre-event dinner arranged by his British hosts, Godley also met wireless pioneer Guglielmo Marconi.

Over the course of the test period, more than two dozen stations were heard between 230 and 235 meters, roughly 1.3 MHz in what is

now the AM broadcast band. Some utilized spark-gap transmitters, others employed vacuum-tube CW transmitters. The one heard most consistently was the 1BCG CW transmitter operated by six members of the Radio Club Of America -- Ernest Amy, 2VK; Edwin Armstrong; George Burghard, 2SS; Minton Cronkhite, 1BCG; John Grinan, NJ2PZ, and Walker Inman, 2BGM. From 1BCG, they transmitted their message at 2152 UTC (then GMT) on December 11, 1921:

*"No.1 de 1BCG. W-12 [Words 12], New York, Date 11/12-21, To Paul Godley, Ardrossan, Scotland, Hearty Congratulations, Burghard, Inman, Grinan, Armstrong, Amy, Cronkhite"*

Reporting on the accomplishment, ARRL Secretary Kenneth B. Warner, 1EH, declared, "Excelsior!" Read [more](#). -- *Thanks to Clark Burgard, N1BCG, and Mike Marinaro, WN1M*

ARRL Letter, December 10, 2020

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### Tennessee Centenarian Receives ARRL Centurion Award

Elizabeth "Betty" Oakberg, N4LZL, of Oak Ridge, Tennessee, recently received the ARRL Centurion Award.

Now 102, Oakberg

started in radio as a shortwave listener (SWL) and earned her Novice-class license in the late 1970s, when she neared retirement as an elementary school teacher. She subsequently upgraded to her Amateur Extra-class license. During her more active hamming years, she earned Worked All States (WAS), made the DXCC Honor Roll, received the Austrian OE-100 Award, and contacted the Mir space station, among other achievements. A longtime member of the Oak Ridge Amateur Radio Club, she served as an officer for several years and regularly participated in ARRL Field Day. She was also a frequent check-in with the American Foreign Service Net. Oakberg received the ARRL Centurion Award plaque in November,

and once pandemic restrictions ease, a formal presentation will be arranged.

ARRL Letter, December 10, 2020

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### **ARRL Asks FCC to Allow 3.4-GHz Operation until Spectrum is Occupied**

In comments to the FCC, ARRL has argued that radio amateurs be allowed to continue shared operation in the 3.4 GHz band until 5G licensees who purchase the spectrum when the FCC puts it up for auction initiate incompatible operations. In its *Further Notice of Proposed Rulemaking (FNPRM)* in WT Docket 19-348, the FCC had proposed to sunset the band for amateur radio in two phases, governed by when new licenses are issued rather than when the new licensees begin to use the spectrum. In the *FNPRM*, the FCC solicited comments on whether alternatives exist to its proposal.

"Amateur activities further the public interest and should be permitted to continue on a secondary basis unless and until a new primary licensee is ready to occupy the spectrum in a preclusive manner," ARRL told the FCC. "At a minimum, amateur operations should be permitted to continue indefinitely in the 3.3 - 3.45 GHz spectrum, where no new flexible licenses are under immediate consideration. The Commission could consider whether a registration or other mechanism similar to that found in Section 97.303(g) would facilitate avoiding interference." Section 97.303(g) contains specific frequency-sharing requirements for the 2200- and 630-meter amateur bands.

"Amateurs often select the 3.4-GHz spectrum precisely because other spectrum choices are sub-optimum or simply not available. Amateurs also are only secondary users on most of the other spectrum suitable for similar purposes," ARRL said. "Links must be carefully engineered because of that secondary status, which applies to most of the 2.4- and all of the 5.8-GHz bands available to amateurs. ARRL emphasized the importance of allowing amateurs to continue to use the 3.4 - 3.45 GHz portion in particular.

ARRL pointed out that in many geographic areas it could be years before the 3 GHz spectrum is actually put into use by commercial users, and argued that amateur radio should be allowed to continue to operations on a secondary, non-interference basis as it has done for decades with federal primary users, until new uses actually begin, rather than when licenses are issued.

ARRL Letter, December 3, 2020

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### **"The Gathering" will be the theme for the 2021 Dayton Hamvention.**

Hamvention General Chair Rick Allnut, WS8G, said the theme reflects what has been missing from our lives most of this year. "We have spent the last 6 months being bound to our houses and small groups," he said. "We are very optimistic that when May arrives, we will be allowed to get together." Allnut, a medical doctor with a master's degree in public health, said Hamvention management is closely following the coronavirus situation and believes it will improve enough by May that government restrictions on travel and large groups will be relaxed. The Hamvention team will continue to follow developments. Hamvention 2021 will be held May 21 - 23 at the Greene County Fairgrounds and Expo Center in Xenia, Ohio.

ARRL Letter, December 3, 2020

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### **Virginia Radio Amateur will Commemorate 1906 Fessenden Christmas Eve**

BroadcastAs he has done each December for the past few years, Brian Justin, WA1ZMS, of Forest, Virginia, will transmit a program on 486 kHz, under authority of his FCC Part 5 Experimental License W12XLQ to commemorate the accomplishments of wireless pioneer Reginald Fessenden. The Canadian-born inventor, experimenter, and entrepreneur has been credited as the inventor of radiotelephony. He claimed to have made his first voice — and music — broadcast on Christmas Eve in 1906 from Brant Rock, Massachusetts, although his account is disputed.

Fessenden's transmitter was most likely a high-speed "dynamo" or alternator — a predecessor to the later Alexanderson alternator. He modulated the signal by placing a carbon microphone in series with the antenna feed line to create an amplitude modulated signal. Fessenden a few years earlier had limited success with voice transmissions using a rotary spark gap transmitter. Fessenden fed his signal into a substantial antenna system erected in Brant Rock for his experiments. Accounts say that, on Christmas Eve 1906, he transmitted recordings of two pieces of music and read a verse from the Bible.

Justin will transmit for at least 24 hours starting at around 2000 UTC on December 24, with a repeat transmission on New Year's Eve likely, "keeping in step with what Fessenden was reported to have done on both nights in 1906," Justin explained. He will use equipment of a somewhat more modern design — a home-brew master oscillator, power amplifier (MOPA) transmitter based on a classic design from the early 1920s. It uses a UV-201 oscillator tube driving a VT-25 tube — a modern equivalent to a UV-202 — to generate "a few watts" on 486 kHz. His modulator consists of another VT-25, which uses a large inductor in the RF amplifier's plate supply to serve as a Heising modulator. The audio program comes from a laptop computer.

"Heising modulation was used in World War I as an easy way to achieve AM in rigs such as those used in aircraft," Justin said. "My particular Heising modulator can deliver only around 60% modulation, so an audio processor is used to help boost the average volume level ahead of the modulator tube."

Justin uses far more modern technology to boost "the few watts" of modulated RF to drive a modified Hafler 9505 solid-state 500-W audio amplifier. "The idea for the amp came from W1TAG and W1VD," he said, "and information on using such an amp on the 630 and 2200-meter ham bands can be found on the web." After a multi-pole low-pass filter, the carrier output is 150 W.

Justin's antenna is a Marconi T, crafted from a 160-meter dipole some 60 feet above ground and fed with open-wire line, which is shorted at the transmitter end. A homebrew variometer — constructed from 14-gauge wire wound on a piece of 4-inch diameter PVC pipe — is placed in series to resonate the antenna, which is fed against an extensive ground system. "Most of the RF is lost due to the ohmic losses of the ground system, but at least 15 W ERP is possible, depending on the dampness of the soil. Damp soil helps lower the ground losses," Justin said.

*ARRL.org, 12/23/2020*

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## Registration Is Open for Online Ham Radio University on January 9

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With COVID-19 restrictions precluding an in-person gathering, the 22nd annual Ham Radio University (HRU) educational conference will be held as a virtual event on Saturday, January 9, 2021, from 8 AM to 4 PM EST (1300 – 2100 UTC) as a GoToWebinar online video conference.

Individual registration is now open for HRU's **14 informational presentations** covering a broad range of amateur radio activities. Topics include amateur radio emergency communications; the basics of HF operating; communicating through amateur radio Earth satellites; remote station operating over the internet; software defined radios; HF and UHF digital communications, and using Raspberry Pi computers in amateur radio.

HRU 2021 will also serve as the online convention of the ARRL NYC-Long Island Section. Participation in HRU 2021 will be free, with a suggested donation of \$5. Advance registration is required for each presentation.

*ARRL.org, 12/23/2020*

# W1AW Operating Schedule



## 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](mailto: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.

However, please note that because of current COVID-19 restrictions, W1AW is not open for visitor operations at this time.

ARRL Bulletin 32, November 2, 2020

## 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)	DIGITAL	Daily
0000 " (7 PM EST)	CWs	Mon, Wed, Fri
0000 " "	CWf	Tue, Thu
0100 " (8 PM EST)	CWb	Daily
0200 " (9 PM EST)	DIGITAL	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)

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 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