Smoke Signals

July meeting 3rd @ 1900 Port Tobacco River Park
7740 Chapel Point Road Port Tobacco MD

CALENDAR

July

01 Net 2030

03 meeting

08 Net 2030

15 Net 2030

22 Net 2030

29 Net 2030 & News articles due

August

05 Net 2030

07 VE session & Club meeting

12 Net 2030

19 Net 2030

26 Net 2030 & News articles due

THE PRESIDENT'S WORKBENCH

We are now in full Phase 2 of Governor Larry Hogan's "Roadmap to Recovery". We still don't have access to our regular meeting place. I suppose that won't become available until Phase 3. As such we have decided to hold our July meeting at a nice pavilion in Port Tobacco River Park. We will have room to build our 3-element, 2 Meter Yagi antenna project there as there are 8 very nice picnic tables in the pavilion. For the sake of social distancing (and not marring up the tables with a jewelers hacksaw) I will pre-tune the radiat-

ing elements for each kit. We'll still have an SWR meter handy to test the finished products.

The final cost of materials for each Yagi antenna kit came out to $15.41 so for ease let's just round it down to $15.

By now Field Day 2020 is in the books. Since our regular Field Day site was unavailable I hope many of you took the opportunity to get on the air from home or at some other location.

This year's Indian Head 100 bicycle ride has been cancelled due to the pandemic. I'm sure we all share in the disappointment with the Oxon Hill Bike and Trail Club. This is always a great event. On a positive note, we now have an additional 12 months to establish our ability to provide APRS tracking coverage over the entire ride course.

The CoVid-19 pandemic still has an impact on our ability to provide ham radio exams. Last week I met with many of the Region 3 VE Team Leaders via a Zoom meeting hosted by the Region 3 VE Coordinator. Two teams have resumed testing, Anne Arundel and one team in Pennsylvania. I will have more information in a separate article.

For now, stay safe and have fun on the air.

by Bob, NW3M

CCARC weekly net

Charles County Amateur Radio Club will start a 147.195 MHz, + 600 offset, PL 156.7 Hz. each Wednesday 2030 local time

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

If you have a question or topic you'd like to discuss please let Michelle or Bob know

HAMFESTS

None listed locally for July;

next listed is in October.

Wireless on the Web

"Whether it's cloudy, or whether it's hot, there's going to be weather, whether or not!" - Anonymous
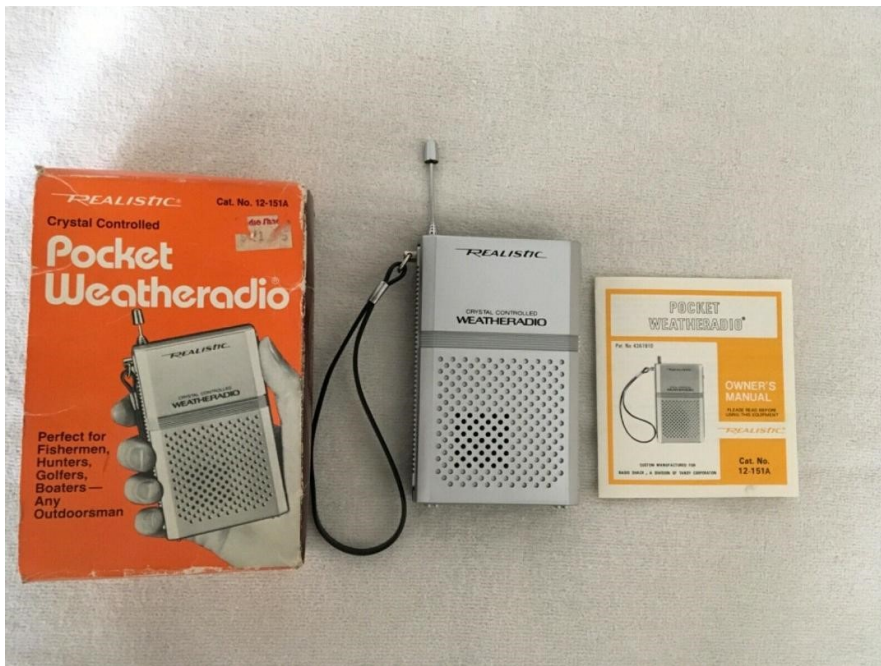
Hello, CCARC, and welcome to July. Hurricane season officially began one month ago, on June 1st, and thunderstorms rolling through in the last couple of nights also served to remind me, and I'm sure those of you with exterior antennas, that the next few months require one to keep an eye on the weather.

When I first began scanner monitoring in the mid-1980's, the Internet was a few years in the future. My mentor, the guy who hounded me into taking the amateur radio license test, Wes, W3ERU, SK, used to keep track of hurricanes at our place of employ using a NOAA Hurricane tracking chart, tuning in good ol' KNB-36, the local NOAA weather radio station to get updated latitude and longitude of a hurricane on an hourly basis, no computer or smart phone needed! If you'd like to try your hand at plotting hurricanes the "old fashioned" way, here's a link to a printable map for the Atlantic Basin: http://w4ehw.fiu.edu/atlantic%20tracking%20map%20full%20basin.pdf

This map is provided by the National Hurricane Weather Center in Miami, Florida. The NHWC has its own amateur radio station, WX4NHC, and their website, with a LOT of interesting links can be found http://w4ehw.fiu.edu/

One link that some of you may find of particular interest is this one that provides plans for an emergency J-Pole VHF/UHF flexible antenna. http://w4ehw.fiu.edu/j-pole.html

There are now a myriad of weather radios available on the market with any number of applications. Many of the scanners I now own have a WX button that will immediately tune in the local weather broadcast. That wasn't always the case and weather radios themselves have grown much more sophisticated over the years. My very first weather radio was a Realistic model # 12-151A, a pocket sized radio that could manually tune in 3 frequencies - 162.40, 162.475 and 162.55 MHz. There was a manual slide switch that allowed the user to select between frequencies. Here's a look at that first radio:

(Photo courtesy eBay)

Information on NOAA Weather Radio can be found at: https://www.weather.gov/nwr/

Many weather radios now incorporate SAME (Specific Area Message Encoding) which requires a bit of programming to "tell" your radio where you are. Once programmed, your NWR will then alert you **only** of weather and other emergencies for the county(s)/ area(s) you chose. NWR receivers with SAME, alert for emergencies anywhere within the coverage area of the NWR transmitter, typically several counties, even though the emergency could be well away from the listener.

More on weather radios and SAME codes:

https://www.weather.gov/nwr/usingsame

Finally, working at Blossom Point for 40+ years, with its many antennas, weather is always a concern, particularly when summer thunderstorms come rolling through in the evening. There are many weather radar sites for NOAA and the various media outlets in the Washington, DC region. However in my opinion the best weather radar site available for our area is WJLA's (Channel 7). You can find it here:

 https://wjla.com/weather/radar

(If your computer is as slow as mine, give it a few seconds to load.)

Of course, its not just weather here on earth that affects radio operations. Space weather, in particular solar weather, is of interest to many DXers, SWLs, and even CBers (Yeah, I know that's a bad word). The sunspot cycle is of continual interest and a source of frustration. A couple of space weather sites of interest:

NOAA's Space Weather Prediction Center:

https://www.swpc.noaa.gov/

Space Weather.com:

https://spaceweather.com/

Space Weather News.com:

https://spaceweathernews.com/

Major League Baseball 2020
After a lot of back and forth disagreements between the owners and the players, it appears that baseball season will FINALLY begin in mid-July with an abbreviated 60 game season. Play is tentatively
 scheduled to start on July 23rd or 24th, depending on the team. The local Washington National won last year's World Series, the first World Series title for the nation's capital since the original Washington Senators franchise won their only World Series title in 1924, a span of 94 years between titles.

As a youngster, some of my first AM DXing experiences came tuning in baseball games. Summertime AM listening presents its own challenges with distant thunderstorms and static crashes interrupting, seemingly always at a crucial point. From my home in northwest Pennsylvania, I recall listening to the Detroit Tigers broadcasts on WJR, Detroit, the Pittsburgh Pirates on KDKA, the Philadelphia Phillies on a now forgotten station and the Cincinnati Reds on powerhouse WLW.

Now we can watch almost every game on MASN, however if you'd like to listen to Washington Nationals broadcasts on the radio, here's a listing of the stations that are a part of the Washington Nationals radio network:

https://en.wikipedia.org/wiki/Washington_Nationals_Radio_Network

However, if your allegiance runs to Charm City, the Baltimore Orioles radio networks affiliates can be found here:

https://en.wikipedia.org/wiki/Baltimore_Orioles_Radio_Network

That wraps up this month's column. Hopefully by the time the August column is due baseball season will be in full swing, the Covid-19 pandemic will be on the wane and life in the country will have returned to some semblance of "normal". As always, I welcome your inputs @ aa3rt2@verizon.net Until next month, 73!

Advanced Technical Information Online

By Bob, NW3M

How many times have you looked for a capacitor for a project and been con-fronted with a bewildering array of choices? All you want is a .01μF capacitor and you're being asked to choose if you want ceramic, styrene, polyester, mi-ca, mylar, etc. What is the difference? What is best for your project?

While many times on my projects the answer is simple; I want the cheapest one. But sometimes I am working on something where the performance char-acteristics of the capacitor are quite specific. Then I have to begin doing my research, pouring over datasheets, comparing things like temperature stability, humidity stability, ESR, even inductance in a few cases.

When we were studying for our ham radio licenses we learned of a thing called a capacitor. Somewhere along the line our study guide briefly explained how they work. But did they get into the real nitty-gritty? Did they explain about the different types? Did they tell you why one was preferred in circuit A but should be avoided for circuit B? Probably not.

Who would have thought there was so much to know about a capacitor? It's just a passive device with two leads. Luckily the folks at KEMET Corporation have come out with a fairly good tutorial that can serve as a starting point in your pursuit of ultimate capacitor knowledge. KEMET Corporation is a manu-facturer of a broad variety of capacitors and other components. So they do know a little bit about the subject matter.

You can find their 16-page tutorial on the Mouser Electronics website at the link below.

https://www.mouser.com/pdfDocs/eb1001_what_is_a_capacitor.pdf

Practice questions

What should be done to all external ground rods or earth connections?
A. Waterproof them with silicone caulk or electrical tape
B. Keep them as far apart as possible
C. Bond them together with heavy wire or conductive strap
D. Tune them for resonance on the lowest frequency of operation

What is the correct way to connect a voltmeter to a circuit?
A. In series with the circuit
B. In parallel with the circuit
C. In quadrature with the circuit
D. In phase with the circuit

Which amateur stations are eligible to be telecommand stations of space stations (subject to the privileges of the class of operator license held by the control operator of the station)?
A. Any amateur station designated by NASA
B. Any amateur station so designated by the space station licensee
C. Any amateur station so designated by the ITU
D. All these choices are correct

What is meant by the term flat-topping when referring to a single side-band phone transmission?
A. Signal distortion caused by insufficient collector current
B. The transmitter's automatic level control (ALC) is properly adjusted
C. Signal distortion caused by excessive drive
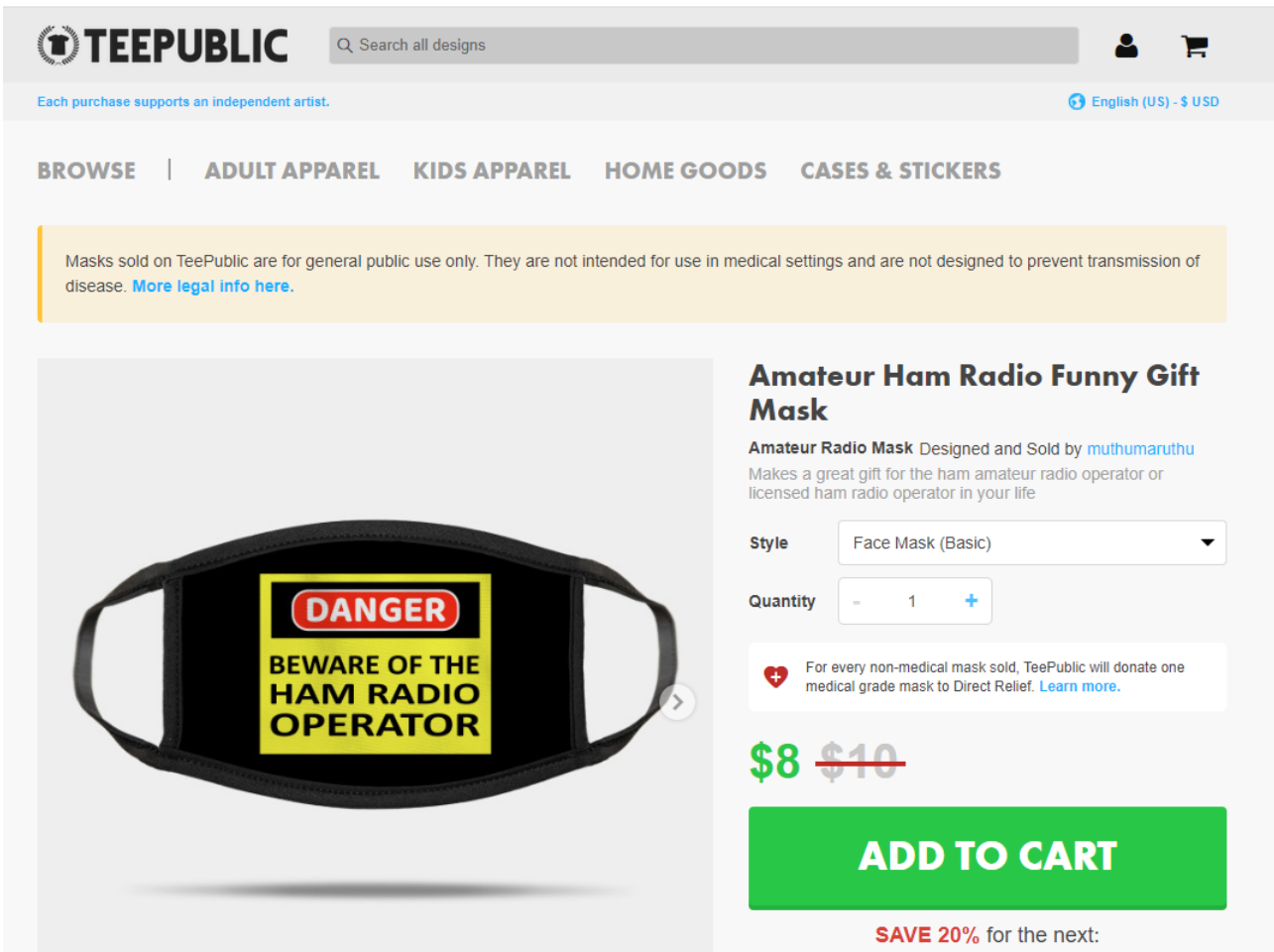D. The transmitter's carrier is properly suppressed

Odd & ends

The United States Postal Service

Check out this list of countries that Covid prevents mail delivery currently.
https://about.usps.com/newsroom/service-alerts/international/welcome.htm

The US Postal Service has temporarily stopped accepting international mail for the listed countries.

Please check before mailing QSL cards

Here's a site to get a ham radio mask

The next exam session is
August 7

CCARC VE Team CoVid-19 Update

By Bob, NW3M

As I mentioned in my President's Report, I met with several of the Region 3 VE Team Leaders via a Zoom meeting hosted by our Region 3 VE Coordinator. Here are just some of the details that came out of that meeting.

We are authorized to provide testing again with some limitations and precautions in place. One change that is strongly encouraged is to not allow walk-in testing. The premise of this recommendation is that it will greatly reduce up close personal interaction with the applicants. Given that we still have to verify identification, licenses currently held, form signatures, etc. of all applicants I don't see where walk-in applicants are much of an issue. From a standpoint of controlling group size I certainly see where accepting only pre-registered applicants is almost mandatory. Currently under Phase 2 of Governor Hogan's Roadmap to Recovery we are limited to no more than 10 people indoors.

The two teams that have resumed testing found that they needed additional VEs present because of additional requirements for sanitization. As such, they had a group that handled registration outside of the building. Inside the building were the three Proctors who observed the examinees. The test graders were set up in a separate space. In the case of Anne Arundel, that space was a different room of their clubhouse. For the PA team that was using an empty warehouse, it was a corner at the opposite end of the warehouse.

One thing both groups had in common was the use of Plexiglas barriers between the applicants and the registration table staff. These had to be built and set up in advance. A suggestion was made to use clear shower curtain material instead of Plexiglas, which would make the system lighter and easier to build.

The use of VE team provided calculators is strongly discouraged as sanitizing them after each use is quite difficult. Pens and pencils should either be provided by each applicant for their own use, or the team provides those items for each applicant to take home with them.

All paperwork and test booklets must be placed in a sealed container, such as a zip lock plastic bag, for a minimum of 24 hours before handling. This includes paperwork given to the examinees at the end of the session.

At the completion of a test by an applicant, the area in which he/she took the test must be thoroughly sanitized before allowing the next applicant to sit for a test. At the end of the exam session, all tables, chairs, clipboards, computers, etc. must be thoroughly sanitized.

With all that said, I am hoping that we will be in Phase 3 by the time of our next test session and perhaps there will be some easing of the requirements. At the very least the reopening of places to conduct exams.

Across

1. Radio room
6. Analog tuning device
10. F-land without
14. Simple /MM vehicle
15. It follows that
16. SK item
17. Henry amp last name
18. "If it ___ broke ..."
19. This
20. They help you read 6-across and other 67-acrosses
22. Rig or antenna maintenance
24. Sometime AMSAT launcher
25. Related degree hams sometimes have
26. Campus org, informally
29. Not fooled by
32. Prepare, as tea
36. Chips that store
37. Dahdit dahdit
38. JA port
39. Hall-of-Famer Mel
40. Comebacks
42. Ham, to Noah
43. Weeper of myth
45. Once again
46. Go for the gold
47. Inductor shape, sometimes
48. Overhaul
49. Figure skater's jump
50. Whig's rival
52. Good thing to break on the links
54. Art's transceiver
57. Rotary, slide, and others
62. Bigger than a pico
63. Speaker part
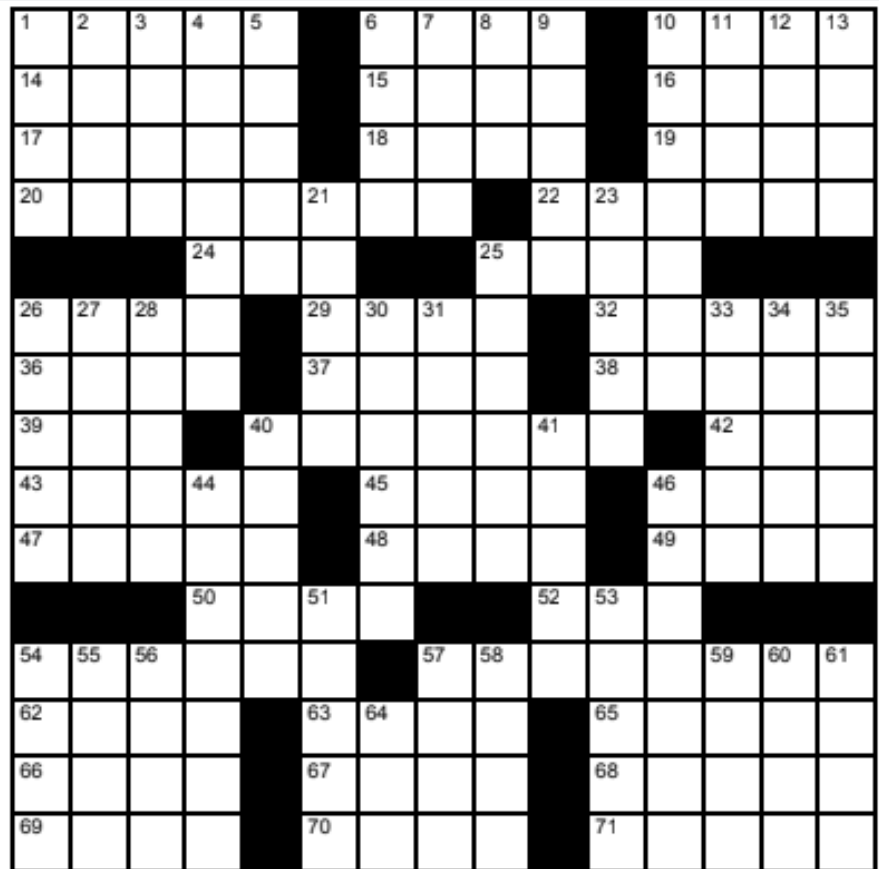65. Stockpile
66. Shakespeare's river
67. Interface device manipulated by digits
68. Where hams want to be
69. Livens (up)
70. Puts in stitches
71. FD, repeater, and others

Down

1. Atlantic fish
2. Innocent antenna configuration?
3. Prefix with VOX
4. Brass instruments not meant for, but useable for, sending CW
5. 19th century G poet
6. DR on CW
7. Pupil's place
8. "What?", on 7.005, say
9. Expensive sports car
10. Where plugs go
11. Old alpha alternative, in the military, say
12. ZK2 place
13. Footfall
21. Spanish prefix
23. XE units
25. Docked /MM
26. With 35-down, it's where 6, 20, 57, 67-across, 10, and 44-down are located
27. Part of SWR
28. Digital mode
30. ___ public
31. Congo prefix
33. Balearic prefix
34. Armenian prefix
35. See 26-down
40. Plant again
41. A full circle
44. Interface devices manipulated by a digit
46. Radio pioneer
51. Crystals, familiarly
53. SV/A Mount
54. Hiker's sack
55. Its length determines frequency
56. KL followers
57. VE8 forecast
58. Networks
59. One method of ant. elev. measurement
60. Lake for which a bug fist is named
61. Flex, SoftRock and others
64. QSO at start of SS

Interface

CCARC Activities

3 July 2020 – Monthly CCARC Meeting at 7:00 PM. Activity: 2M Yagi building. Location Location will be the pavilion at:

Port Tobacco River Park
7740 Chapel Point Road
Port Tobacco MD 20677

7 August 2020 - Test Session at 5:30 PM followed by Monthly CCARC Meeting at 7:00 PM.

16 August 2020 – 5th Annual Connector Workshop with linked dipole antenna build. 1:00 PM to 5:00 PM, QTH of Jeff – KB3SPH and Pam – KB3SWS.

More information in the document, 2020-08-16-Connector Workshop.docx, available for download at www.smas.us/ConnectorWorkshop.

4 September 2020 – Monthly CCARC Meeting at 7:00 PM.

Note: The Oxon Hill Bicycle and Trail Club has cancelled the Indian Head 100 Bike Ride that was scheduled for 7 September 2020. Information at: https://www.ohbike.org/

2 October 2020 - Test Session at 5:30 PM followed by Monthly CCARC @ 7:00 PM.

Contests in June

RAC Canada Day Contest	1	NAQCC CW Sprint	16
Phone Fray	1	RTTYOPS Weeksprint	16
VHF-UHF FT8 Activity Contest	1	QRP Fox Hunt	17
CWops Mini-CWT Test	1 to 2	NCCC Sprint & RTTY	17
RTTYOPS Weeksprint	2	Russian Radio Team Championship	18
NRAU 10m Activity Contest	2	Trans-Tasman Low-Bands Challenge	18
SKCC Sprint Europe	2	Feld Hell Sprint	18
QRP Fox Hunt	3	North American QSO Party, RTTY	18 to 19
NCCC Sprint & RTTY	3	CQ Worldwide VHF Contest	18 to 19
FISTS Summer Slow Speed Sprint	4	RSGB Low Power Contest	19
DL-DX RTTY Contest	4 to 5	RTTYOPS Weekend Sprint	19
Marconi Memorial HF Contest	4 to 5	CQC Great Colorado Gold Rush	19
Original QRP Contest	4 to 5	Run for the Bacon QRP Contest	19 to 20
PODXS 070 Club 40m Firecracker Sprint	4 to 5	Worldwide Sideband Activity Contest	21
YBDXC 80m Contest	5	RTTYOPS Weeksprint	21
RSGB 80m Club Championship, CW	6	SKCC Sprint	22
Worldwide Sideband Activity Contest	7	Phone Fray	22
ARS Spartan Sprint	7	CWops Mini-CWT Test	22 to 23
RTTYOPS Weeksprint	7	RTTYOPS Weeksprint	23
Phone Fray	8	RSGB 80m Club Championship, Data	23
VHF-UHF FT8 Activity Contest	8	QRP Fox Hunt	24
CWops Mini-CWT Test	8 to 9	NCCC Sprint & RTTY	24
RTTYOPS Weeksprint	9	RSGB IOTA Contest	25 to 26
QRP Fox Hunt	10	ARS Flight of the Bumblebees	26
NCCC Sprint & RTTY	10	QCX Challenge	27
FISTS Summer Unlimited Sprint	11	RSGB FT4 Contest Series	27
IARU HF World Championship	11 to 12	Worldwide Sideband Activity Contest	28
SKCC Weekend Sprintathon	11 to 12	RTTYOPS Weeksprint	28
QRP ARCI Summer Homebrew Sprint	12	Phone Fray	29
4 States QRP Group Second Sunday Sprint	13	CWops Mini-CWT Test	29 to 30
Worldwide Sideband Activity Contest	14	RTTYOPS Weeksprint	30
RTTYOPS Weeksprint	14	QRP Fox Hunt	31
Phone Fray	15	NCCC Sprint & RTTY	31
CWops Mini-CWT Test	15 to 16		
RSGB 80m Club Championship, SSB	15		

Local ARRL Amateur Radio Examination Session held on 10 June 2020.

Seven local area amateur radio operators held an Examination Session at the Adventist HealthCare Fort Washington Medical Center on 10 June 2020. Participants were:

Charles - AA3WS
Gary – K3GDM
Jim – KA3LXM
Jeff - KB3SPH
Pam - KB3SWS
Joe – W0JRJ
Larry – W3RL

We had obtained permission to use the hospital's Emergency Operations Center spaces and outside areas to conduct the examination session and strictly adhered to the social distancing, limited personal interaction, mask wearing requirements, and disinfecting surfaces and supplies between tests. All candidates were required to pre-register and their paperwork was completed prior to their arrival.

The 16 candidates had designated appointment times that were spread out over a period of 4 hours from 3:00 PM to 7:00 PM. We limited the total number of candidates present at any one time by having those that showed up early wait in their vehicles or elsewhere until a space was available. We notified them via text message when we were ready for them. The weather cooperated and the team was able to have some exams administered outside at a socially distanced table.

The team administered 25 examinations during the course of the session and every candidate earned either a new license or an upgrade to their current license. The tally was:
2   Upgrades to Amateur Extra from General
1   Upgrade to General from Technician
3   New Generals (Passed both the Technician and General Exams)
10 New Technicians

Many of the candidates had been searching for months looking for a non-cancelled examination session. The examination team was glad to make it happen for them.

73
Jeff – KB3SPH

Special Event Calls June

Event	Dates	Calls
13 Colonies special event	1-8	K2A, K2B, K2C, K2D, K2E, K2F, K2G, K2H, K2I, K2I, K2J, K2M
3905 Century Club Eyeball	5 to 19	K5A, K5B, K5E, K5L, K5M, K5S, K5Y, N5N, N6E, N6L, K5K, W3E, K2O
79th Annual Convention NSS	25 to 31	K8V
American MENSA Annual Gathering	1 to 5	K0M
Batavia Summer Days	18 to 26	K2B
Capt Emilio Carranza Memorial	5 to 11	N2M
Century club eyeball on the air	10 to 20	N5N
Commemoration of USA army Buffalo Soldiers	25 to 26	W5W, W5B
Dalton Gang Train Robbery, Adair, OK	11 to 13	W5D
Dry Tortugas DXpedition	19 to 25	N4T
EAA 2020 Airventure	18 to 26	W9W
EX CA-130 and SSN-698	3 to 6	K7B
Happy Birthday USA	1 to 15	W2W
Indianapolis Bicentenial Celebration	3 to 5	W9I
Mount Washington Hillclimb	9 to 12	N1H
MT RUSHMORE INDEPENDENCE CELEBRATION	3 to 5	W0I
N3WD 45th Year Of A Being Licensed Amateur	7 to 19	W3O
North American QSO Party RTTY	18 to 20	W1N
Oregon Train Run	3 to 10	K7K
Peace Cross Memorial	11th	N3V
Pine Valley Days	17 to 31	K6A
Red River Bridge War Special Event	10 to 18	W5I
Salmoncon XV	8 to 13	K7S
Small town Independence Day celebration	3rd	K7T
South Carolina Peach Festival	17 to 19	W4W
Tennessee's Oldest Town	12 to 19	K0T
USNS Twin Falls Independence Day	3 to 6	W7H
Warrick County 4H Fair	13 to 18	W4H
WSSM 10th Anniversary Special Event	12 to 25	W1V

Charles County Amateur Radio Club Meeting Minutes
May 1, 2020

Officers Present:

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

Members Present:

Michelle Sack N3YRZ
Bill Luyster W8BL
Joe Boswell KB3HNP
Tom Abernathy W3TOM
Debbie Abernathy KA3VNF
Lee Flick N3YRZ
Rey Robles N3QPG
Greig Verkerke KB3YQG
Spencer Johnson KB3WYR

Visitors:

John Kohansby

Meeting opened 1912 Hours.

President Bob Curran NW3M opened the Meeting on ZOOM and welcomed the members. Bob reminded the Club next month would be an Antenna Building session.

Jeff Humbert KB3SPH, gave a presentation on the DieHard® Battery Pack, Portable Antennas, and a Solar Panel with a Charge Controller connected to a lead acid battery.

New Business

Treasurer:

Pam KB3SWS gave the Treasurer's Report. Bob moved the May Treasurer Report be approved. Motion was seconded and approved. (Attached.)

Activities Manager:
Jeff KB3SPH reported on the following upcoming activities (up dated June 23):
3 July 2020 – Monthly CCARC Meeting at 7:00 PM.; Activity for the evening is 2M Yagi building.
Note the location for this meeting:
Port Tobacco River Park Pavilion
7740 Chapel Point Road,
Port Tobacco, MD 20677

7 August 2020 - Test Session at 5:30 PM followed by Monthly CCARC Meeting at 7:00 PM.

16 August 2020 – 5th Annual Connector Workshop with linked dipole antenna build. 1:00 PM to 5:00 PM, QTH of Jeff – KB3SPH and Pam – KB3SWS.
Reference: 2020-08-16-Connector Workshop.docx, available for download at www.smas.us/ConnectorWorkshop.

4 September 2020 – Monthly CCARC Meeting at 7:00 PM.

Note: The Oxon Hill Bicycle and Trail Club cancelled the Indian Head 100 Bike Ride that was scheduled for 7 September 2020.

2 October 2020 - Test Session at 5:30 PM followed by Monthly CCARC Meeting at 7:00 PM.
We're always looking for presentations, demonstrations, guest speakers, etc., on various topics to be presented in conjunction with our club meetings. If you have a request for a specific topic, a point of contact for a presentation, and/or you would like to make a presentation yourself, please let Jeff – KB3SPH know at humbert1js@gmail.com.

Secretary:
Minutes for the Meeting are published in the Monthly New Letter. Bob moved the May Minutes be approved. Motion was seconded and approved.

Old Business
None.

Member's Comments:

Spencer Johnson KB3WYR, noted the use of Plastic Cutting Boards for mounting mobile radios and associated equipment.

Michelle Sack N3YRZ, reminded the Members of the upcoming MD QSO Party on August 8, 2020.

Jeff Humbert KB3SPH, reminded the Members of the Thirteen Colonies event July 1 through 8, 2020.

Pamela Humbert KB3SWS, and Bob Davison KB3KOW, reported on the Big Red Drill.

Closing:
A motion was made and seconded to close the meeting. The motion passed at 2007 Hours.

Charles Hallock AA3WS Secretary

A $25 Panadapter?
(well, almost)

If you've ever sat down at the rig at night and thought to yourself – "Self, I wonder who might be out there tonight?" and then you start spinning the dial. However, as you know, the person calling CQ may have paused as you go past their calling freq and then you've missed a potential contact.

One way around this is to have a panadapter. What exactly is a 'panadapter'? According to our good friend Google: A **panadapter** is a device that adapts the narrow (typically 4kHz) bandwidth of a traditional receiver into a much wider bandwidth, perhaps the entire band.

Moore Google research will shows that you can use a Software Defined Radio (SDR) as a panadapter, but I'm not sure how many of us own one of those really nice FLEX radios that seem to start around the $1000 price tag. There must be a more cost effective way of doing this?? Well, as luck would have it, there is!

If you haven't seen them, there are a few companies that make 'SDR Dongles.' These devices are normally a USB stick with some form of connection at the other end to allow the attachment of an antenna but the newer models have an SMA connection.
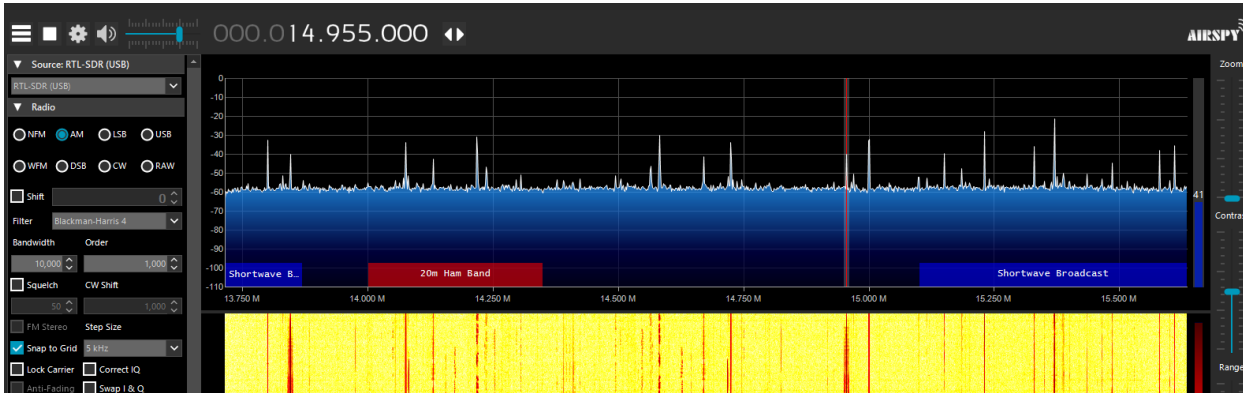

As seen in the above picture, this specific device is version 3 (v3) of their brand of dongles and what is nice about this version is that it will do HF without the need for an downlink converter. RTL-SDR has an Amazon store front at:
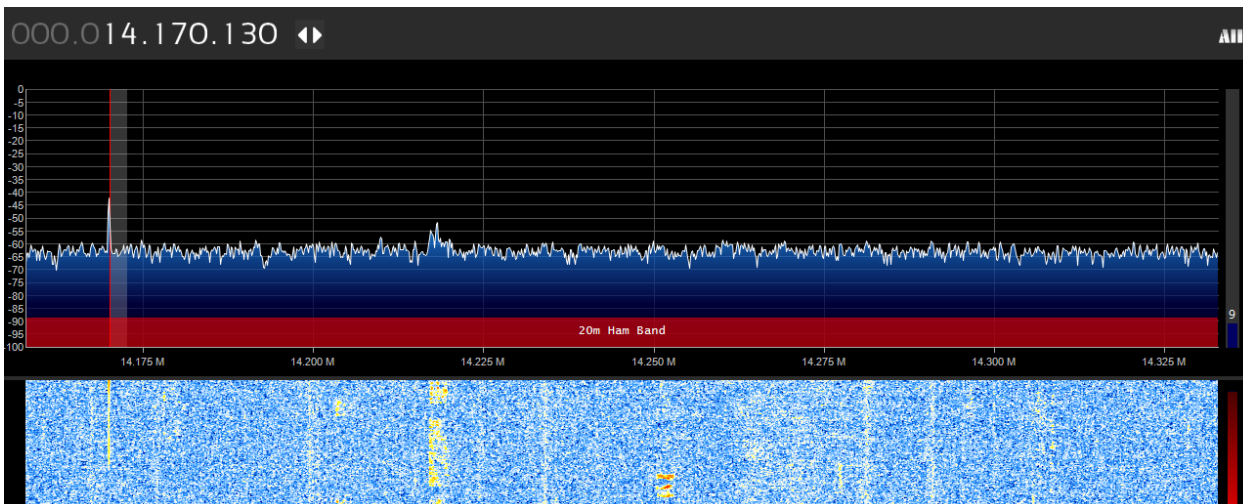
https://www.rtl-sdr.com/buy-rtl-sdr-dvb-t-dongles/

Once you have the dongle in hand, the RTL-SDR site has links to several free-ware SDR programs for Windows, Mac and Linux. Since I'm using a Windows10 machine, I went with the SDR# software. Installation is easy but there is a need to run a third party program to set up the driver for the dongle so that the software can see and make use of it. Once that is completed and the software is running, a few configurations later, when you start the program running, you should see something similar to this:
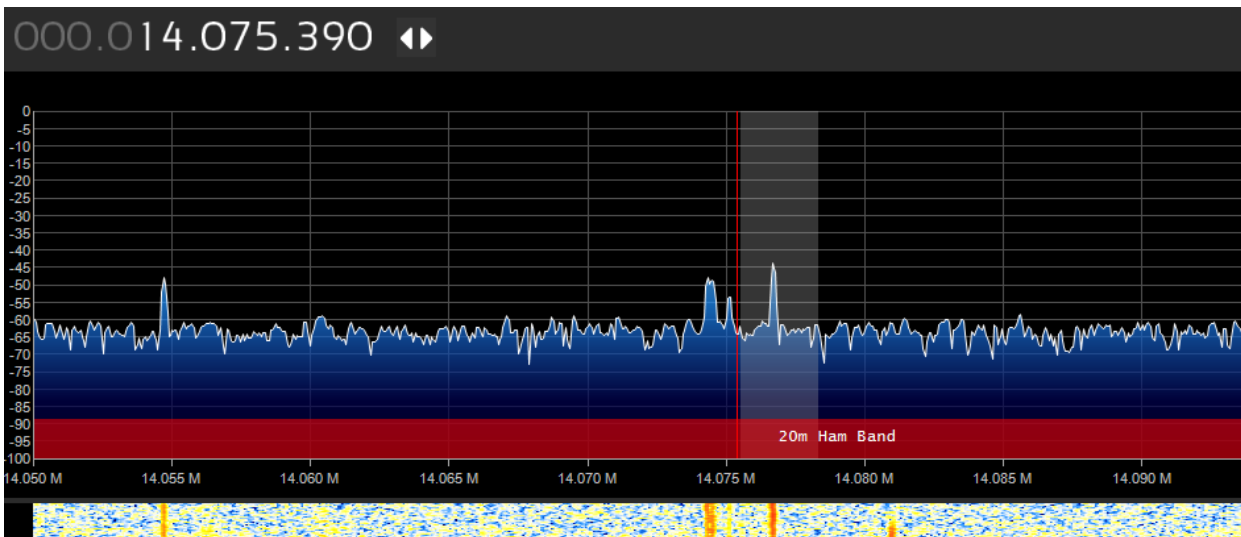

Note: Some of the screen has been clipped to make a smaller image.

In the above I'm looking at 14.955Mhz and you can see the various signals from 13.750 up to 15.550 with the waterfall underneath. You'll also note that the spectrum is labeled with some basic band names. In the above picture the red box is for the 20m Ham Bands and the blue boxes indicates shortwave broadcasts.
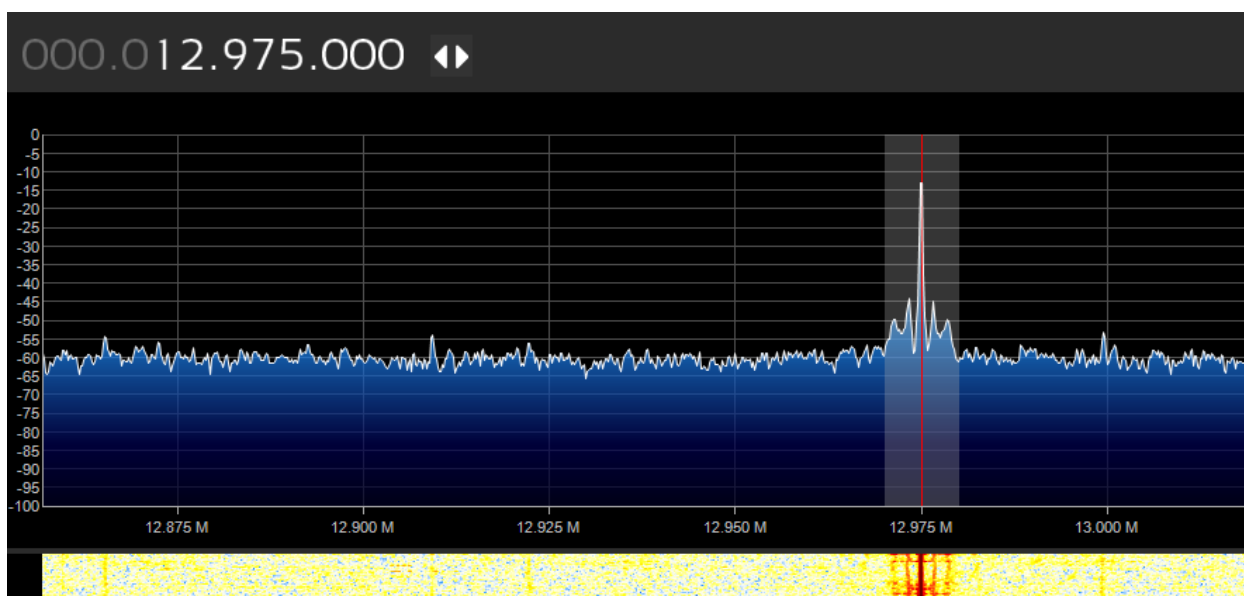
To the right of the display there is a 'zoom' slider. Using that, I've zoomed in bit more on the 20m band. Here you ca see a few QSOs in progress.

Here is a view of the JT65 and PSK31 area:

And finally, a view of an AM station:

The cost for the basic dongle is about $25. If you get the package with the additional antennas, the cost is around $35. You will need the SMA to PL-259 adapter but the cost is minimal there, however, if you want to use your antenna for transmitting, then you may want to look at the MFJ-1708SDR which allows you to use the same antenna for TX and RX with the SDR feed being shorted out when transmitting so you don't fry it, however the cost is about $119 for this device.

While I've focused on the HF side, these dongles can also be used for UHF/VHF frequencies along with the local AM and FM radio stations or for any signal out there. If you make use of the 'Virtual Audio Cable' software, you can then pipe the audio to any other related program to either record the audio or inject it into other ham related software for decoding.

73 Bob KB3KOW

On May 30th, ARES conducted a drill in support of the American Red Cross (ARC). As with any of these drills, there is always a potential to conduct some mini-drill aimed at a specific mode or topic. During the drill Jim, WB3KAS, had coordinated the use of APRS to track a vehicle of interest as it delivered a package from Prince George County to Howard County.

  As part of the drill, we often seek other with internet access in the area to track the vehicle and then make reports back to the EOC, but for this drill we were operating under the pretense of an internet denied environment, so we wanted to reach out a bit further to seek some help.

  Since I wanted to mix things up a bit and with my association with Scouting and the current COVID lock down, I figured there may be a Scout or two that would be interested in helping out, so I took a chance and reached out to two groups. In this case, it was a very long reach as one group was the 1st Leeds Children's Hospital Guides & Scout Group located in Leeds, England. For this group I reach out to Mr. Steve Hards, one of their District leaders and he in turn mentioned it to his group during one of their virtual meetings and from that we had the assistance of Oliver.

   At the same time, I also reached out to the Association of Radioamadores da Linha Cascais (ARLC), the Portuguese radio club in the local area we go to visit every few years. They work extensively with the Scouts and they in turn contacted the 550 Manique Scout Group and found a few volunteers to join them.

  Both teams then started to track the vehicle and provided reports every so often as the car made various turns and passed various landmarks. Since their area was not impacted by any internet outage, injection was each and then I reached out via a variety of modes to different HF stations to pull in their reports.

  It was impressive that once the car reached its destination, they were offered the chance to quit, but opted to continue and track the return trip as well, especially with it being 5 hours later in Europe.

The ARLC enjoyed the opportunity to participate in the drill and posted the following to their Facebook Page: "…and also concern derived from the Covid scenario, but it is also these elements that challenge our operationality and readiness for real scenarios because it never has a set agenda. To praise the readiness and response of everyone involved, especially the **Agrupamento 550 Manique** who immediately made its headquarters and 2 adult scouts

available to participate in the joint exercise. The enthusiasm and dedication of this grouping is already recognized by us from other activities and once again overcome with merit and even answered the call with more than 2 adult elements to participate in another new challenge.
…… it is a cause of satisfaction for all of us, including those who could not participate in the front line, demonstrated capacity, solidified relationships, and designed the scouting and amateuristic community. As a former military used to being on the tip of the spear I never forgot the importance that has a long rod, without the rod the spear has little range and reduced chances of success….”

 (note: the above is the FB translation)

 I hope we have a future opportunity to work with these two groups again.

73 Bob KB3KOW CHAR EC

Special events and Amateur Radio

Since I enjoy contacting special events and learning from them; I determined to write up an article about special events. I hope to highlight and provide some of the history of special events. For future issues, I plan to pick a special event for that month and give the history.

What is a special event? Pretty much anything an amateur could want to highlight. The rules say, "an event of special significance to the amateur service community"? But usually commemorates an event which is publicly significant in the community. It can be a one time or recurring celebration, festival, anniversary, convention, dedication, or public demonstration of amateur radio or the like. It is NOT so you can have a short call sign during a contest. Coordinators have wide latitude in the acceptance, rejection or cancellation of 1x1 call sign reservations.

So, what was the first special event? I did some digging through old QST's and the first significant event that I found was in 1916. For George Washington's birthday, they did a test of traffic handling. Although not specifically listed as a "special event", it seems to me that since they chose a special date, stations, and conditions it meets the criteria.

Before the Radio Act of 1912, amateurs chose callsigns normally 3 letters which were published in Modern Electrics magazine. Information included name, location and call-letter and approximate wavelength on which they transmitted along with the spark coil length or the transmitter power. Then the US Department of Commerce began issuing licenses, and the Government Printing Office, published annual lists of all US radio stations - amateur, commercial, and government stations all being listed together.

War interrupted radio with amateur radio prohibitions for both World wars. Following the Great war, the Navy wanted to control radio (it was mainly for seagoing vessels) Thanks to the efforts of ARRL (American Radio Relay League), the US national amateur radio society, & Representative William Greene of Massachusetts; in 1919, the Navy was directed to allow amateur radio operations. After wwi when licenses were being reissued X was saved for experimental, Y for teaching and z for special land stations (like Hiram Maxim). This is when

zones were more established.

Special events appear throughout QST here's one from 1965 and feature Boy Scouts honoring Baden Powell p1k.arrl.org/pubs_archive/57823

GB2BP was set up and manned for one day last September in High Wycombe, Bucks, England, in honor of Lord Baden-Powell, founder of the Scouting movement. Shown at the microphone is G2DRT.

And Miss America:

Each year since 1971, the Southern Counties Amateur Radio Association has sponsored special events station WX2MAP at the annual Miss America Pageant in Atlantic City, New Jersey. All cards received for 1971/72 contacts have been acknowledged. If you still need a QSL, apply with s.a.s.e. to K2JOX, 205 Hamburg Avenue, Egg Harbor, NJ 08215.

I

For a while, extras could choose a call, and use a "commemorative" call; but in the 1970's the "CB" craze and the bicentennial overwhelmed the FCC resources and led to stopping issuance of special calls in 1978.
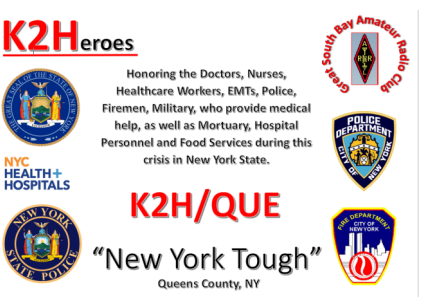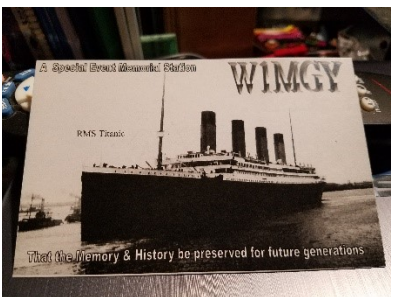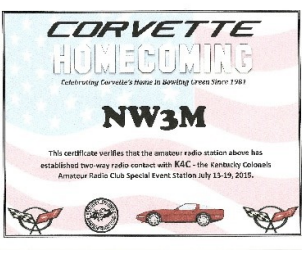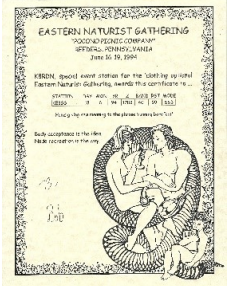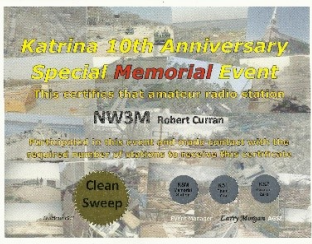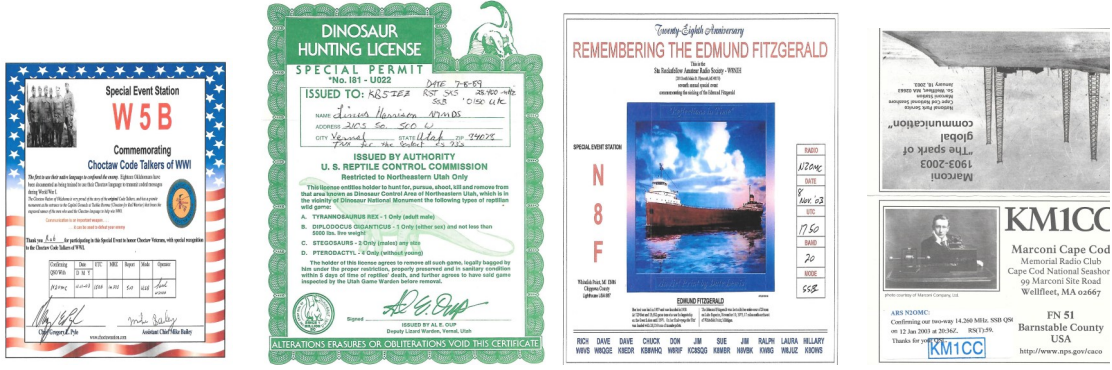
QST started listing special events after the event in those first issues and the upcoming ones starting in the 1960's. They still list them in each issue.

Amateur licensees used his/her own call sign until 1995 when the rule was changed once again allowing vanity calls. Then in 1997 the rules changed again to allow special event single letter prefix "K", "N" or "W", followed by a single digit numeral "0" through "9", followed by a single letter "A" through "W" or "Y" or "Z" ("X" is not available to amateur stations). The first 1 by 1 (W3W) was then issued to SPARK (Southern Pennsylvania Amateur Radio Klub) for the Steamtown marathon.

Many special event stations provide a special QSL card or certificate. Here are some that members of Charles County Amateur Radio Club have contacted:

As you can see, Bob really looks for special events....look at this list" The ones in yellow are ones he hosted. Look for more info on those and those run by CCARC in next month's newsletter

50th Anniversary of Halton County Radial Railway Museum	Hanover, Michigan's "Rust n' Dust Days"	Sun 'n Fun Fly-In
Vote for your favorite grilled picnic meat	South Carolina 13 Colonies	70th Anniversary of VE Day at the Mighty Eighth Air Force Museum
Early Days Power and Tractor Show	Georgia 13 Colonies	39th annual WBCCI Region 4 Rally in Mansfield, OH
Thomas Jefferson's summer retreat	152nd Anniversary of the Battles of Hanover and Gettysburg	Massachusetts 13 Colonies
Norman Bird Sanctuary Harvest Fair	Rhode Island 13 Colonies	Stuart Air Show
14th Annual Cranberry Festival	Pennsylvania 13 Colonies	Year of Pluto
50th Anniversary of the Raritan Bay Radio Amateurs	Connecticut 13 Colonies	National Parks On The Air - PK02
16th Annual NASCAR Day Festival	New Hampshire 13 Colonies	Anniversary of Winston Churchill's Iron Curtain Speech.
1st Railroad Bridge across Mississippi River	Maryland 13 Colonies	National Parks On The Air - SS02
7th Annual Railroad Rendevous	New Jersey 13 Colonies	National Parks On The Air - MP-04
Indianapolis 500	New York 13 Colonies	National Parks On The Air - TR-16
Nude Awareness Week	North Carolina 13 Colonies	Brickyard 400 Race
Anniversary of sinking of the Edmund Fitzgerald	Virginia 13 Colonies	St. Paul Island DX-pedition
Anniversary of sinking of the Edmund Fitzgerald	Delaware 13 Colonies	Michigan State Parks On The Air - KFF-3310
Navajo Code Talkers Days	Williamsburg 4th of July	LARC Fourth of July Celebration
51st Annual Illinois Steam Power and Threshing Bee	152nd Anniversary of the Battles of Hanover and Gettysburg	Battleship New Jersey
Plymouth, Mass, Pilgram First Landing Site	Bonus 13 Colonies	My Leyden Jar 270th Anniversary
Steel City ARC 50th Anniversary in new clubhouse	Green Valley, AZ, Happy Birthday America	Remembering the Edmund Fitzgerald (Split Rock Lighthouse)
Winter Festival of Lights	44th Annual Smithville Fiddlers Jamboree & Craft Festival	Trick-or-Treat Halloween
Miss America Pageant	234th Anniversary of the British surrender to the American and French forces in 1781	200th Anniversary of Royal St. John's Regatta in St. John's, Newfoundland, Canada.
Plymouth, Mass, Pilgram First Landing Site	65 Years of Deutscher Amateur Radio Club	76th Anniversary of the Motor City Amateur Radio Club
Lu Mil Relay For Life Pig Cookoff	4-H Expo	Vermont Parks on the AirKFF-3150
Mid-State ARC 25th Anniversary	Corvette Homecoming 2015	Parks on the Air - K-0430
80th Anniversary of Dawes Arboretum	Hurricane Katrina 10th Anniversary	Jimmy Stewart Airshow
40th Anniversary of Apollo 11 moon landing	73rd Anniversary of Invention of the Cubical Quad Antenna	30th Annual Rosebud Souix Ministry Trip
Great Smoky Mountains and Asheville Hamfest	Hurricane Katrina 10th Anniversary	USS Salem, CA139
Mackinac Sail boat race	National Museum Day	Historical Electronics Museum
Lighthouses on the Air	Ascension Hot Air Balloon Festival	Caboose Mobile on the Arkansas & Missouri Railroad
Christmas Tree Island, Islands on the Air	75th Anniversary of the PA Turnpike	50th Anniversary of the St. Louis Arch
Scarlet Carnation Flower	Spartans on the Air, Mich. State Tailgate Party	SOTA # W4/SH-005
Lighthouses on the Air	IOTA NC011S, NA 120, NA 092	Stuart, FL Air Show
Special Event station from the International DX Convention in San Diego, CA.	Caboose mobile on north shore of Lake Superior coupled to NSSR excursion train	Christmas Tree Island, Islands on the Air
Oliver Hardy Festival 27th Anniversary	Lester Dent/Doc Savage Special Event	

Contact special event stations and help commemorate a historical occasion or other special event. A good one to get you started is the 13 colonies that runs from July 1 to July 7. http://www.13colonies.us/

I'm hoping to make this a regular newsletter column highlighting an event for the month.

Thank you for the assist in gathering information: Les Couchenour N3RFO, Maty Weinberg, KB1EIB for helping provide references to the QST's for information, Bob Curran NW3M & Rob Hoyt N2OMC for sharing their cards, and ARRL for the QST archives for research.

73, Michelle N3YRZ

References:

http://www.rfcec.com/RFCEC/Section-3%20-%20Fundamentals%20of%20RF%20Communication-Electronics/13%20-%20HISTORY/Radio%20History%2008%20-%20Amateur%20Radio%20Callsigns%20History%20(By%20Phil%20Sager%20WB4FDT%20&%20Rick%20Palm%20K1CE).pdf

http://www.arrl.org/special-events-application First licenses 1905 (UK), 1912 radio act in US.

https://www.electronics-notes.com/articles/history/amateur-ham-radio/ham-radio-operations-first-world-war.php

http://p1k.arrl.org/pubs_archive/67767

http://www.arrl.org/special-event-stations

http://p1k.arrl.org/pubs_archive/67101

ANSWERS

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Answers to practice questions

1 C 2 B 3 B 4 C

H🍖ms in Action

ARES support of the Red Cross

On May 30th, ARES conducted a two part drill. The main purpose of the drill was to demonstrate to the American Red Cross (ARC) the capabilities that amateur radio could provide in the event all other communications were lost.

The drill was conducted in two parts with the each part simply being called Part A and Part B. For Part A, each county ARES team was more or less free to do what they wanted with regards to a drill. The Section EC (SEC), Jim, WB3KAS, provided a framework for all the counties to follow if they had nothing of their own. Well, just to be different, the Charles County ARES opted to do something a bit different.

We were able to obtain a list of the designated shelters within the County and on the day of the drill, two ARES teams headed out to all the shelters in the county. The first team consisted of Michelle (N3YRZ) and the second team was Pam (KB3SWS) and Jeff (KB3SPH), and with Bob (KB3KOW) acting as the 'ARC office). As they arrived on site, we first tried a simplex comm check and if that failed, then we'd move to a series of repeaters to test the coverage at each of the shelters.

The repeaters used were located in King George, Mechanicsville, Prince Frederick and Brandywine and we were able to identify two repeaters that provided coverage to all the shelters. Now, our testing environment wasn't the best since this was all done from the cars using magmount antennas, so if we had to activate a shelter and the potential to deploy a mast may yield better or different results.

Part B of the drill was a little bit more structured with the goal of generating specific messages using the FLMSG program (part of the FLDIGI suite of programs) and then sending them to the SEC via Winlink, where they were consolidated and then sent onward.

Overall a very successful drill and the event coordinators are hoping to be able to conduct another one in the Fall time frame.

73 Bob KB3KOW CHAR EC

WANT ADS, FOR SALE, &

PUBLIC SERVICE ANNOUNCEMENTS:

K3SMD

Meetings, nets, & contacts

First Friday- Monthly meeting @ 7 PM/1900 Charles County Rescue Squad 2 Calvert Street, LaPlata, MD

Net-Wednesdays 8:30 PM local: 147.195 MHz, + 600 offset, PL 156.7 Hz.

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

Leave laughing