

Charles
County
Amateur Radio
Club

Inside

this issue:

activities	6
Contests	14
Crossword/ puzzles	15
Hamfest	4
Member Column	8
Minutes	24
Practice questions	12
Special events	20

Smoke Signals



Volume 24
issue 6

June 2021

Meeting 4th @ 1900 EST via Zoom &/or
Marbury Baptist Church 4670 Bicknell Rd,
Marbury, MD 20658

THE PRESIDENT'S WORKBENCH

Here we are in June already. It seems like not long ago we were in the chilly grips of winter. June is a busy month for amateur radio and an interesting propagation mode begins to present itself.

The most prominent amateur radio activity in June is Field Day. Field Day this year falls on June 26 and 27, with set up authorized to begin at 2:00 PM local time on Friday, June 25. Look elsewhere in the newsletter for details about the CCARC Field Day plans.

Field Day and Special Event Stations share some things in common. Both can involve setting up equipment and antennas in the great outdoors and operating. I stumbled upon an interest-

ing special event that takes place the weekend before and the weekend during Field Day. Much like the various "On the Air" activities for parks, islands, light-houses and summits, this one seeks to put lots of museums on the air. The event is the International Museums Weekend.

We have a few museums in Charles County. The one that makes the most sense for a special event station is the Maryland Veterans Museum in Newburg. They have a large field we could operate from & they have museum displays of field radios used by the military in various conflicts. Setting up a special event station the weekend before Field Day would be an opportunity to

(Continued on page 2)

CALENDAR

June

02 Net 2030

04 meeting

09 Net 2030

16 Net 2030

23 Net 2030

26-27 Field Day

30 Net 2030 &

News articles due

July

02 meeting

07 Net 2030

14 Net 2030

21 Net 2030

28 Net 2030 & News
articles due

test the antennas and equipment you might use for Field Day. If this is something we want to do, we will need to act quickly to secure permission and possibly apply for a special event call sign.

Along the lines of doing a special event station at the museum, which is a volunteer supported operation, I've often thought that the CCARC should be reaching out to other organizations within the community to establish partnerships. Currently we have partnerships with the Charles County 4-H, the Oxon Hill Bike and Trail Club and the March of Dimes of Charles County. Our members could benefit the museum with our knowledge of electronics as well as providing radio operation demonstrations. More importantly, other organizations can benefit us with potential guest speakers, facilities, future hams, and other ways we might not think of. Please think about any organizations you know of that might benefit from a partnership with the CCARC and pass it along to one of our board members.

For those of you who chase special event stations, June will be a busy month for you. As I am writing this article there are currently 30 events listed for June on the ARRL Special Events calendar. Early in the month there are loads of museum ship stations. Later in the month are commemorations for parades, cities, islands, even the Arkansas Statehood. Some others of interest are a King Kamehameha celebration, some Boy Scout Councils, and the Salvation Army Donut Day.

Those of you chasing State QSO Parties, June offers only Kentucky and West Virginia.

I mentioned earlier an interesting propagation mode. With the transition to summer weather, atmospheric temperature inversions become more common. Normally, as you increase altitude the temperature declines. In a temperature inversion, the same thing happens but you suddenly encounter a zone of warmer air overriding a zone of colder air forming a sharp layer of warm air above cold air. This zone is reflective to VHF and UHF signals. It is common in southern Maryland to hear repeaters during the morning rush hour from New York, New Jersey, Connecticut, Pennsylvania, North Carolina and southern Virginia. With a 25-watt radio and even a basic outdoor antenna, you can easily access those distant repeaters from your home or vehicle. You will just need to program the correct PL-tone.



by Bob, NW3M

Field Day

Greetings from Pam – KB3SWS. The 2021 Summer Field Day is right around the corner, and this year's event will see a return to a traditional in-person gathering of hams from throughout Southern Maryland. Field Day will be held on Saturday, June 26 through Sunday, June 27, 2021, at the Nanjemoy Creek Environmental Education Center (NCEEC), 5300 Turkey Tayac Place, Nanjemoy, MD 20662 (Charles County). For directions to the site, go to the link on the Southern Maryland Astronomical Society (SMAS) website: http://www.smas.us/html/directions_to_smas.html. FYI: There is no fee for use of this site.

According to the ARRL website, this year's Summer Field Day operations will run from 1800 UTC (2:00 PM local) on Saturday, June 26 through 2059 UTC (4:59 PM Local) on Sunday, June 27. Additional information can be found at: <http://www.arrl.org/field-day>.

For those who want to set up early, we can also access the site beginning on Friday, June 25.

This year's event will include a special presentation on the evening of Saturday, June 26, and feature local hams demonstrating RC aircraft, and how they utilize ham radio for their operations.

For those who wish to stay overnight, NCEEC has six small rustic cabins, available on a first come first served basis, plus field space for tents and RVs. There is a separate indoor restroom and shower facility, adjacent to the cabins. Participants are also welcome to attend during the day only, on Saturday and/or Sunday. Food service in a separate pavilion and kitchen building will be both potluck shared meals, and "Bring Your Own."

Please NOTE: NCEEC is a facility of the Charles County School District, therefore, it is a smoke free, alcohol free and drug free zone. It is not a public park, nor a public campground. It is also a gated facility, with school staff on site. If you want to visit the site ahead of time to plan your setup, do not try to visit the site by yourself! Contact me ahead of time at kb3sws@arrl.net, to make an appointment to tour NCEEC.

Additional details will be sent via e-mail. We hope to see you at the 2021 Summer Field Day.



photo by Bob Curan Jeff KB3SPH
on radio field day 2019

Hamfests

**The Ole Virginia Hams Amateur Radio Club
Is happy to announce they are hosting a
Ham Radio Tail Gate Party**



**Saturday, June 12, 2021
8 am to 2 pm Rain or shine**

Across from Signal Hill Park in Manassas Park, VA

38° 45.2710'N, 77° 26.2800'W

**Signal Hill Park address is 9300 Signal View Dr. Manassas Park – the field is located on
Signal View Drive across the street from the park entrance**

**The field is on the east side of Signal View Drive just past the National Monument for the First
Battle of Manassas**

**Admission \$5 per person over 18
\$20 per vehicle to set up and sell
All attendees will park in the field**

More information www.w4ovh.net

Father's Day Hamfest at Arcadia

06/20

Arcadia Fairgrounds 16920 Carnival Ave. Upperco, MD 21155

Contact: David Shadwell , AB3TE P.O. Box 120 Reisterstown, MD 21136

410-252-2878 W3FT@yahoo.com **Talk-In:** 146.67 (PL 107.2)

<http://W3FT.com> Facebook Baltimore Amateur Radio Club

Happy father's day



CCARC weekly net

Charles County Amateur Radio Club net each Wednesday 2030 local time
147.195 MHz, + 600 offset, PL 156.7 Hz. If repeater fails 146.480 simplex

EchoLink N2OMC-L (when available, watch emails)

Follow us on Netlogger

Nets will be roundtable type with a question of the week for discussion. All amateur radio operators are welcome; please join in the fun!

Sign up for net control at

<https://www.signupgenius.com/go/20F0B48ACAB2CA5F85-ccarc>

CCARC Activities

By Jeff – KB3SPH

4 June 2021 – Monthly CCARC Meeting at **7:00 PM**.

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

Agenda:

*Presentation - “Smith Charts” by Bill – W8BL

A copy of a Smith Chart can be downloaded from: https://leleivre.com/downloadables/colour_smith_chart.pdf

Zoom:

We also plan to have the meeting available via Zoom:

Meeting ID: 867 2886 6720

Passcode: 847634

Join the 4 June CCARC Meeting via desktop/laptop/smartphone: <https://us02web.zoom.us/j/86728866720?pwd=eWNMdWVHdU13R3Nrb09TQnRsM05Odz09>

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

301-715-8592

25 – 27 June 2021 – Field Day at Nanjemoy Creek Environmental Education Center, Nanjemoy, MD.

2 July 2021 – Monthly CCARC Meeting at 7:00 PM – Details TBD.

6th Annual Connector Workshop

Mark your calendars for the **6th Annual Connector Workshop** (Red-Righting, Tongue-Upping the World since 2016) to be held at the Nanjemoy Creek Environmental Education Center (NCEEC) on **Sunday, 9/19/2021**. This year's theme is "**Solar Sunday**."

Who: Any interested person. This email is being sent to local area amateur radio operators. **Please feel free to forward this email to any individual/group that may have an interest.**

What: Free Connector Workshop focusing on learning about & constructing power cable assemblies using Anderson PowerPole connectors. Planned speakers include Charles AA3WS & Jeff KB3SPH.

Also: "Solar Sunday" Presentations on Various Solar Power Systems:

Kato – KB3LIB: Home/Cottage Solar Project

Steven – KC3DSO: Camping/Hiking/Vehicle Solar Systems

Jeff – KB3SPH: Field Deployable/Portable Solar System

When: Sunday, 19 September 2021, 1300 – 1700 (1:00 PM – 5:00 PM).

Where: Nanjemoy Creek Environmental Education Center (NCEEC)
5300 Turkey Tayac Place Nanjemoy, MD 20662

How (To): Briefs on how to use Anderson PowerPole connectors (the ARES/RACES standard) and demonstrations on various configurations to assemble
Hands on use of PowerPole crimpers and insulated connector crimpers to assemble cables

Hands on use of other crimp-on connectors, PL-259 connector installation, etc.

Briefs and demonstrations on preparation of cables and soldering various connectors and Crimp-the-Shield/Solder-the-Pin connectors

Hands on use of soldering equipment

Note: No experience or bringing of equipment is necessary, come and learn from others! If you have a situation where you need assistance in getting a connector/advice on equipment, please bring that equipment to the workshop and let the "Brain Trust" have a crack at solving the issue.

Why: Get the creative juices flowing!

If you are interested in attending the workshop, please let me know via return email (humbert1js@gmail.com) and include the number of people you're bringing with you.

Member Column

Let the spotlight this month shine on

Calvin Lockhart

KC3RAN



Let us welcome brand-new HAMster Calvin Lockhart KC3RAN. Calvin was born in 1969 in Caro, Michigan. He received his Technician's license in January 2021. "My interests in amateur radio have stemmed from a desire to learn more about communication options during emergencies, including weather, national-level, or even the ultimate, Zombie Apocalypse. I figured if my family and I had comms for any of those scenarios, we would be in a good position to survive anything! J"

As a new licensee, he is experimenting with various platforms, and working to establish a reliable base station to communicate regularly with the weekly CCARC nets. Jeff, KB3SPH, has been the consummate Elmer-really patient in understanding my level of knowledge, experience with amateur radio, and broadening exposure to different platform capabilities and options. And very trusting in lending me radios, antennas, coax cables, etc. I really appreciate all of it.

The most memorable contact so far has been while traveling to NC to see our grandchildren using a mobile radio Jeff lent. He connected with the repeater in King George, VA. A couple other operators discussed the other repeaters in the area and how fun amateur radio was. His teenage son listening in the back seat, said, "This is cool!" Calvin thinks it will be something a catalyst for the teen to pursue amateur radio.

His plan is to acquire equipment that was not too advanced, but also something that I could grow into for years to come. Taking advice from Gordon West in his Technician Class license study guide, he bought dual-band handheld Kenwood TH-D74. While it has a steep learning curve, it has many more capabilities grow into than he is currently using currently.

Calvin is a field-grade officer in the US Army Reserve and works for the DoD as a strategic planner in a civilian capacity. After enlisting in the US Army as a Military Police in 1990, he travelled extensively -several countries in central America, to Iraq (once), and Afghanistan (twice) over the last 30 years. He has also been to ~40 states in the U.S., again mostly from military travels and assignments.

Intrigued by the electromagnetic waves and how so much can affect them; but also how we can use them to communicate around the world with relatively little power and equipment.

globe.” He is trying to get them to comprehend the beautiful simplicity of amateur radio and how vulnerable their communication means are to satellite capabilities and networked towers.

In what little spare time he finds, he goes hunting for deer on his land, or reads (lot of genres in both fiction and non). He is actively studying for his General license now, with a goal of taking the test by the end of summer and investing in a rig to explore the HF frequencies. He would like to get a nice home station established to contact people in several countries around the world. He would be interested in building a radio from scratch with just the basic necessary components.

People should try hiking and camping in the woods at least once in their lives. Being in nature and unhooking from our technological tethers can really put things in perspective. Sometimes the simplest things can be the most profound.

What is something you really want but cannot afford? “Retirement!” At least not yet.

His hope for the future of radio is that we never forget the simplicity of the craft and aren’t seduced and become reliant on technology.

For now, the best time to catch him is on the CCARC Wednesdays and FWARC Sunday Nets.



TROTSAR MOUNTED SEARCH AND RESCUE TEAM

Pete Fields KC3SBN

In 1980 Trail Riders of Today, TROT, was organized to find, maintain and preserve in central Maryland, trails for equestrian use. In 1993, the group created a public service unit called TrotSar Mounted Search and Rescue Team. The purpose was to assist law enforcement and local authorities to search and rescue people in wilderness, suburban and urban venues using horses as a "force multiplier". As an example, we can see over fences and use our horses to evacuate victims. It beats trying to carry a litter over rough terrain. The team engaged in many missions, but by 2002, the roster had declined to four members. The team commander, Suzanne Anderson from Mt Airy, MD and the team training officer, Tom' Finkle (KB3MK1) from Marbury, MD organized two recruiting drives in 2003.

Larry Raskin (WB3DAJ) from Woodbine, MD organized the venue at the Johns Hopkins Applied Physics Laboratory. The recruiting was successful in bringing the team strength up to 15 members. A key lesson learned was that the prerequisite courses such as First Aid and CPR needed to be met before the applicant was entered into the training program. Of the over 75 people who signed up in that recruiting effort, only 11 progressed through the prerequisites in 2003. The newly reconstituted team was challenged almost immediately by call out missions near Hagerstown in sleet and freezing rain conditions and a search for a lost turkey hunter in Garrett County New Germany State Park. The law enforcement partners and search managers praised the team for the searcher and equine toughness and endurance under trying conditions. Up to September 11, 2001, the team operated under the Trot 501c3 status and insurance policy.

After 9-11, DHS and FEMA mandated that all non-paid first responders were to have their own 501c3 status and insurance. By 2004, the Team gained its own 501c3 status with the IRS and purchased its own insurance policy. By then the commander was Tomi' Finkle and a consistent record of responding to call out requests was established. By 2006, the response area was enlarged when the team became a member of the Virginia Search and Rescue Council (VASARCO) and thus responded to call outs from the Virginia Department of Emergency Management (VDEM) as well as Maryland authorities. Larry Raskin assumed the post of Communications Supervisor and Pete Fields (KC3SBN) became the Secretary and primary dispatcher. The response area was set as East of I-81, North of I-64, South of PA route 30 and West of the Eastern Shore.

We donated our older Sabre transceivers to another Search and rescue team and

equipped ourselves with TEKK XV 1000 transceivers operating in the 155 MHz range. In order to be interoperable, Larry programmed the sets to include frequencies used by sister organizations and VDEM. The team call sign is WPCR663, but it is seldom used since we operate under a NCS usually referred to as "Base". Individual designations are task team identifiers assigned by the Search Manager. Occasionally, the Search Manager will arrange for ground based relay stations or airborne relay stations manned by CAP crews. In both cases, we refer to our individual searchers by their task team numbers. We always search in pairs or greater, never alone. The theory is that there is one victim; so let's not have any more than one. The radio traffic is mandated (but not always complied with) to be plain English with no 10 codes or Q codes.

It is always a challenge to keep our roster numbers up. The requirements are demanding in that there are 40 hours of annual mandated training or mission response, 16 of which is to be mounted. There are required annual course work such as Blood Borne Pathogens as well as First Aid/CPR and Horse Rider Evaluation requalification's. The result is that we have now 12 highly motivated "operators" (author's term). In a few weeks we will welcome three more operators who will be equipped with a radio. GPS, team hat and a safety vest. The goal is to bring our roster up to 35; so that there is a high probability of having at least two members respond to a mission call out.

In 2018, cancer took our team commander Tomi' Finkle and to the writer's surprise the team chose Pete Fields to be the commander. The feeling of pride in this team cannot be adequately expressed in that they are a very determined and able body. Our Assistant Commander, Janet Vandervaart, serves our training officer and assures that our skills are kept current. Some day we will be ham radio equipped such that we are never out of communications via access to repeaters. Until then, we will continue to respond to such missions as a National Guard F-15 aircraft crash on the West Virginia border as well as a similar mishap between Maryland and Pennsylvania and a frantic search for an autistic child near Kings Dominion.

My job is to balance meeting the mission, "So Others May Live", and team safety. For that, I'm grateful for the efforts of Michele McGuinness (KC3QME), our Treasurer and Land Navigation expert. She is my moral compass.

Every commander needs one.

Practice questions

1. With which countries are FCC-licensed amateur radio stations prohibited from exchanging communications?
 - A. Any country whose administration has notified the International Telecommunications Union (ITU) that it objects to such communications
 - B. Any country whose administration has notified the American Radio Relay League (ARRL) that it objects to such communications
 - C. Any country engaged in hostilities with another country
 - D. Any country in violation of the War Powers Act of 1934
2. What is the inductance of three 10 millihenry inductors connected in parallel?
 - A. 0.30 henrys
 - B. 3.3 henrys
 - C. 3.3 millihenries
 - D. 30 millihenries
3. Which circuit is used to combine signals from the carrier oscillator and speech amplifier then send the result to the filter in some single sideband phone transmitters?
 - A. Discriminator
 - B. Detector
 - C. IF amplifier
 - D. Balanced modulator
4. What is a characteristic of a monostable multivibrator?
 - A. It switches momentarily to the opposite binary state and then returns to its original state after a set time
 - B. It produces a continuous square wave oscillating between 1 and 0
 - C. It stores one bit of data in either a 0 or 1 state
 - D. It maintains a constant output voltage, regardless of variations in the input voltage

Advanced Technical Information Online

By Bob, NW3M

Since this is the month of Field Day I thought I'd give you a link to an article about minimizing interference between all the radios at a Field Day site.

If you've participated with a competitive, multi-radio Field Day group you are familiar with the amount of interference generated by your own team members. This is also common for multi-operator contest stations and special event stations. It is always frustrating to keep asking a station to repeat their report or call sign because every time they give it, one of your fellow team members makes a transmission and wipes out your receiver.

The interference is worst when two stations are operating on the same band but different modes, i.e. CW/Digital and Phone. The next bad condition is another station operating on a harmonically related band below your band of operation, such as a 40-meter station transmitting while you're listening on 20 or 15-meters.

There are techniques you can use to minimize the interference, some of which don't even require the purchase of expensive hardware such as bandpass filters. In fact, in the article linked below many of the solutions simply require a little planning.

The article explains the techniques of placing the antennas in each other's "null" zones. The null zone is the direction where the antenna is least sensitive and radiates practically no signal. It also explains the proper use and setup of cross polarized antennas to provide approximately 20dB of isolation between stations.

This might be a handy article to printout and add to the documentation and setup notes for your Go-Kit.

<https://www.onallbands.com/setting-up-multiple-antennas-4-tips-on-avoiding-interference/>



Contests in June

Worldwide Sideband Activity Contest	1		REF DDFM 6m Contest	12 to 14
QCX Challenge	1		ARRL June VHF Contest	12 to 13
RTTYOPS Weeksprint	1		K1USN Slow Speed Test	14
Phone Weekly Test - Fray	2		4 States QRP Group Second Sunday Sprint	14
VHF-UHF FT8 Activity Contest	2		Worldwide Sideband Activity Contest	15
CWops Mini-CWT Test	2 to 3		RTTYOPS Weeksprint	15
NRAU 10m Activity Contest	3		NAQCC CW Sprint	16
EACW Meeting	3		Phone Weekly Test - Fray	16
SKCC Sprint Europe	3		SARL Youth Sprint	16
Walk for the Bacon QRP Contest	3 to 4		RSGB 80m Club Championship, CW	16
PODXS 070 Club Three Day Weekend Contest	4		CWops Mini-CWT Test	16 to 17
NCCC Sprint	4		RTTYOPS Weeksprint	17
HA3NS Sprint Memorial Contest	4		EACW Meeting	17
K1USN Slow Speed Test	4		NCCC Sprint	18
PVRC Reunion	5 to 6		K1USN Slow Speed Test	18
DigiFest	5 to 6		Battle of Carabobo International Contest	19
KANHAM Contest	5 to 6		ARRL Kids Day	19
Wake-Up! QRP Sprint	5 to 6		Feld Hell Sprint	19
Tisza Cup CW Contest	5 to 6		All Asian DX Contest, CW	19 to 20
UKSMG Summer Contest	5 to 6		Ukrainian DX Classic RTTY Contest	19 to 20
Kentucky QSO Party	5 to 6		IARU Region 1 50/70 MHz Contest	19 to 20
RSGB National Field Day	5 to 6		Stew Perry Topband Challenge	19 to 20
FULL-LRB HF Contest	5 to 6		West Virginia QSO Party	19 to 20
10-10 Int. Open Season PSK Contest	6		WAB 50 MHz Phone	20
Cookie Crumble QRP Contest	6		Run for the Bacon QRP Contest	20 to 21
K1USN Slow Speed Test	7		K1USN Slow Speed Test	21
RSGB 80m Club Championship, Data	7		Worldwide Sideband Activity Contest	22
Worldwide Sideband Activity Contest	8		RTTYOPS Weeksprint	22 to 24
ARS Spartan Sprint	8		SKCC Sprint	24
RTTYOPS Weeksprint	8		Phone Weekly Test - Fray	24
Phone Weekly Test - Fray	9		CWops Mini-CWT Test	24
CWops Mini-CWT Test	9		EACW Meeting	24
VHF-UHF FT8 Activity Contest	9		RSGB 80m Club Championship, SSB	24
CWops Mini-CWT Test	9 to 10		NCCC Sprint	25
RTTYOPS Weeksprint	10		K1USN Slow Speed Test	25
EACW Meeting	10		UFT QRP Contest	26
NCCC Sprint	11		His Maj. King of Spain Contest, SSB	26 to 27
K1USN Slow Speed Test	11		Ukrainian DX DIGI Contest	26 to 27
VK Shires Contest	12		ARRL Field Day	26 to 27
Asia-Pacific Sprint, SSB	12		K1USN Slow Speed Test	28
AGCW VHF/UHF Contest	12		RSGB FT4 Contest Series	28
SMIRK Contest	12 to 13		QCX Challenge	28 to 29
DRCG WW RTTY Contest	12 to 13		Worldwide Sideband Activity Contest	29
Portugal Day Contest	12 to 13		RTTYOPS Weeksprint	29
SKCC Weekend Sprintathon	12 to 13		Phone Weekly Test - Fray	30
GACW WWSA CW DX Contest	12 to 13		CWops Mini-CWT Test	30

Light bulb puzzle:

There is a room with a door (closed) and three light bulbs. Outside the room, there are three switches, connected to the bulbs. You may manipulate the switches as you wish, but once you open the door you can't change them. Identify each switch with its bulb. All bulbs are in working condition. Let the bulbs be X, Y, and Z



Thanks to Martin Blaise AG5T for the new puzzle for the newsletter.

Microwave DXing Can Be Dangerous!

And I am not talking about RF exposure. I am instead referring to irate land owners, especially in rural areas.



We recently were alerted to the problem by a microwave ham on the east coast. He stumbled onto an angry posting online on the Reddit web site about one of our Colorado microwave enthusiasts. He solicited our assistance in warning him of the potentially lethal danger posed by this very irate land owner. The land owner posted on the internet this photo of the ham with his big microwave dish. This land owner has had legal issues with the government and he thought that the microwave truck was the FBI spying on him.

The political environment in the USA has become very negative and confrontational recently. This was evidenced dramatically on January 6th with the violent insurrection and storming of our national capital in Washington, D.C. Add onto that the gun control issue and the alarming increase in mass shootings, of which we here in Boulder recently experienced at our own King Soopers grocery store with ten victims. Especially in the rural areas of our county, the residents seem to be more and more paranoid about the government trying to control their lives and guns.

Captain Bill, KORZ, of the Boulder County Sheriff's Dept. (now retired), has been a long time microwave DXer, moon-bouncer & ATV ham. Bill's advice to the rest of us is to be aware of the changing times and attitudes. He would hate to see us stop doing our microwave experiments. But be extra cautious and vigilant about our surroundings.

Best not to go out alone, but have a buddy along to keep eyes on the surroundings. This has always been BCARES policy when sending ATV teams out in the field. Send two persons, never be alone. Bill also now recommends we pick our sites extra carefully. He suggests only going to public locations, such as parks, etc. and avoid rural private lands. Even though we have never been trespassing on private land, but parking on the side of public highways, the rural land owners still sometimes get upset. Several of us have in fact, at times in the past, been confronted by a nearby land owner who was antagonistic about our presence.

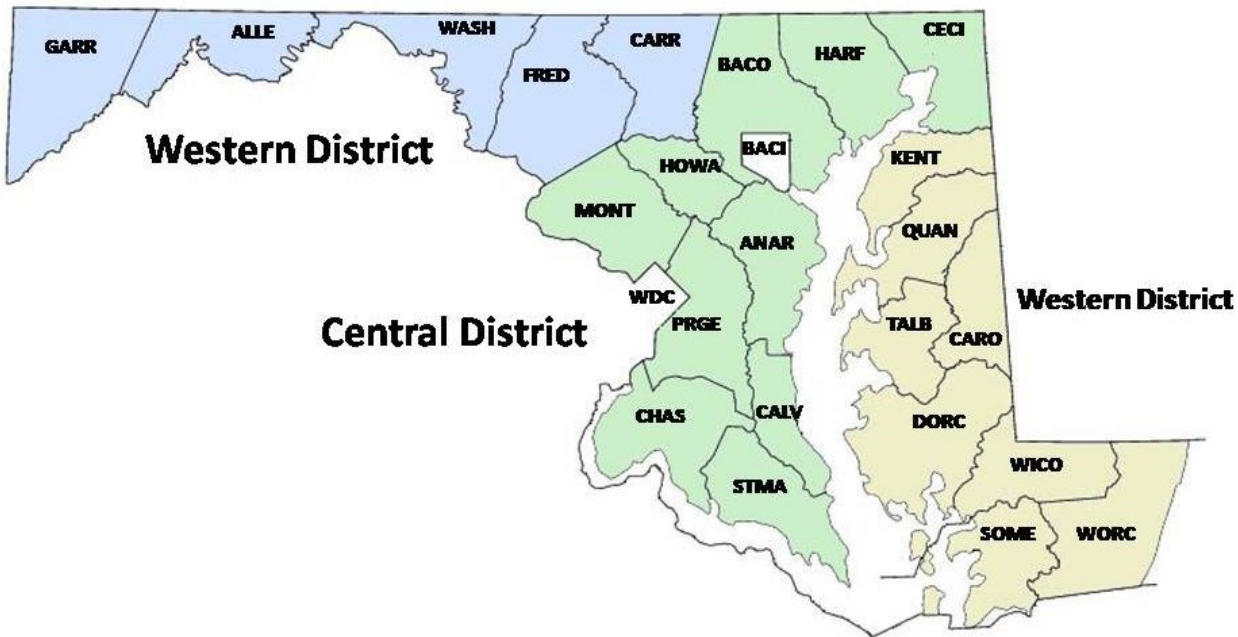
ARES MINUTE

Did you know that for ARES purposes, Charles County, along with 22 other counties are part of the MDC ARES section. When doing reports or messages, each county is referred to by its four-letter designator and in our case, it is CHAS.

The below map shows the other counties in the section as well as their 4 letter designators.

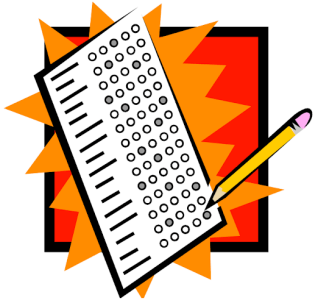
ARES (**A**mateur **R**adio **E**mergency **S**ervices) membership is open to all interested ham – contact me for more info.

Districts within the MDC Section



73 Bob Davidson CHAS EC – KB3KOW

CCARC VE Team Report



By Bob, NW3M

The CCARC VE Team held the first exam session since everything shut down in March 2020 due to the pandemic. The test session was held prior to our May meeting at the Marbury Baptist Church.

Social distancing was the rule of the evening. Each examinee was assigned a private table for taking their exam(s). The exam graders were spaced out at opposite ends of a pair of tables. The FCC Form 605 application forms were pre-printed for each applicant and required only verification of ID and a signature. This was done by requiring a full pre-registration for our exams rather than just a sign-up sheet like we had before. This made the onsite registration and pre-exam paperwork process much quicker.

We had five applicants to come out for the exam session. All five successfully reached their goal. Three applicants went from no license to a new Technician Class license, one from no license to a new General Class license, and our very own Jim Dunn, W3JTD, earned his Extra Class license. A big congratulations to all the successful applicants.

Administering the exams is a lot like riding a bike. You don't forget how, but you do get a little wobbly at first after a 15 month hiatus from riding. During the pandemic down time there were a few minor changes to the procedures. These changes are all on the backend of the exam session. The changes actually resulted in a more efficient process for preparing the FCC upload files and getting the exam paperwork to the Laurel VEC.

To administer the exams, we had three of our regular VEs and one guest VE, Larry, W3RL. Thank you to Larry for coming out to help. Having an extra VE on hand for our first effort was a tremendous benefit.

I would also like to thank Pam, KB3SWS, for her efforts at making sure all the tables and chairs were properly sanitized before and after the exam session.

An informal poll of everyone present for the exam session revealed that everyone had been fully vaccinated for the COVID-19 coronavirus.

Special events in May

185th Anniversary of Arkansas Statehood	15	to	19	N5A
1st Annual US Island Special Event Week	12	to	20	K3USI, W0DBQ
250th Anniversary of Peru, Ma	28	to	Jul 8	K1P
3905 CCN Appreciation/KL7JR Road Trip	11	to	25	K8J
Liga Radio Bogota; Los Libertadores Univ; & Dr. Jorge Reynold's Birth	6	to	8	5K48LRB, HK3LRB
Anniversary of Paley Award Presented to Marshall Ensor	5	to	5	W9BSP
87th Anniversary of the Virginia Fone Net	3	to	6	W4V
Activation of the 1877 Tall Ship Elissa	4	to	7	N5E
Adam M Denton	17	to	21	K1D
Amateur Radio In Public Parks Kings County Ca.	1	to	15	K6F
Appleton Flag Day Parade Event Station	12	to	12	W9ZL
Bannerman Island event	13	to	13	N2U, N2H, N2B, N2V, N2N, N2O, N2S, N2D
Boy Scouts Michigan Crossroads Eagle XXVII	28	to	Jul 2	K2BSA/8
Col James M. Schoonmaker	6	to	6	K8E
Commemoration of Role of Electronics in D-Day	16	to	16	W2W
D Day Anniversary	6	to	6	W4D
Dog Island IOTA DXpedition	18	to	18	K4D
Field Day	25	to	28	Over 120 calls
Heartland Military Day	8	to	16	N0G
International Museums Weekends	19	to	27	W8M
Kansas Heartland Military Day	12	to	12	N0G
King Kamehameha Celebration	10	to	13	K6K
Museum Ships Weekend	5	to	7	W1Z, N1S, W1E,N5R, W5T, N0P
Museum Ships Weekend USS Ticonderoga	5	to	6	W2C
National Speleological Society Annual Convention	26	to	Jul 2	K6V
NAUTILUS - First Nuclear Submarine	5	to	5	N1S
Norfolk County Radio Association 100 Year Anniversary.	5	to	12	W1AGR
Salvation Army Donut Day	4	to	4	K0SAL
SouthEast LinuxFest 2021	6	to	13	W4L
Summer Get Your Park On	19	to	20	N9G, N6G, W4Y, N2G, K5G
Union County Indiana Bicentennial	27	to	Jul 11	K9U
WHOA/SCOTA	12	to	13	W1M

International Museums Weekends 2021

So, as Bob pointed out in his column, June 19-20 & 26-27, weekends have a special event to operate amateur radio at as many museums in the world. HF, VHF, and UHF (APRS) packet are desirable, but up to you. The sponsor suggests "aim for the largest and/or most unusual site you can find". For the purposes of the event, the word 'museum' is loosely interpreted. <http://www.radio-amateur-events.org/IMW/index.htm> Registration online is requested of clubs to allow administration of the event, provide numbers, list museums taking part with location, and send out a participation award to all stations.

Started in 2002, with 80 museums, it is now well supported especially in the UK, with ships (including military), castles, air museums, Napoleonic forts, pumping stations, wireless museums, racing museums and many others. It has shown itself to be a tremendous public relations exercise, as well as all of us having lots of fun over the IMW weekends.

So, lets learn a little about museums.

A museum is an institution that cares for (conserving) a collection of artifacts or objects of artistic, cultural, historical, or scientific importance and makes them available for public viewing through exhibits. Early museums began as the private collections of wealthy individuals, families, or organizations displayed in wonder rooms or cabinets of curiosities with only the rich and their chosen friends allowed to view them. One of the oldest museums known is Ennigaldi-Nanna's museum, built by Princess Ennigaldi circa 530 BC. Artifacts from Mesopotamian civilizations notably, a clay drum label—written in three languages found at the site, explaining the history and discovery of a museum item.

Many collected "new discoveries" and learned that displaying in a museum to the public helped to get more information out, increased travel, and led to further inventions. Ulisse Aldrovandi, who made a point of gathering as many facts about item to consume and collect as much knowledge as possible, to put everything they collected and everything they knew in these displays. Ashmolean Museum, however, is considered by some to be the first modern public museum. The collection included antique coins, books, engravings, geological specimens, and zoological specimens. (an interesting issue the stuffed body of the last dodo had to be destroyed for mold growth and only head and one claw were saved. It opened to the public in 1677 from the personal collection of Elias Ashmole, initially at University of Oxford but moved to the building in 1683. The Louvre opened in Paris in 1793 allowing public to view the royal collections and the objects confiscated by Napoleon (though some were returned when he was defeated not all were).

America had a museum building age in the early 19th century especially for learning, getting research. In 1990, many items were returned to native American tribes for reburial of human remains and proper treatment of religious/cultural items due to the Native American Graves Protection and Repatriation Act (NAGPRA).

August 10, 1846, President James K. Polk signed into law the Smithsonian Institution act accepting the funds bequeathed from James Smithson (1765–1829), to the United States (for Smithsonian Institution, "an establishment for the increase and diffusion of knowledge " in Washington, DC).

According to Museums of the World, there are about 55,000 museums in 202 countries. The International Council of Museums comprises 30,000 members in 137 countries. 35,000 in the US. One in eight museums worldwide may never reopen, according to the international council of museums more victims of the pandemic.

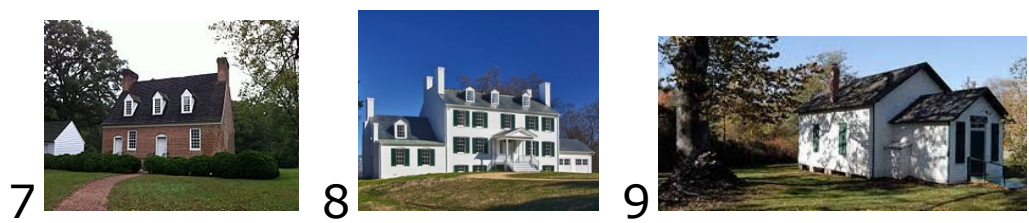
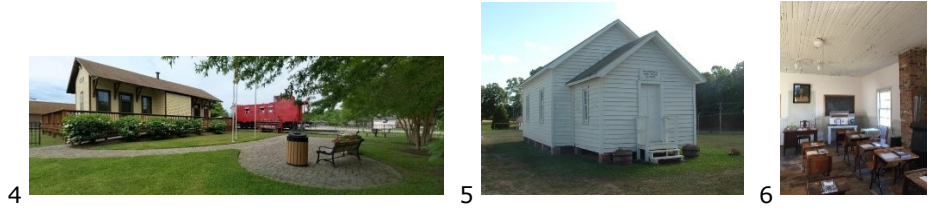
Museums contribute much to the world, just in the US: 726,000 jobs (including indirect jobs) ~ \$50 billion->\$12 billion tax; Available museums is high priority and seventy-six percent of all on leisure travel visit (more than attend a professional sporting event). And that does not count online views. 55 million visits/year by school groups lead to ¾ museum budgets to provide education activities. This is reflected in higher achievement scores in reading, mathematics and science of children who had visited even by those at risk for deficits/delays in achievement.

The Top 20 most visited Museums in the world: (number visitors)

- 1 Louvre Paris 10,200,000
- 2 National Museum of China Beijing 8,610,092
- 3 The Metropolitan Museum of Art New York City 6,953,927
- 4 Vatican Museums Vatican City (Rome) 6,756,186
- 5, 11, 12, & 16 Smithsonian D.C; Air/Space 6,200,000; Natural History .4,800,000; Gallery Art 4,404,212; American History .4,100,000
- 6,7, 8, 9 & 17 Tate 5,868,562; Natural History, 5,226,320; Victoria Albert Museum 3,967,566 British 5,828,552 National Gallery 5,735,831
- 10 American Museum of Natural History New York City 5,000,000
- 13 China Science and Technology Museum Beijing 4,400,000
- 14 State Hermitage Museum Saint Petersburg 4,220,000
- 15 Zhejiang Museum Hangzhou 4,200,000
- 18 Reina Sofía Madrid 3,898,000
- 19 National Palace Museum Taipei 3,860,000
- 20 Nanjing Museum Nanjing 3,670,000

What museums are in Charles County?

- 1 African American Heritage House 7485 Crain Highway, La Plata (open by appointment)
- 2 Dr. Samuel Mudd House (treated John Wilkes Booth after Lincoln assassination) 3725 Dr. Samuel Mudd Road, Waldorf
- 3 Historic Port Tobacco Village (Port Tobacco Courthouse, Burch House, & Stagg Hall), 8450 Commerce St., Port Tobacco
- 4 La Plata Train Station 101 Kent Ave., La Plata, (open by appointment)
- 5 Maryland Veterans Museum at Patriot Park 11000 Crain Highway, Newburg
- 6 McConchie School House & Farm Museum Charles County Fairgrounds, 8440 Fairground Road, La Plata,
- 7 Mount Aventine manor in Chapman State Park, 3452 Ferry Place, Indian Head
- 8 Port Tobacco One-Room Schoolhouse 7215 Chapel Point Road (off Route 6 west), Port Tobacco,
- 9 St. Ignatius Church & St. Thomas Manor (Georgian mansion) 8855 Chapel Point Road, Port Tobacco,
- 10 Smallwood's Retreat House (Revolutionary War General Smallwood) in State Park 2750 Sweden Point Road, Marbury,
- 11 Thomas Stone National Historic Site (signer of Declaration of Independence) 6655 Rose Hill Road, Port Tobacco
- 12 La Plata Firehouse Museum 3 Firehouse Alley La Plata



And in the rest of Maryland (just a sampling not a complete list):

1. U.S. Naval Academy
2. The Walters Art Museum
3. American Visionary Art Museum
4. Chesapeake Bay Maritime Museum
5. Baltimore Museum of Art
6. B&O Railroad Museum
7. Glenstone Museum
8. Bruce Snake Gabrielson's Surf Art Gallery & Museum
10. Baltimore Museum of Industry
11. National Capital Radio and Television Museum
12. Maryland Science Center
13. National Museum of Civil War Medicine
14. Calvert Marine Museum and Drum Point Lighthouse
15. National Cryptologic Museum
16. Washington County Museum of Fine Arts
17. Ocean City Life-Saving Station Museum
18. B&O Ellicott City Station Museum
19. College Park Aviation Museum
20. Babe Ruth Birthplace and Museum
21. Allegany Museum
22. Port Discovery Children's Museum
23. Washington County Rural Heritage Museum
24. Observation Gallery at BWI Marshall
25. Ripley's Believe it or Not! Ocean City
26. Great Blacks in Wax Museum
27. Annmarie Garden
29. USS Torsk
30. Bayside History Museum
31. National Electronics Museum
32. Chesapeake Beach Railway Museum

Many museums in modern times are tailored to a specific topic. Sometimes they are dedicated to a specific person, sport, or just an obscure thing. Here are a few:

Barbed Wire Museum (LaCrosse, Kansas), Devil's Rope Museum (McLean, Texas)

Barney Smith's Toilet Seat Art Museum in San Antonio, Texas

Bata Shoe Museum (Toronto, Canada)

Bigfoot Discovery Museum in Felton, California

Corpus Museum (Oegstgeest, Netherlands)

Cup Noodles Museum Osaka Ikeda (Ikeda, Japan)

Dog Collar Museum (Kent, England)

Electric Ladyland Phosphorescence Museum (Amsterdam, Netherlands)

Gopher Hole Museum (Torrington, Canada)

Hammer Museum in Haines, Alaska

Hobo Museum in Britt, Iowa

Icelandic Phallogological Museum (Reykjavík, Iceland)

International Banana Museum in Mecca, California

International Cryptozoology Museum (Portland, Maine)

International Spy Museum in Washington, D.C.

International UFO Museum in Roswell, New Mexico

Kattenkabinet (Amsterdam, Netherlands)

Kazoo Museum in Beaufort, South Carolina

Marvin's Marvelous Mechanical Museum (Farmington Hills, Michigan)

Meguro Parasitological Museum (Tokyo, Japan)

Mini Time Machine Museum of Miniatures in Tucson, Arizona

Musée Mécanique in San Francisco

Museo de las Momias de Guanajuato (Guanajuato, Mexico)

Museum of Bad Art, Massachusetts

Museum of Broken Relationships (Zagreb, Croatia)

Museum of Ice Cream in Los Angeles and San Francisco

Museum of Miniature Books (Baku, Azerbaijan)

Museum of Sex (New York City, New York)

Museum of Witchcraft and Magic (Boscastle, England)

Mutter Museum (Philadelphia, Pennsylvania)

(Continued from page 22)

National Hobo Museum (Britt, Iowa)
National Museum of Funeral History (Houston, Texas)
National Museum of Mamatics in New York City
National Poo Museum (Isle of Wight, England)
Neon Museum (Las Vegas, Nevada)
Plastinarium (Guben, Germany)
Spam Museum in Austin, Minnesota
Sulabh International Museum of Toilets (Delhi, India)
Tabasco Museum (Avery Island, Louisiana)
Titanic (Pigeon Forge, TN & Branson, MO)
Umbrella Cover Museum in Portland, Maine
Underwater Museum of Art (Cancun, Mexico)
Vacuum Cleaner Museum in St. James, Missouri
Vent Haven Museum (Fort Mitchell, Kentucky)
Weird Museums You Won't Believe Exist
Yo-Yo Museum in Chico, California

References:

https://en.wikipedia.org/wiki/Lists_of_museums#:~:text=According%20to%20Museums%20of%20the,30%2C000%20members%20in%20137%20countries.
<https://en.wikipedia.org/wiki/Museum>
<https://news.artnet.com/art-world/unesco-icom-museums-report-1866558>
<https://www.aam-us.org/programs/about-museums/museum-facts-data/>
<https://www.ims.gov/news/government-doubles-official-estimate-there-are-35000-active-museums-us>
<https://www.museumplanner.org/how-many-museums-in-the-world/>
<https://www.tripadvisor.com/Attractions-g28941-Activities-c49-Maryland.html>

An Online museum

The Museum of Hoaxes covers modern and historical scams and April fools pranks. They are searchable by category or name.

check it out at <http://hoaxes.org/>

So, shall we put a museum on the air? Being between Memorial & Independence Days, I think President Bob's idea of operating at the Veteran's Museum would be very appropriate. Seems like with museums in danger of permanent closure post pandemic, not only will this be a good radio activity; but also may help our community. Let Bob know if you're interested and/or be at the meeting to hash out details.



Charles County Amateur Radio Club Meeting Minutes

May 7, 2021

Officers Present:

President – Bob Curran - NW3M
Vice President – Bob Davidson – KB3KOW (In and Out)
Secretary – Unable to Attend
Treasurer – Pamela Humbert – KB3SWS
Activities Manager – Jeff Humbert - KB3SPH

Visitors:

Nancy Hallock

Members Present:

Joe Boswell - KB3HNP
Jim Dunn – W3JTD
Patrick Hinman - KB3UYZ – via Zoom
Calvin Lockhart - KC3RAN
Michelle Sack – N3YRZ

The meeting opened at 1904 Hours.

Bob - NW3M made a motion to accept the April 2021 minutes, as submitted by Charles Hallock – AA3WS. Jim - W3JTD seconded the motion. It passed unanimously.

Pam – KB3SWS read the April 2021 Treasury report. Joe KB3HNP made a motion to accept it; Michelle – N3YRZ seconded the motion. It passed unanimously.

Bob – NW3M introduced the newest Extra class member in CCARC, Jim – W3JTD. Jim had passed the Extra class test during an in-person license test session that was held before the meeting. It was the first in-person test session that CCARC conducted in over a year. A total of five candidates took exams. The results were three new Technicians, one new General, and one new Extra.

The VEs included Bob - NW3M, Jeff - KB3SPH, Michelle – N3YRZ, and Larry Laffoon – W3RL. Pam – KB3SWS worked as a non-official VE “runner.” Bob C. reported that the test session went smoothly and according to plan. Pam reported that the test candidates were very appreciative of the opportunity to take the in-person tests. Additional comments by participants described the test session as well organized and professional. Pam also explained that the spacious meeting room afforded CCARC the ability to provide social distancing for the test candidates and ease of monitoring by the VEs.

Business for the Meeting:

Activities Manager: Jeff reported on the following upcoming activities:

Friday, June 4 – During the monthly CCARC meeting, Bill – W8BL is scheduled to give an in-person talk and hands-on activity about the Smith Chart, as a continuation of his presentation at the April meeting. The Smith Chart is a graphic tool that can be used to display an antenna’s impedance.

Friday, June 25 – Sunday, June 27 – Summer Field Day Weekend – An in-person Field Day event has been scheduled at the Nanjemoy Creek Environmental Education Center (NCEEC). Invitations and event details will be extended to hams throughout Southern Maryland by Pam.

Pam introduced the idea of adding a demonstration of how ham radio operators utilize their licenses to supplement their radio control (RC) aircraft operations. She would send requests to Kato Spears – KB3LIB and Jon Madejski – KC3KPQ, for demonstrations on the evening of Saturday, 6/26/21. Bob C. said that he would contact Chip McBride - KC3SBM about doing a demonstration as well. Chip is a member of the Charles County Radio Control Club, and was one of the test candidates at the session before the meeting.

Sunday, September 19 – Connector Workshop - Nanjemoy Creek Environmental Education Center (NCEEC) – 1:00 PM to 5:00 PM – The sixth annual event, hosted by Pam and Jeff, will include lessons on building connectors with Anderson Power Poles, that can be used with various types of equipment. Additionally, this year’s theme will be “Solar Sunday.” Special “Show and Tell” presentations will be given by Kato, Jeff and Steven Keller – KC3D-SO, and feature backpack portable, back yard portable and whole house solar power systems.

Another future presentation idea would include a request of Bill to show his magnetic loop antenna.

New Business:

STEAM Day Event – Pam gave a recap of the event that CCARC and the St. Mary’s County Amateur Radio Association participated in on Saturday, April 24, at the Pax River Naval Air Museum. Her full report can be found on the CCARC website: <http://k3smd.net/>.

Wide Area Hams – Bob C. asked if the “Wide Area Hams” group, which meets via Zoom on the second Thursday of the month, had mentioned previously discussed plans for a picnic. Pam replied that they had not done so at the April meeting. Bob C. said that if they do, a possible demonstration idea would be for Bob C. and Bob D. to do a slow scan TV demonstration.

Meeting Location - Joe asked if the room at the Station 51 Rescue Squad Building in La Plata is still unavailable for CCARC meetings. Bob C. replied that it is still unavailable, as of this report date.

Bob C. called for a motion to adjourn the meeting. Pam made a motion, Jeff seconded it; the motion passed unanimously.

The meeting was adjourned at 1940 Hours.

The May 7, 2021 minutes were written by Pamela Humbert, KB3SWS, on behalf of CCARC Secretary Charles Hallock, AA3WS, who was unable to attend.



The 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. 2nd Thursday of every month 7:30 PM Eastern Time

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=Q2IUL05PTVB3RnEvUkZPNmlKUFJ3QT09>

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 rob-hoyt32@yahoo.com

Odds & Ends

ARRL and Digital Broadcasts

Are you looking to play a bit with RTTY, PSK or MFSK16, just to see how they work (if you're not already familiar) or want to try some of the various software for the digital modes? If you aren't aware, during the week at 6:00 pm and 9:00 pm our time, the ARRL transmits a daily bulletin on 7095Khz using these modes. They will cycle through the modes, one at a time and each day it is a different order.

This is an excellent opportunity to play with FLDIGI or MultiPSK, which cover multiple modes or dedicated programs like MMTTY, which is only RTTY. All it takes is a feed from the head phone jack on your radio to the sound card input on your PC.

More information can be found at: <http://www.arrl.org/digital-transmissions>

73 Bob KB3KOW



Radio amateur and SWL observations are needed June 7, 2021 from 0000 UTC to June 12, 2021 2359 UTC.

Test Run on May 30.

See link:

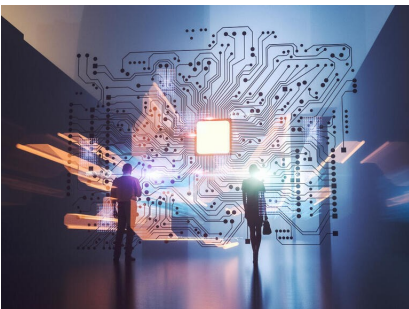
<https://hamsci.org/june-2021-eclipse-festival-frequency-measurement>

contact: kd8oxt@case.edu 73, Dave K3ZJ



Global chip shortage:

"In this hobby, the newer radio "toys" are advanced technology, but the hottest radio might sell 5,000 units per year. If Apple wants 100 million chips, but the little ham radio company wants 5,000, Apple wins!" Glenn O'Donnell K3PP said. <http://www.southgatearc.org/news/2021/may/will-chip-shortage-hit-ham-radios.htm#.YLQtvahKiUk>



He refers to this article <https://www.techrepublic.com/article/global-chip-shortage-the-logjam-is-holding-up-more-than-laptops-and-cars-and-could-spoil-the-holidays/>

Many radio stores are selling out of the current stock for this reason in addition to the grandfather clause exempting expensive RFI testing.

Hams in Action

Tim Skees, K9KSP, a firefighter in Brownsville, Kentucky, was among those responding to an April 23 fire dispatch call he heard on his ham station scanner reporting a possible drowning of a 40 year old in the Green River.

Information obtained from family members and some noise helped Tim find the victim downriver 300 yards on a shallow rock shoal. With assist of other firefighters, he was pulled up the riverbank and treated for hypothermia in the vehicle of Edmonson County Emergency Management Director Terry Massey until an ambulance arrived.



The International Space Station SpaceX Crew-1 mission with astronauts Michael Hopkins, KF5LJG; Victor Glover, KI5BKC; Shannon Walker, KD5DXB, and Soichi Noguchi, KD5TVP, splashed down safely in the Gulf of Mexico on May 2. It marked NASA's first nighttime splashdown since 1968, the first ever from the ISS, and the first operational mission for SpaceX. Launched last November to carry the crew to the ISS, the Crew Dragon spacecraft *Resilience* returned the crew to Earth. Crew-1 is the first of six crewed missions NASA and

(L - R) Expedition 64 Flight Engineers and SpaceX Crew-1 members Michael Hopkins, KF5LJG; Victor Glover, KI5BKC; Shannon Walker, KD5DXB, and Soichi Noguchi, KD5TVP. [Photo courtesy of NASA]

[Commercial Crew Program](#), which worked with

the US aerospace industry to return rockets, spacecraft, and launches with astronauts to the US.

"We welcome you back to planet Earth, and thanks for flying SpaceX," SpaceX mission control official Michael Heiman told the astronauts. "For those of you enrolled in our frequent flier program, you have earned 68 million miles on this voyage."

In advance of departure from the space station, Crew-1 astronaut and Station Commander Walker handed over command of the station to astronaut and Crew-2 member Akihiko Hoshide last week during a change of command and farewell event.

The Crew Dragon undocked and departed the space station autonomously. In addition to the crew, *Resilience* will also return important and time-sensitive research to Earth.

While still in space, some of the returning astronauts had hosted Amateur Radio on the International Space Station ([ARISS](#)) contacts with schools. ARRL is an ARISS sponsor. From ARRL

Amateurs' Email Addresses Will Be Kept Private

FCC agreed with ARRL, and stated in an email to ARRL counsel that it will continue to "mask" amateurs' email addresses from public view in the Universal Licensing System (ULS).

Starting on June 29, all applications filed with the FCC must include an email address for FCC correspondence; the FCC will use the email address supplied by amateurs to correspond with applicants, including to send a link to the official electronic copy of their license when an application is granted.

The FCC is transitioning to fully electronic correspondence and no longer mails hard-copy licenses. Amateurs can view, download, and print their official license grant, using the ULS. When a license is first granted, each applicant will receive an email with a direct link to the license. Although the link expires in 30 days, the license itself will remain available in the ULS and may be downloaded at any time by signing into the licensee's account using their FCC Registration Number (FRN) & password.

Under the amended Section 97.23, "The email address must be an address where the grantee can receive electronic correspondence. 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."



PRESERVATION MATTERS

Read the stories about preserving Charles County's rich history in the 2020-2021 issue of Preservation Matters. charlescountymd.gov/government/planning-and-growth-management/preservation-and-long-range-planning/historic-preservation



ANSWERS

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

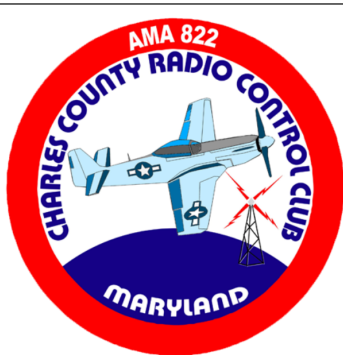
Light bulb puzzle Solution:

Turn on switch X for 5 to 10 minutes. Turn it off and turn on switch Y.

Open the door and touch the light bulb.

1. if the light is on, it is Y
2. if the light is off and hot, it is X
3. if the light is off and cold, it is Z

WANT ADS, FOR SALE, &
PUBLIC SERVICE ANNOUNCEMENTS:



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

TrotSar Mounted Search Team

21218 Dorsey Spring Place
Germantown, MD 20878

Pete KC3SBN Commander



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>

Smallwood Camera Club



Open to all skill levels and photographic interests.



email: SmallwoodCameraClub@gmail.com

K3SMD



Meetings, nets, & contacts

First Friday- Monthly meeting @ 7 PM/1900

Net-Wednesdays 8:30 PM local 147.195 MHz, + 600 , PL 156.7 EchoLink N2OMC-L

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

Service Club

We're on
the web

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

Leave laughing

