

Charles
County
Amateur Radio
Club

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Membership renewal payment is due by March 4 to ensure receiving newsletters and email information

Smoke Signals



Volume 25
issue 2

February 2022

THE PRESIDENT'S WORKBENCH

Here I sit looking outside during the coldest temperatures we've had in the past three years. I don't know about you, but the older I get, the less I like the winter cold. The trouble with the cold weather is it gives me too much time to plan antenna projects and then I get impatient waiting for the return of warmer weather so I can go outside and build.

Hunkering down inside also gives me a little more time to spend on the radio in search of interesting contacts. I'm happy to see the sunspots picking up with what looks promising for really good sunspot numbers in this new solar cycle. There has been much more activity on 15 meters lately, thanks to these early sunspots. As I sat tuning around the bands a few weeks ago, it occurred to me that there is way less activity than when I was first licensed way back in 1979.

Back then I would spend considerable time tuning around looking for an **empty** spot to call CQ, or find someone calling CQ. There

was rarely a clear spot without a QSO in progress; as busy as Field Day all year long. It was unusual for a repeater to sit silent for more than a few minutes between 5:00 AM and 10:00 PM. Given that there are currently more licensed hams than at any other time, I have to ask, where are they? I started doing research on that topic, and related topics, and I've been learning some very interesting information. But I feel like I'm just barely scratching the surface thus far. I'd be curious about your thoughts on why there are so many licensed hams and so few getting on the air.

In accordance with our By-Laws, nominations for club officer positions will be taken from the floor at the upcoming meeting. The election will be held at the March meeting with any last minute nominations being called for, and accepted, prior to the actual vote. I've been President for two terms now, is it time for new blood at the helm?

(Continued on page 2)

CALENDAR

Meeting Feb 4
1900 EST via
Zoom &/or
Marbury Baptist
Church 4670
Bicknell Rd,
Marbury, MD
VE session prior

February

02 Net 2030
04 Meeting
09 Net 2030
16 Net 2030
23 Net 2030 &
News articles due

March

02 Net 2030
04 Meeting
09 Net 2030
16 Net 2030
23 Net 2030
30 Net 2030 &
News articles due

(Continued from page 1)

There are many special event stations coming up in February. Several are dedicated to President's Day and events related to freezing temperatures. Three others caught my attention though. The 80th anniversary of the Voice of America was the first. The VOA ham radio club in downtown DC will be on the air along with groups in Ohio and North Carolina. The Daytona 500 Speedweek special event station will be on the air from Daytona Beach, although I think I'd rather be there with them right now. The third event that caught my eye was the Boy Scout WHOA Weekend. You can find these and many others in the February Special Event List elsewhere in this newsletter.

To help distract you from the cold weather, there are a number of QSO Parties in February. In addition to four states, there are also two outside our US borders. Among the US QSO Parties are Vermont, Minnesota, South Carolina and North Carolina. Outside the US there are QSO Parties for British Columbia and the Netherlands.

For the Technician operators in the club, there is an HF contest you can participate in. It is the 10-10 International Winter SSB contest. It runs from 0001Z February 5 to 2359Z February 6. Most of the activity will take place in the Technician 10 Meter Phone sub band. With luck the sun will have several sunspots pointed our way that weekend.

It's not too late to pay your annual dues, you have until March 4. You can pay via PayPal, in person at the meeting, or send a check in the mail (made out to CCARC) to PO Box 169, La Plata, MD 20646.

I hope to see you at the meeting and hear you on the air. Our club net is every Wednesday night!



by Bob, NW3M

VE News

Next Test Session

February 4, 2022 @1730 Local
Marbury Baptist Church

ARRL NEWS

Amateur Operation in 3.45-3.5 GHz Segment Must Cease by April 14, 2022

The FCC has established April 14, 2022, as the date by which amateur radio transmissions must stop in the upper 3.45 - 3.5 GHz segment of the amateur secondary 9-centimeter band. Secondary operations are permitted to continue indefinitely in the remainder of the band, 3.3-3.45 GHz, pending future FCC proceedings.

On January 14 the FCC released DA 22-39, which announces the results of Auction 110 for the 3.45-3.55 GHz band. Release of this notice triggered FCC rules adopted last year requiring that amateur radio operations between 3.45 GHz and 3.5 GHz cease within 90 days of the public notice.

DA 22-39 can be found online at,

<https://www.fcc.gov/document/fcc-announces-winning-bidders-345-ghz-service-auction/attachment-a>

A chronology of actions responding to amateur access on the 3.5 GHz band can be found on the ARRL website at <http://www.arrl.org/3-ghz-band>.

CCARC History

Charles County Amateur Radio Club (CCARC) started in 1997. It was started to be a place that hams could get together have fun, learn, help, and provide a service to the community. The first officers were: President Mike Tackish, KA3GRW

Vice President Joe Sartori, WB3IUT (now K3WTF),

Secretary Cliff Owen N3YYP (now N3FI)

Treasurer Ron Peter KD4UUH,

Activities Manager Tom Abernathy WA3TAI (now W3TOM).

Unfortunately, two are silent key Ron and Mike. Two remain members of the club, Cliff & Tom.

The best I can reconstruct (from the old newsletters I have) here is a list of officers over the 25 years:

years	President	Vice President	Secretary	Treasurer	Activity Manager
1997	Mike Tackish	Joe Satori	Cliff Owen	Ron Peter	Tom Abernethy
1998	Mike Tackish	Joe Satori	Cliff Owen	Ron Peter	Tom Abernethy
1999	Mike Tackish	Greg Jones	Lee Flick	Rob Hoyt	Bob Martin
2000	Greg Jones	JD Delancy	Gary Gertz	John Foote	Bob Martin
2001	Lee Flick	JD Delancy	Bill Palmer	Mike Sack	Don Munson
2002	Tom Abernethy	Mike Tackish	Bill Palmer	Debbie Abernethy	Art Audley
2003	Tom Abernethy	Mike Tackish	Bill Palmer	Debbie Abernethy	Lee Flick
2004	Rob Hoyt	Art Audley	Bill Palmer	Debbie Abernethy	Joe Boswell
2005	Rob Hoyt	Art Audley	Bill Palmer	Debbie Abernethy	Joe Boswell
2006	Rob Hoyt	Art Audley	Bill Palmer	Charles Hallock	Gene Risso
2007	Rob Hoyt	Art Audley	Bill Palmer	Charles Hallock	Gene Risso
2008	Rob Hoyt	Lee Flick	Bill Palmer	Bob Curtin	Bob Davidson
2009	Rob Hoyt	Lee Flick	Bill Palmer	Bob Curtin	Bob Davidson
2010	Art Audley	Charles Hallock	Bill Palmer	Andrew Davidson	Bob Davidson
2011	Art Audley	Charles Hallock	Bill Palmer	Andrew Davidson	Bob Davidson
2012	Art Audley	Charles Hallock	Bill Palmer	Andrew Davidson	Bob Davidson
2013	Rob Hoyt	Mike Tackish	Art Audley	Bob Davidson	Spencer Johnson
2014	Rob Hoyt	Mike Tackish	Cliff Owen	Bob Davidson	Spencer Johnson
2015	Rob Hoyt	Mike Tackish	Cliff Owen	Bob Davidson	Spencer Johnson
2016	Rob Hoyt	Mike Tackish	Charles Hallock	Bob Davidson	Tim Velasquez/Rob Hoyt
2017	Mike Tackish	Tom Abernethy	Charles Hallock	Bob Davidson	Rob Hoyt
2018	Bob Curran	Tom Abernethy	Charles Hallock	Bob Davidson	Jeff Humbert
2019	Bob Curran	Tom Abernethy	Charles Hallock	Bob Davidson	Jeff Humbert
2020	Bob Curran	Bob Davidson	Charles Hallock	Pam Humbert	Jeff Humbert
2021	Bob Curran	Bob Davidson	Charles Hallock	Pam Humbert	Jeff Humbert

There were also sometimes when a membership chairperson was listed. Also a few years the VEC, or a training person, but I need to do more research into when and who on those.

Below is an excerpt of the oldest of the Smoke Signals I have found. It was edited by Joe Satori, and I think it was the first (note it says Volume 1 issue 1 and is from January 1998. In the early years a membership roster was included either in the newsletter or mailed with it. So, you will see who some of the first members were.

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Smoke Signals

Volume 1 Issue 1

January, 1998

From The Beginning

We are finally here. After several months of organizing, we've finally made it! A club for everyone. There have been several meetings, a few breakfasts and now a full fledged club. Below you will find a list of the current Board of Directors:

President: Mike Tackish KA3GRW
Vice President: Joe Sartori WB3IUT
Secretary: Cliff Owen N3YYP
Treasurer: Ron Peter KD4UUH
Activities Manager: Tom Abernethy WA3TAI

We the Board wish to thank each and every member for your interest and support of the club. All of us can be reached on the C.C.A.R.C. repeater 443.700, and by phone should you have any questions or concerns, regarding the club or Amateur Radio itself. Remember the Next Meeting is January, 2nd 1998 at the OEP in La Plata. See you there!

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ite Plains, MD 20695.

Call Joe, WB3IUT 301-843-5831

Repeater News

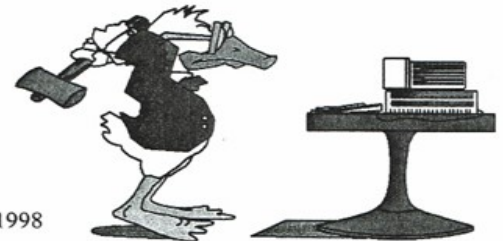
As most of you are aware, we have been having problems with the coverage of the repeater. After switching antennas and lots of perseverance, it appears we have a handle on the problem. By the time you are reading this, we will have installed the new antenna. Please let us know how the system is working for you.

Congratulations

Our Activities Manager, Tom Abernethy, WA3TAI, was selected to be the RACES officer for Charles County. We are all proud of Tom and we know he will serve us well.

Our President and Vice President were elected to positions on the T-MARC Board. Mike will aid the Frequency Coordinator and Joe is the Secretary - Treasurer. For those who have never heard of T-MARC, it is the organization that coordinates all the repeater and packet frequencies so there is no interference to each other. Good Luck Guys!!

Compute This !!



CCARC Member List

<i>Last Name</i>	<i>First Name</i>	<i>MI</i>	<i>Call Sign</i>	<i>Class</i>
Abernethy	Steve		N3QKJ	Technician+
Abernethy	Tom		WA3TAI	Advanced
Abernethy	Debbie		KA3VNF	Technician+
Adams	Winnie	C	N3CLQ	Technician+
Adams	Robert	L	W7UH	Amateur Extra
Audley	Art		N3KUQ	Technician
Buchanan	John	A	KW3X	Amateur Extra
Delancy	Emily		N3TYQ	Technician
Delancy	April		AL7CV	Amateur Extra
Delancy	J	D	W3SMD	Amateur Extra
Fenwick	Allan	D	N3VIL	Technician+
Gertz	Gary	R	N3TIE	Technician
Gormley	James		N3SFY	Technician
Gormley	Bridget		N3YKV	Technician
Groeger	Walter		WA3VDV	Amateur Extra
Harding, Sr.	James	E	K3DRJ	Amateur Extra
Jameson	William	P	WB3KYW	Advanced
Mank	Willie		W1ZX	Amateur Extra
Moreland	Vicky		N3OAD	Technician
Owen	Clifford	W	N3YYP	Technician
Peter	Ronald	W	KD4UUH	Technician
Plamer, Jr.	William	J	KE3RE	Advanced
Sack	Michelle		N3YRZ	Technician
Sartori	Joe		WB3IUT	Technician+
Tackish	Paul	M	KA3GRW	Technician+
Troger	Frederick	O	K8TKC	Technician+

Support Wounded Veterans via Stamp Collecting Program

Want to help wounded veterans? In 1942, Stamps for the Wounded started a program to send donated postage stamps and other philatelic material and supplies to wounded, ill, and isolated veterans. It is intended to spark their interest, stave off boredom, and comfort them in the knowledge that people do care for our veterans.

If you sent in for the 13 Colonies event, then you have already donated. The QSL manager for WM3PEN and the club started with the over a thousand they received after the event. Now they have sent >60 pounds (~4000 stamps = a pound)

For further information on the SFTW program, go to

<https://www.stampsforthewounded.org/>

Special Event article

In 1983, President Reagan instituted **National Inventors' Day** to recognize the contribution of inventors Feb 11 was chosen as it is the birthday of Thomas Edison. More than any other inventor in history, he is responsible for the technologies that make modern life modern. By the time of his death in 1931, he held 1,093 patents covering the creation or refinements of devices in telegraphy and telephony, electric power generation and lighting, sound recording, motion pictures, storage batteries, and mining and cement technology.

<https://siarchives.si.edu/blog/happy-national-inventors-day#:~:text=On%20January%2013%2C%201983%20President,birthday%20of%20Thomas%20Alva%20Edison.>

https://en.wikipedia.org/wiki/Inventors'_Day

The New Jersey Emergency Communications Team will operate a Special Event Station for National Inventors' Day on Saturday 2/12/2022. Special thanks to the Edison Center Museum in New Jersey for hosting this New Jersey Emergency Communications Team event. The station will operate on 20M and 40M SSB (other bands and modes to be



determined based on band conditions). The special event station location is also a [Parks On The Air designated park](#), and a log of all RF contacts will be submitted to the Parks On The Air program for hunter credit! Amateur stations who contact special event station N2I are eligible to receive an individualized QSL card via email <https://form.jotform.com/220067929607057>

CCARC Election of Officers

It is time, once again, to hold the biennial election of club officers. As spelled out in the club Constitution, nominations for President, Vice President, Secretary, Treasurer and Activities Manager will be made at the February meeting and recorded in the minutes. At the Annual Meeting in March, additional candidates can be nominated prior to holding the election and all nominees will be considered and voted on by the majority of the members present.

I would like each of you to consider what office you might be willing to accept if nominated. This club is an organization for us, and by us. As such, we should all be taking an active role in making the club a success, either by serving as a club officer for a term or two, or volunteering for various activities, projects, and events.

To assist you with deciding what officer position you might be comfortable accepting, each position description, as defined by the club Constitution, is listed below.

ARTICLE III: DUTIES OF OFFICERS

Section 1: The President shall preside at all meetings of this club, and conduct the same according to Robert's Rules of Order. He/She shall enforce due observance of this Constitution, decide all questions of order, sign all official documents that are adopted by the club, and none other, set the dates for the annual and regular meeting, and perform all customary duties pertaining to the office of President.

Section 2: The Vice-President shall assume all the duties of the President in his/her absence.

Section 3: The Secretary shall keep a permanent record of the proceedings of all meetings, keep a roll of members which shows their addresses, submit applications for membership, carry on all correspondence, read communications at each meeting, countersign such documents as his/her position requires, and perform all other duties pertaining to the Office of Secretary.

Section 4: The Treasurer shall receive and receipt for all monies paid to the club, he/she shall keep an accurate account of all monies received and expended. He/She shall pay no bills without proper authorization from the Board of Directors. He/She shall report all activity upon his account at each meeting.

Section 5: The Activities Manager shall organize Club activities and advance Club interest and activity as approved by the Club. He shall maintain liaison with other organizations to fulfill-the Club's projects and business.

Section 6: The president shall maintain close liaison with the ARRL Emergency Coordinator or SEC to further the fullest possible club participation in the Amateur Radio Emergency Corps. In addition the President shall maintain close association with civil authorities, law enforcement authorities and Emergency government.

Section 7: All officer-directors shall at the expiration of their terms turn over all corporation records, and any other corporate property they might have in their possession to their successors.

ARES Corner



Off-Grid Texting

Recently I've seen a number of notes about "LoRa" or "Long Range" communication devices. One YouTube video showed a demo of doing texting 'off-grid' using two of these devices and the distance between both devices. Since I like to play, I placed two of them on order and after several weeks they finally cleared customs and made it to my home.



Here is a picture of one of the devices on my slightly cluttered work area:

The red circle is showing the attached GPS antenna.

The devices run off of batteries, but the size is 18650, so nothing you can run down to the local store, so while those are on order, I used an external power bank to get them up and running. Once power is supplied, then the small screen provides some information:

(Continued on page 10)



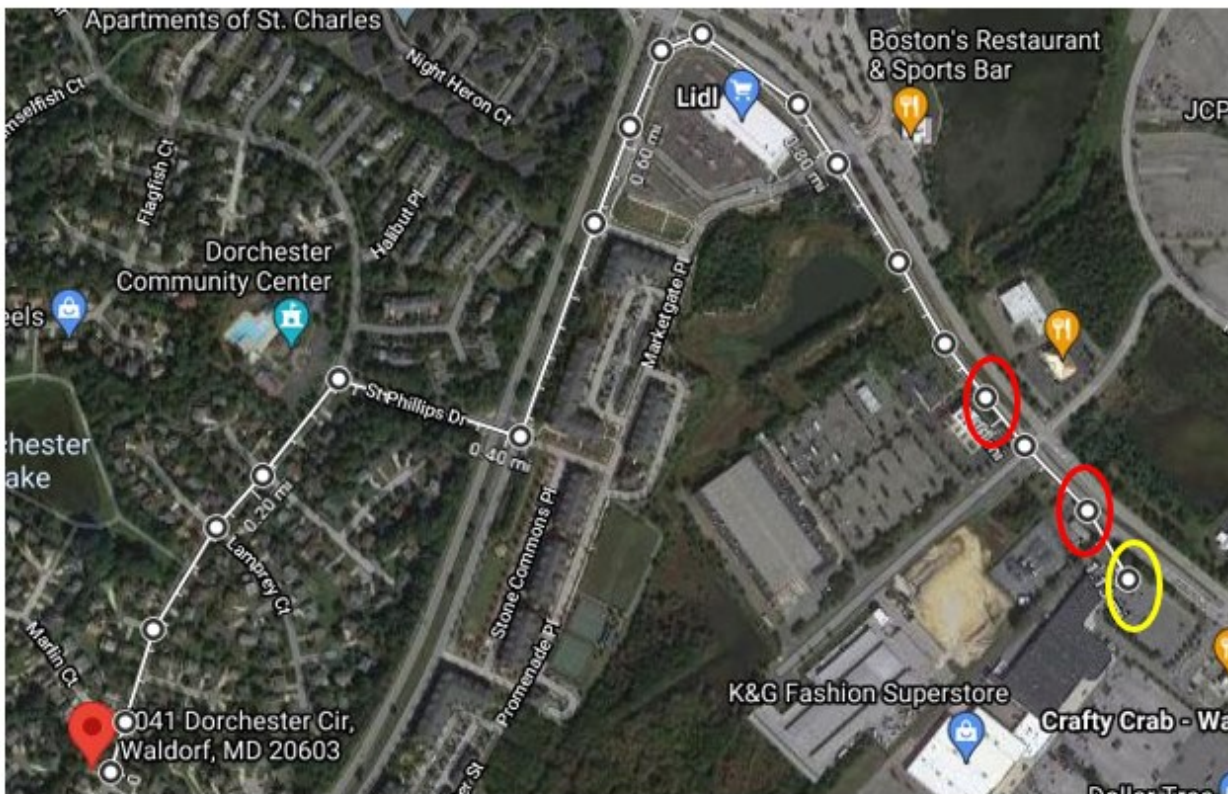
This node is 41fc as indicated by the small 'I' information and they have joined the mesh with node 22f8.

I found out after initial power on that I needed to update the firmware and was a bit worried about that and causing any undue problems, but the update process when fairly quick and painless. The firm-ware being used is called 'Meshtastic'.

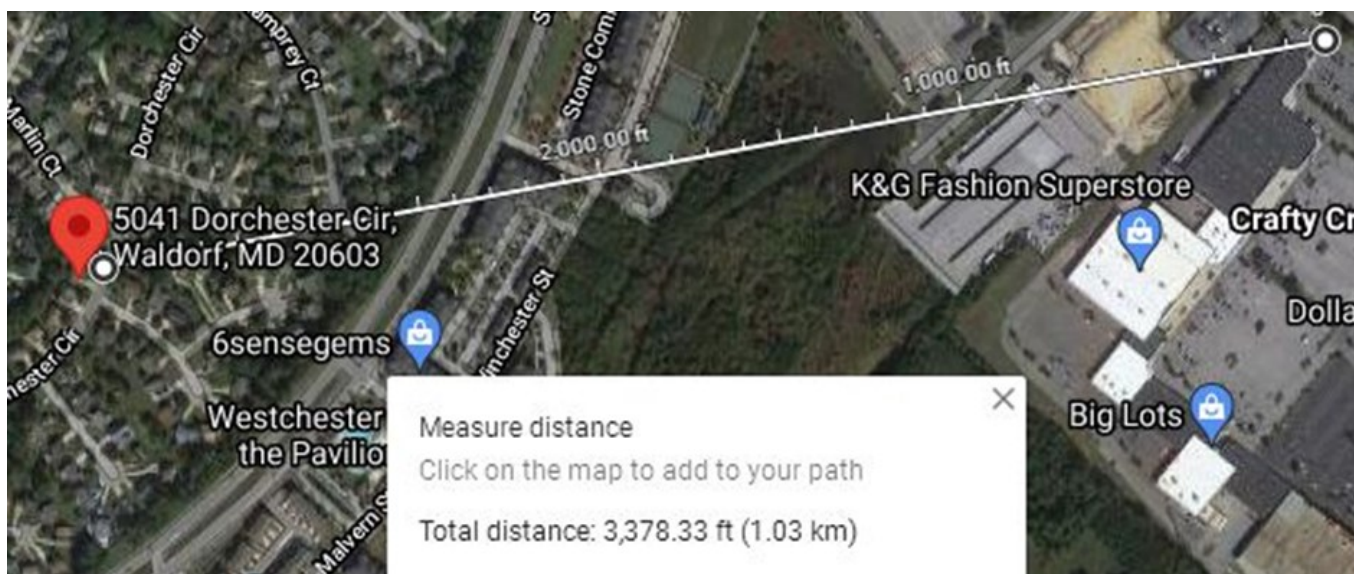
I have an Android tablet and also made use of my iPhone for the software. The

android software, also called 'Meshtastic' is easy to download onto the device. The iPhone takes a bit more work since the software is still in development. You need to first download and install a program called 'Testflight' which is a devel-
opment environment and then enter a certain link into your iPhone browser to

get to the Meshtastic software, accept a few rules and you're off .



I conducted a few in-house tests and then employed the texting skills of my daughter. I took one of the nodes and placed it in her bedroom window along with the android tablet and myself and iPhone started a hike to the credit union. Here is a map showing each of the locations where we tried some communications:



The two points circled in red were not successfully received by her, but the one in yellow was however, I could not get anything from her. That is a bit over a mile of walking, however, as the famous crow flies:

It is less than a mile, but for using the stock 5" antennas that came with them and with all the buildings around me, not to shabby.

I will note that these modules come in different freq ranges including the 433Mhz and the 915Mhz. I opted for the 915Mhz version for my testing and the price runs about an average of \$30, sometimes a bit more and sometimes a bit less.

I'll be doing some more testing over the next few months and maybe add another node or two to the Borg collective and see what I can do distance.

73
Bob
KB3KOW

CCARC Activities

By Jeff – KB3SPH

4 February 2022 – Exam Session at **5:00 PM**, Monthly CCARC Meeting at **7:00 PM**.

Location: Marbury Baptist Church Hall, 4670 Bicknell Road, Marbury, MD 20658.

Agenda:

* Officer Reports

* Presentation: “Amateur Radio Related Software (CENOS, AppCAD, and LCWO) by Bill – W8BL”

Zoom:

We also plan to have the meeting available via Zoom:

Meeting ID: 871 6462 1696

Passcode: 181595

Join the 4 February CCARC Meeting via desktop/laptop/smartphone: <https://us02web.zoom.us/j/87164621696?pwd=Ym1laWxYNkxVcVhFOTBIQmwxOExEdz09>

Dial in via landline/cell phone and follow voice prompts:

301-715-8592

4 March 2022 – Monthly CCARC Meeting at 7:00 PM. **Location:** Marbury Baptist Church Hall, 4670 Bicknell Road, Marbury, MD 20658. Other Details Pending.

1 April 2022 – Exam Session at 5:00 PM, Monthly CCARC Meeting at 7:00 PM. **Location:** Marbury Baptist Church Hall, 4670 Bicknell Road, Marbury, MD 20658. Other Details Pending.

HAMFESTS/Classes

ARRL National Convention & Orlando HamCation®

February 10-13, 2022 | [Registration](http://www.arrl.org/arrl-expo) at <http://www.arrl.org/arrl-expo>

35th Annual Winter SWL Fest

March 4-5, 2022, Online using the Zoom webinar platform The Winter SWL Fest is a conference of radio hobbyists of all stripes, from DC to daylight. Historically, every year scores of hobbyists have descended on the Philadelphia, Pennsylvania suburbs for a weekend of camaraderie. The Fest is sponsored by NASWA, the North American Shortwave Association, but it covers much more than just shortwave; mediumwave (AM), scanning, satellite TV, and pirate broadcasting are among the other topics that the Fest covers. You're sure to find a welcome from your fellow hobbyists, even if it's a "virtual" welcome!

Registration will be \$10 per computer screen to defray the Zoom hosting expenses. <http://www.swlfest.com/online-registration-form/>

Your hosts, Richard Cuff and John Figliozzi, work throughout the year to ensure that attendees have a great time over the weekend.



Coming
March 12-13, 2022

Our next **QSO Today Virtual Ham Expo** will be held live from **March 12-13**, and then on-demand for 30 days afterwards. We promise an amazing learning and networking experience to help you improve your amateur radio knowledge and get exposed to new ideas, equipment, and practical techniques. No need to travel - participate from your home or office! Information can be found at <https://www.qsotodayhamexpo.com>.

Practice questions

1. Under what conditions is an amateur station authorized to transmit music using a phone emission?
 - A. When incidental to an authorized retransmission of manned spacecraft communications
 - B. When the music produces no spurious emissions
 - C. When the purpose is to interfere with an illegal transmission
 - D. When the music is transmitted above 1280 MHz

2. When may an amateur station transmit communications in which the licensee or control operator has a pecuniary (monetary) interest?
 - A. When other amateurs are being notified of the sale of apparatus normally used in an amateur station and such activity is not done on a regular basis
 - B. Only when there is no other means of communications readily available
 - C. When other amateurs are being notified of the sale of any item with a monetary value less than \$200 and such activity is not done on a regular basis
 - D. Never

3. Who or what determines "good engineering and good amateur practice" as applied to the operation of an amateur station in all respects not covered by the Part 97 rules?
 - A. The FCC
 - B. The Control Operator
 - C. The IEEE
 - D. The ITU

4. What privileges are authorized in the U.S. to persons holding an amateur service license granted by the Government of Canada?
 - A. None, they must obtain a U.S. license
 - B. All privileges of the Extra Class license
 - C. The operating terms and conditions of the Canadian amateur service license, not to exceed U.S. Extra Class privileges
 - D. Full privileges, up to and including those of the Extra Class License, on the 80, 40, 20, 15, and 10 meter bands

Special events in February

02/01/2022 | JY1 Memorial Special Event

Feb 1-Feb 28, 0000Z-2359Z, N9SES, Lake Station, IN. Arab QRZ International. 14.025 14.076 14.250 21.025. QSL. Ayman Azar, 2861 Decatur Street, Lake Station, IN 46405. <https://www.n9ses.com/jy1-memorial-special-event-station>

02/03/2022 CactusCon K7C alex.m.hoffman@gmail.com

02/04/22 SHUTTLE COLUMBIA MEMORIAL K5C AE5P@ARRL.NET

02/05/2022 | EARS (Ellijay Amateur Radio Society) 25th Anniversary

Feb 5-Feb 13, 1500Z-2300Z, W4HHH, Ellijay, GA. Ellijay Amateur Radio Society (EARS). 14.171 7.171. Certificate & QSL. Ellijay Amateur Radio Society, 78 N Garrett Branch Road, Ellijay, GA 30536. W4HHH will transmit on 10, 12, 15 17, 20 40 80 & 160 meter bands off and on throughout the 9 days of the event. The certificate will indicate which of the several operators are contracted and, hopefully, participants will try for a clean sweep and contact all EARS operators. w4hhh.org

02/05/2022 | Minnesota QSO Party

Feb 5, 0000Z-2359Z, W0K, Karlstad, MN. Northwest Minnesota Amateur Radio Group. 14.050 21.050 14.270 21.350. QSL. Jack Parker, PO Box 244, Karlstad, MN 56732.

Feb 7, 1400Z-2359Z, N0SPN/N0V/W0M, Kasson, MN. Minnesota Wireless Association. 28.450 14.250 7,250 3.850. QSL. Danny Stroh, 27172 675 Street, Kasson, MN 55944. dstroh57@yahoo.com or <https://www.w0aa.org>

02/05/2022 | Republic of Texas Central National Road

Feb 5, 1400Z-2200Z, K5R, Rockwall, TX. Rockwall Amateur Radio Club. 14.050 14.074 14.265. QSL. Rockwall Amateur Radio Club, P.O. Box 1791, Rockwall, TX 75087. Commemorating the Republic of Texas Central National Road and it's impact on the history of Rockwall and all of Texas. Planned operation on CW, FT-8, and SSB. QSL card available for download from the Rockwall Amateur Radio Club website. sites.google.com/site/rarck5rkw

02/05/2022 | Traveler's Rest RV Resort and Golf Course 50th Anniversary

Feb 5, 1200Z-2000Z, W5O, Dade City, FL. Traveler's Rest ARC. 7.240 14.240. Certificate. K4TRR Anniversary, 29129 Johnston Rd. Lot 09-03, Dade City, FL 33523. Members of K5TRR (club station for Traveler's Rest RV Resort and Golf Course) celebrating 50 years of service to the RV-Ham traveler. k4trrinfo@gmail.com

02/07/2022 | 50th Anniversary of GERATOL W.A.S.Net

Feb 7-Feb 20, 1000Z-2100Z, W1G, Wheelwright, MA. GERATOL Worked All States Net. 3.668 During Net Time 20 Meter SSB 40 Meter SSB. QSL. Kevin Lynch, POB 124, Wheelwright, MA 01094. Special event station, W1G will be active from February 7, 2022 through February 20, 2022 to commemorate the 50th Anniversary of the GERATOL Worked All States Net. A special QSL card will be available to those who send an SASE with their QSL. geratol.net

02/07/2022 | Abraham Lincoln's Birthday

Feb 7-Feb 14, 1200Z-0600Z, W9L/K9L, Lerna, IL. National Trail Amateur Radio Club. 14.250 7.250. QSL. National Trail Amateur Radio Club, Attn: Lincoln Birthday, P.O. Box 903, Effingham, IL 62401. All bands all modes. K9L will be managed by multiple club members running from home Feb. 7th thru the 13th. W9L will only be used on location at the farm owned by President Lincoln's father and stepmother. Lincoln Log Cabin information can be found at www.lincolnlogcabin.org. Special event QSL cards can be obtained by sending a SASE to NATIONAL TRAIL AMATEUR RADIO CLUB INC Attn: Lincoln Birthday PO BOX 903 Effingham, IL 62401 www.nationaltrailarc.org

02/11/2022 Pluto 100th Anniversary Countdown W7P bob6315@earthlink.net

02/11/2022 World Radio Day K6B cis202@usa.com

02/11/2022 2022 Inventor's Day N2I DAVIDGOLDRN@GMAIL.COM

02/11/2022 Happy Hams Second Valentine's Day Celebration K1S km1ndy.km1ndy@gmail.com

02/12/2022 | Washington's Birthday

Feb 12, 1500Z-2100Z, W0ARC, Washington, IA. Washington Area Amateur Radio Club, Inc.. 14.250 7.250. QSL. Mark Lukins, 802 N 2nd Ave, Washington, IA 52353. SASE please. www.waarc.net

02/13/2022 | Wisconsin SimCom 2022

Feb 13-Feb 20, 0600Z-0600Z, W9WCA, Junction City, WI. Wood County ARES/RACES. Allstar 52770/Echolink W9WCA-L 7.250 14.250 3.970. QSL. Wood County ARES/RACES, Attn: SimCom SES, 5421 Madison Circle, Wisconsin Rapids, WI 54494. This is the special event for the 2022 SimComm exercise in Lake Delton, Wisconsin. We will be operating the event outside of the times we will be directly performing tasks related to the exercise. QSL with SASE via W9BBF. kb9stb@gmail.com

(Continued on page 18)

AMATEUR RADIO CONTESTS



Start Day → 1 → End Day 3
 Start Time (UTC) → 0000Z → End Time (UTC) 2359Z
 Contest Name
 ← Major Contest Of Weekend

- Multimode
- CW
- Digital
- Off-The-Air
- SSB
- VHF/UHF

Contests in February

NCCC RTTY Sprint	Every Thursday	EUCW 160m Contest	8 to 9
NCCC Sprint	Every Friday	RSGB 1.8 MHz Contest	12
K1USN Slow Speed Test	Every Sunday	CQ WW RTTY WPX Contest	12 to 13
Worldwide Sideband Activity	Every Tuesday	SARL Field Day Contest	12 to 13
RTTYOPS Weeksprint	Every Tuesday, Thursday	Asia-Pacific Spring Sprint, CW	12 to 13
Phone Weekly Test - Fray	Every Wednesday	Dutch PACC Contest	12 to 13
A1Club AWT	Every Wednesday	SKCC Weekend Sprintathon	12 to 13
Mini-Test 40 & 80	Every Wednesday	YLRL YL-OM Contest	12 to 13
CWops Mini-CWT Test	Every Wednesday, Thursday	OMISS QSO Party	12 to 13
EACW Meeting	Every Thursday	AWA Amplitude Modulation QSO Party	12 to 13
QRP Fox Hunt	Every Sunday, Wednesday, Friday	KCJ Topband Contest	12 to 14
OK1WC Memorial	Every Monday	Balkan HF Contest	13
VHF-UHF FT8 Activity Contest	2, 16	PODXS 070 Club Valentine Sprint	14
UKEICC 80m Contest	2,23	CQC Winter QSO Party	14
NRAU 10m Activity Contest	3	4 States QRP Group 2nd Sunday Sprint	14
SKCC Sprint Europe	3	ARRL School Club Roundup	14 to 18
NCCC Sprint Ladder	4	AGCW Semi-Automatic Key Evening	16
EurAsia HF Championship	5	RSGB 80m Club Championship, Data	16
FYBO Winter QRP Sprint	5	NTC QSO Party	17
Minnesota QSO Party	5	ARRL Inter. DX Contest, CW	19 to 20
FISTS Saturday Sprint	5	Russian PSK WW Contest	19 to 20
AGCW Straight Key Party	5	FISTS Sunday Sprint	20
Vermont QSO Party	5 to 6	Feld Hell Sprint	20
10-10 Int. Winter Contest, SSB	5 to 6	Run for the Bacon QRP Contest	20 to 21
F9AA Cup, CW	5 to 6	RSGB 80m Club Championship, CW	24
Mexico RTTY International Contest	5 to 6	High Speed Club CW Contest	27
British Columbia QSO Party	5 to 6	RSGB FT4 Contest	28
European Union DX Contest	5 to 6	CQ 160-Meter Contest, SSB	25 to 27
North American Sprint, CW	5 to 6	REF Contest, SSB	26 to 27
Classic Exchange, CW	6 to 9	FTn DX Contest	26 to 27
Walk for the Bacon QRP Contest	6 to 7, 20 to 21	UBA DX Contest, CW	26 to 27
RSGB 80m Club Championship, SSB	7	South Carolina QSO Party	26 to 27
NAQCC CW Sprint	8	NA Collegiate Championship, RTTY	26 to 27
ARS Spartan Sprint	8	North American QSO Party, RTTY	26 to 27
ARRL RTTY Roundup	8 to 9	North Carolina QSO Party	27 to 28

02/16/2022 | 2022 Speedweek/Daytona 500

Feb 16-Feb 20, 0000Z-2359Z, N4DAB, Daytona Beach, FL. Daytona Beach CERT Amateur Radio Team. 14.255 14.074 7.255 7.074. Certificate. Steve Szabo, WB4OMM, Trustee, 536 Central Park Blvd., Ponce Inlet, FL 32127. n4dab@n4dab.com or www.n4dab.com

02/17/2022 | HL Hunley Commemoration and Special Event

Feb 17, 1400Z-1900Z, N4HLH, Sullivans Island, SC. Trident Amateur Radio Club. 14.262 7.262. QSL. QSL Manager, P.O. Box 60732, North Charleston, SC 29419. <https://www.tridenthams.org/hl-hunley>

02/19/2022 Antarctic Activity Week K4A oldbibles@aol.com

02/19/2022 | Cajun Coast Eagle Expo

Feb 19, 1600Z-2000Z, W5BMC, Patterson, LA. Bayouland Emergency Amateur Radio Service [BEARS]. 7250 14250 Echo Link W5BMC-R 507010. QSL. Deborah Price N5FMI, 708 Front St, Morgan City, LA 70380. Set up will be on the banks of the Lower Atchafalaya River at Captain Caviar's Tour Boat Landing Under 200 year old live oak trees

02/19/2022 | George Washington's Birthday

Feb 19-Feb 20, 1700Z-1000Z, K4US, Alexandria, VA. Mount Vernon Amateur Radio Club. 14.260 14.074 7.040. QSL. MVARC, P.O. Box 7234, Alexandria, VA 22307. Annual station celebrating our first president's birthday is held on the grounds of his Virginia home at the Mt Vernon Greenhouse. QSL with SASE to: MVARC P.O. Box 7234 Alexandria, VA 22307 mvarc.org

Feb 20-Feb 22, 1900Z-2359Z, WS7G, George, WA. Columbia Basin DX Club. 14.322 7.222 3.855. Certificate & QSL. Brian Nielson, 11650 Road 1 SE, Moses Lake, WA 98837. we will be celebrating George Washington's birthday from George, Washington. cbn.homestead.com/WS7G.html

02/19/2022 | Ice Station WØJH (Frozen Lake Portable) *Updated Info*

Feb 19-Feb 21, 1600Z-2300Z, W0JH, Stillwater, MN. Stillwater, MN Amateur Radio Assoc. (SARA). 3.860 7.260 14.260 21.360. Certificate. Shel Mann, 1618 Pine St. West, Stillwater, MN 55082. We will have multiple stations simultaneously operating on different bands and different modes. In keeping with COVID social distancing protocols, we will operate from our individual QTHs this year. In a meager attempt to drive away the remainder of Minnesota winter, the Stillwater Amateur Radio Association will be generating as much RF as possible over the President's Day long weekend. Certificates will ONLY be sent via email in PDF format. (Send requests with standard QSL confirmation info via email to: IceStation2022@radioham.org) There is no need to send a QSL card. Info: www.qrz.com/db/w0jh & www.radioham.org. IceStation2022@radioham.org

02/19/2022 | Scouts BSA WHOA Weekend

Feb 19, 1400Z-2000Z, W1M, Russell, MA. Western Massachusetts Council, Scouts BSA. 7.190 10.115 14.060 14.290. QSL. Tom Barker, WA1HRH, 329 Faraway Road, Whitefield, NH 03598. Monthly seasonal outdoor activities for Scouts and the general public including "ham radio in the woods." Paper logging. QSL via SASE and eQSL.

02/19/2022 | Voice of America 80th Anniversary of the First Broadcast Overseas

Feb 19-Feb 21, 1400Z-2359Z, W3V, Washington, DC. Voice of America Amateur Radio Club. 3.880 7.280 14.280. Certificate & QSL. Voice of America Amateur Radio Club, 330 Independence Ave. SW, Rm 2525-croft, Washington, DC 20237-0073. Also operating W8O and W4A. See separate listings. <https://www.qsl.net/k3voa>

Feb 19-Feb 21, 1400Z-2359Z, W8O, West Chester, OH. West Chester Amateur Radio Association. 3.880 7.280 14.280. Certificate & QSL. West Chester Amateur Radio Association, 8070 Tylersville Rd, West Chester, OH 45069. W3V and W4A also participating. See separate listings. <https://wc8voa.org>

Feb 19-Feb 21, 1400Z-2359Z, W4A, Greenville, NC. Bright Leaf Amateur Radio Club. 3.880 7.280 14.280. Certificate & QSL. Bright Leaf Amateur Radio Club, c/o Eddie R. Campbell, W4JNC, 2421 Cobb Dail Rd., Farmville, NC 27828. W3V and W8O also participating. See separate listings. <https://w4amc.com>

02/25/2022 | 75th Anniversary of Decommissioning USS Tennessee (BB43)

Feb 25-Feb 26, 1422Z-1422Z, W4BSF, Huntsville, TN. Big South Fork Amateur Radio Club - Scott County ARES. 14.250. Certificate & QSL. Big South Fork Amateur Radio Club, P.O. Box 5029, Oneida, TN 37841-5029. The Big South Fork Amateur Radio Club will operate live from the USS Tennessee (BB-43) museum in Huntsville TN. 75th Anniversary of Decommissioning. For spotting, QSL/certificate information and to learn more about the USS Tennessee see www.qrz.com/db/w4bsf or www.bsfar.com

02/26/2022 | 18th Annual "Freeze Your Keys" Winter Operating Event Feb 26, 1400Z-2200Z, W0EBB, Leavenworth, KS. Kickapoo QRP Amateur Radio Club. 14.325 14.058 7.240 7.035. QSL. Gary Auchard, 34058 16th Street, Leavenworth, KS 66048. SASE required for a QSL please. w0mna74@gmail.com

02/27/2022 North Carolina QSO Party

1500 UTC February 27, 2022 to 0100 UTC February 28, 2022 <https://ncqsoparty.org/rules/>

Advanced Technical Information Online

By Bob, NW3M

Recently I've been coaching Bob, KB3KOW, as he scratch builds a project that uses a long popular IC. If you've been building electronic projects for a while you've likely used, or heard of, the 555 timer chip. The 555 has been around since I was a teen and it is the first IC I ever used in a project. I was the ripe age of 14 at the time, and my friend and I were trying to build a variable speed light bulb flasher.

When we bought the IC there was a sheet of paper stapled to the back of the card it was packaged on. The paper had several sample circuits that could be made with the IC. After quickly getting bored with watching a flashlight bulb blink on and off we decided to do something else. However, that piece of paper had whetted my curiosity for what else this little chip could do.

As a teenager, my friend and I continued to use 555 chips in model railroad projects and for audio signal generators. In my early twenties, I found a 555 circuit that allowed adjustment of the pulse width of the chip output between 1% and 99%. A lightbulb lit in my head and I designed a small model train throttle based on that circuit as a DC motor speed controller.

Over the years I've turned to the ever versatile 555 chip for countless projects, both personal and professional. For digital circuits it has been my faithful clock pulse generator. I've used them for servo testers, signal generators, function generators, an electronic chime, and alternating LED flashers. I've cascaded 555 chips to create event sequencers that have different time requirements for each step. I've even used a 555 as an engine for a quick and simple digital audio amplifier.

Helping Bob reminded me of the many uses for the 555 chip. I went on a search to see if I could find a website that had a thorough collection of circuits that can be built with the chip. It took a little while weeding through many less than ideal websites until I hit one with what might be called a Mother Lode.

Most of the myriad circuits can be built with the chip and just a couple resistors and capacitors. Many are good as standalone devices, or can be easily integrated into a more complex device. They also make good electronics learning circuits to experiment with. The site has diagrams for 90 projects.

After looking at all the projects, I would say there are 2 that should not have been included. One is a stepper motor driver that doesn't use a 555 timer IC, but instead a similarly numbered custom stepper motor driver chip. The other is something called a Clark Zapper which is little more than a snake oil phony miracle medical device that claims to cure anything and everything. Don't waste your time with that one.

If you've never explored the vast array of uses for the 555 timer chip, this website might keep you busy experimenting and learning. If, like me, you've used them for many years in many applications, you still might find some unique ways to use one that may be new to you.

<http://www.555-timer-circuits.com/>



Charles County Amateur Radio Club Meeting Minutes

January 7, 2022

Officers Present:

president – Bob Curran NW3M
Vice President – Bob Davidson KB3KOW
Treasurer – Pamela Humbert KB3SWS
Activities – Jeff Humbert KB3SPH
Secretary – Charles Hallock AA3WS

Members Present:

Christen Lockhart - KC3SRG (Zoom)
Calvin Lockhart II – KC3RAN (Zoom)
Garret Lockhart – Future (Zoom)
Jay Howard – KC3MUV
Bill Luyster - W8BL
Les Couehenour – N3RFO
Pat Hinman – KB3UYZ (Zoom)
Nathan Daetwyler – Future Joe Boswell – KB3HNP
Michelle Sack – N3YRZ (Zoom)

Meeting opened 1910 Hours.

President Bob NW3M reported on the death of our Charter Member Mike Tackish KA3GRW. President Bob Curran NW3M opened the Meeting at the Marbury Baptist Church Social Hall. The meeting was also displayed on Zoom. Bob welcomed the guest and members. A Test Session was held prior to the Meeting and one person renewed his License.

Presentation

Bob Curran NW3M gave presentation on "Amateur Radio Astronomy". Bob explained the history of Amateur Radio Astronomy along with the many data collection efforts of Hams. He closed his talk with the description of available projects: NASA Radio JOVE Receiver Kit, NASA VLF "Inspire", Scope in a Box and the Itty Bitty Telescope [IBT].

Treasurer:

Pamela Humbert KB3SWS gave the January Treasurer's Report. The January's Treasurer Report was approved.

Activities Manager:

Jeff Humbert KB3SPH reported on the following upcoming activities:

4 February 2022 – Exam Session at 5:00 PM, Monthly CCARC Meeting at 7:00 PM. Location: Marbury Baptist Church Hall, 4670 Bicknell Road, Marbury, MD 20658. Other Details Pending.

4 March 2022 – Monthly CCARC Meeting at 7:00 PM. Location: Marbury Baptist Church Hall, 4670 Bicknell Road, Marbury, MD 20658. Election of Officer will be conducted during the Meeting. Other Details Pending.

1 April 2022 – Exam Session at 5:00 PM, Monthly CCARC Meeting at 7:00 PM. Location: Marbury Baptist Church Hall, 4670 Bicknell Road, Marbury, MD 20658. Other Details Pending.

Secretary:

There were no Minutes for the December's Meeting. The Meeting was replaced with the Christmas Party Hosted by the Humberts

(Continued on page 21)

Old Business

President Bob NW3M repeated the need of Club Net Controllers and Volunteers were needed at the LaPlata Train Station.

New Business

President Bob NW3M reminded the Club of CCARC Dues Cycle for 2022.

President Bob NW3M requested nominations for Club Officers for the Election to be held during the March Meeting.

President Bob NW3M advised the Club of the status Blossom Point repeater and the late Mike Tackish repeater. Since the Club did not own the equipment, no action was recommended. Individuals were encouraged to enquire with the respective owners should they have an interest in the repeaters.

Michelle Sack N3YRZ requested input for the 25th Adversary of the Club

Members:

Pam reported on CCARC's the success of the December Christmas Party. Fun was had by all.

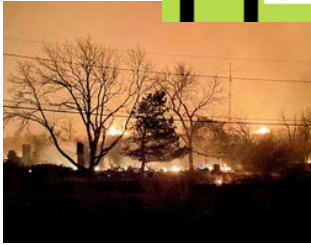
Closing:

A motion was made and seconded to close the meeting. The motion passed at 2042 Hours.

Charles Hallock AA3WS / Secretary



Hams in Action



ARES Activates as Wind-Driven Year-End Fire Destroys 1,000 Colorado Homes



Members of the Amateur Radio Emergency Service in Colorado, turned out on December 30, 2021 as the devastating Marshall Fire roared through Superior and Louisville, Colorado. Intense winds whipped a grass fire south of Boulder near Marshall into a massive firestorm that became too large and fierce for firefighters to battle. "The only battle was evacuation, as the towns of Louisville and Superior and [the] northern suburbs of Denver lay in the fire's wind-driven path," said Amateur TV (ATV) enthusiast and equipment dealer Jim Andrews, KH6HTV, of Boulder. "This was not a typical forest fire, but an urban firestorm." Thousands of people were evacuated.

ARES volunteers supported communication at evacuation sites and established emergency communication as commercial power failures and preventive shutdowns by utilities caused a loss of commercial communication. "Within about 8 hours," Bishop said, "battery back-up systems for cell phones and landlines failed, and 911 services went down." "To facilitate a restoration of these emergency services, BCARES activated the Mountain Emergency Radio Network which consists of repeaters installed at fire stations in Gold Hill and Allenspark, at community centers in Nederland and Raymond, and the privately owned Airlink Repeater. "These repeaters provided the emergency communication links that facilitated the restoration of 911 communications back to the dispatch center for the duration of the power outages," Bishop explained. According to Bishop, as the Marshall Fire expanded, evacuation center support was requested at three locations to provide on-site situation reports using Winlink. Bishop said BCARES members and mutual-aid ARES operators from neighboring Districts established local communication with the BCARES EOC radio position from designated field locations. BCARES was activated for 2 days.

As Andrews reported, Boulder County announced on New Year's Day that nearly 1,000 homes were lost. And one person died. In addition to his own home, the fire destroyed his daughter's home next door, as well as the homes of all his close neighbors. "We had no official warning of the coming firestorm," Andrews said. "My only warning was from our daughter who saw it happening." Andrews added, "KH6HTV VIDEO, as a supplier of ATV gear, will be out of operation for a very long time to come." Andrews edits the monthly Boulder Amateur Television Club TV Repeater's REPEATER newsletter



. Jim Andrews, KH6HTV, shared this photo of what remained of his home . [Ji

m Andrews, KH6HTV,

photo] <http://www.arrl.org/arrlletter?issue=2022-01-20>

What is a net control station & why should you be one?

Have you been on the radio and heard "this is Callsign, Net Control for the ___ Net"?

According to ARRL, a net is communications between 3 or more radio stations. So how do they not just talk over each other? If it's just a few friends, usually they can just round robin it...1 passes to 2 to 3...etc. But what if it's for a club and you're inviting several operators to join. Here is where that net control station comes in handy to establish order.

What the Net Control Station (often written as NCS) does is mostly to direct the net activity. NCS chooses the frequency. Usually clubs have a suggested frequency, but the NCS checks for availability in case that suggested frequency is already in use. They may also move to avoid man made or natural interference.

The NCS opens the net, takes check-ins, makes any announcements, & directs passing of any traffic messages. We don't manage routine traffic. But if there was an emergency message to pass, we would, as mandated by FCC law assist as we could.

Then the NCS takes comments from the participants with mobile stations that might move out of range, followed by others in order they checked into the net. When all have had their say, and there are no further comments or business, NCS closes the net

So that the NCS can call folks in order of check in, he or she will keep a list as they call. It is the NCS choice of how they prefer to do this. Some use paper and pencil, others use computer programs such as Netlogger. You may have seen as we are using it on the Echo-Link/multimode net and experimenting with it on the HF net.

Does the NCS have to do this alone? No. Often other stations work along with NCS as a relay. Sometimes, NCS doesn't hear all the stations calling. In that case, a relay who does hear the station will relay them to NCS. You have a script to follow (not written in stone...you can adlib some for the situation) and plenty of folks to back you up.

Why should you be an NCS? This is a good way to prepare for emergency. It helps the persons involved in the emergency to have a NCS to direct and route messages. Imagine being thrown in to the Colorado fire response with no prior work.

Secondly, it helps your club. We can't have a net without an NCS. And it can help you...if you are nervous...just remember we're all friends in the club...and we all remember what those beginning nets were like. And after many years of doing NCS, I have goofed on recent nets...did you notice...do you remember? It's not an exact science and we're doing net control to practice and have fun at the same time. You can start with a back up NCS if you like. I'm willing to help. Please consider signing up... <https://www.signupgenius.com/go/20f0b48acab2ca5f85-ccarc1>

Or email me at msack@verizon.net (especially if you want help or have concerns).

73

Michelle N3YRZ

Wide area Ragchew session

The Saint Mary's County Amateur Radio Association is hosting a monthly, informal ragchew session via Zoom for hams in the surrounding counties. The idea is to just get together to chat about what's going on, activities, etc. **once a quarter**. We'll pick it back up on on the 2nd Thursday in Jan, 1/13/22.

AGENDA:

- Everyone is invited and welcomed from anywhere in the MDC area (southern Maryland, Northern Neck, eastern shore of Maryland, etc.)
- Open chat – who is doing what, club news from all areas, how can we work together better to keep ham radio a growing, viable hobby, sharing of news about upcoming ham events, meet new people!
- Please keep all discussions related to ham radio activities!

JOINING THE GROUP (there are 3 different ways to join in on the meeting):

1 – Click on this QUICK LINK:

<https://us02web.zoom.us/j/8673965998?pwd=Q2lUL05PTVB3RnEvUkZPNmlKUFJ3QT09>

2 – Open up the ZOOM app on your computer or device and:

Select 'Join Meeting' button and type in the meeting ID and password:

Meeting ID: 867 396 5998 Meeting Password: 1460464

3 – Use your regular telephone (no computer needed, voice only, no video):

Dial 1-301-715-8592 (US) – Follow the voice prompts... enter the Meeting ID followed by the # (pound) symbol; then enter your participant ID (if applicable) followed by #; then enter the meeting password followed by #

Contact information: Rob Hoyt, N2OMC – SMCARA President/ host robhoyt32@yahoo.com

Please note change in date to quarterly

ANSWERS

Answers to practice questions
1 A 2 A 3 A 4 C

WANT ADS, FOR SALE, &
PUBLIC SERVICE ANNOUNCEMENTS:



**Southern Maryland
Astronomical Society**

Explore the night sky with us at our observatory, or use your own telescope.

New to astronomy? We'll help you learn.

For information, visit us at <http://smas.us>

TrotSar Mounted Search Team
21218 Dorsey Spring Place
Germantown, MD 20878
Pete KC3SBN Commander



**AMA 822
CHARLES COUNTY RADIO CONTROL CLUB
MARYLAND**

Interested in joining the fascinating hobby of RC airplanes?

The Charles County Radio Control Club is ready to help you get started.

Visit us on the web: charlescountyrcc.com



Smallwood Camera Club

Open to all skill levels and photographic interests.



email: SmallwoodCameraClub@gmail.com



**EAST COAST
AMATEUR RADIO SERVICE**



1968 - 2018 Leading the Way Into the Next 50 Years 2018 - 2068

Net Operations occur daily on 7.255 MHz (LSB).
Weekday operations 7:30 am to 2:00 pm
Weekend operations 8:00 am to 12:00 pm, East Coast time
<http://www.ecars7255.com/FrontPageLinks/ECARSOrganization/info.htm>

Meetings, nets, & contacts

- First Friday- Monthly meeting @ 7 PM/1900
- Net-Wednesdays 8:30 PM local 147.195 MHz, + 600 , PL
- 156.7 EchoLink KB3KOW-R
- PO BOX 169, La Plata, MD 20646
- President: Bob Curran NW3M flyingham@verizon.net
- Vice-president: Bob Davidson rdavidson@aceweb.com
- Secretary: Charles Hallock AA3WS selbynet@hotmail.com
- Treasurer: Pam Humbert KB3SWS *humbertpj@gmail.com*
- Activities: Jeff Humbert KB3SPH humbert1js@gmail.com
- Newsletter Michelle Sack N3YRZ msack@verizon.net
- VE Coordinator Bob Curran NW3M



Charles County Amateur
Radio Club

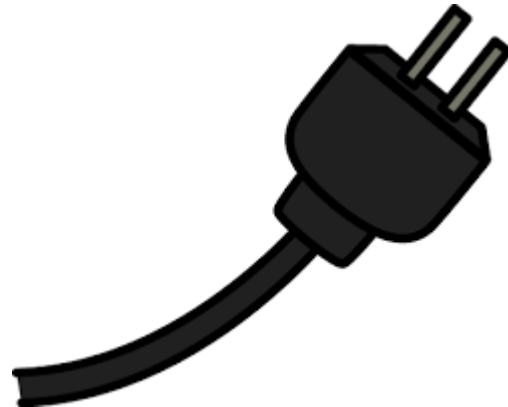
ARRL Service Club

We're on
the web

[http://
k3smd.net](http://k3smd.net)

Leave laughing

My son won't quit chewing on
electric cords, what should I do?



Ground him till he conducts himself
properly.

