

ISSUE

04

Decembrrrr
2018

A Journal of the
Montgomery Amateur Radio Club
(MARC) Rockville MD

MARC Proceedings



News and Features:

2 Stories

2 "Shep" K2ORS – "You'll shoot your eye out!"

3 Confessions of a Teenage Wannabe Ham

4 MARC Repeater Support Maintenance

5 Damascus Emergency Communication Team (DECT)

6 ON AIR

1929-ers

Dawn Patrol

7 Events, Hamfests, Reports

Winter Field Day 2019

Straight Key Night & K3Y Annual Event

MARC Election Results

8 Nets

Stories

Ahh, it is that time of year again;- December. Seasonal motifs decorate homes and buildings with mistletoe, wreaths, Menorahs. Christmas Trees prevail to the delight of mere children; and also to children of all ages. Menorahs are dimming perhaps by now, and Christmas tree lights continue to “rage against the dying of the light”, Kwanzaa candles continue to glow until January. All in all it is a time for people to get together and share gifts and food. It is also a time for people to share stories of their lives. It is no surprise that one sees multiple offerings of that master story teller, Jean Shepherd’s “Christmas Story” showing up on TV.

Holidays such as Christmas, Hanukkah and Kwanzaa happen during the month of December through January, with December as the darkest-month-of-the-year. It is no wonder that cultures have resisted this darkest with celebrations of light. Each of these holidays shine light during the shortest days of the year. For Hams it is not just the visible aspects of light that excite the senses and imagination. Hams are jealous for the whole-spectrum; DC to day-light. And old “Shep” brightened the imagination of many a



listener when they tuned their AM dial to 720 kc WOR in the 1960s and 70s. So many of those listeners had never heard a broadcaster “just talk” and it seemed so extemporaneous. Shep often spun yarns based on the tapestry of his whole life; especially his youth that illumined not only the imagination of his listeners but also their recollections of shared experiences. Many scenes in Jean Shepherd’s “Christmas Story” are renderings of tales he aired on radio. It is Shep’s voice that narrated this, now, classic film that had everyone saying “you’ll shoot your eye out”.

Like Shep everyone has a story to tell; - albeit not as skillfully as he does. He after all is recognized as one of the great story tellers having plenty of years of practice as a radio broadcaster. Some even put Shep in the category of a Mark Twain. Shep and his stories are pure Americana;- here purposely putting Shep in the present-tense. Theoretically all those broadcasts he aired are still propagating through the cosmos. His stories have cosmic staying-power for both those who have never heard him but also for those that have. It is in this sense that Shep is in the present-tense. Stories are like that. They too have staying power. Families cherish them as heirlooms in the retelling. For those of you that have never heard of “Shep” take the time to learn about him. Besides he is a fellow-Ham. His last call sign was K2ORS.

In 1978 ARRL had a publication that appealed to budding new Hams titled “TUNE IN THE WORLD WITH HAM RADIO” that included two cassette tapes; the first of which Shep introduced you to Ham Radio. The cassettes served to train a newbie in Morse Code as preparation to pass a FCC 5-WPM code test. The book served to prepare one for the questionnaire portion of the exam. When the prospective novice felt ready to take the test he or she would mail in a FCC application requesting the test. When it arrived in the mail, in a separate large manila envelope one would meet with an examiner who would break the seal and set you down to take the test. First though you were tested in CW. If you passed then you were given the questionnaire. It was this book and 2-cassette combo that prepared WB2U to take the Novice exam that he passed in early 1979 in time to operate in April with call sign KA2ETW.

Jean Shepherd introduces the complete “Tune in the World With Ham Radio” cassette instruction that WB2U studied found at <https://www.youtube.com/watch?v=xMHgkIWsf34> and <https://www.youtube.com/watch?v=xmU9LZ-tcII>. These two recordings are still very good Morse Code training materials.

Here are two of Shep’s broadcasts about Ham Radio: Part 1: <https://www.youtube.com/watch?v=22fl5JtoZXU>
Part 2: https://www.youtube.com/watch?v=uR46E_WV6vc

The following was on 710 kc AM; an episode that had an appeal to Ham Radio. He expresses how talking about Pi Section Networks to his date Ester Jean Albury caused a glaze to come her face. She was not impressed and thought Shep was a nut. Start listening to it at time-index of 6:30 minutes.

https://ia802303.us.archive.org/3/items/JeanShepherd1965Pt1/1965_01_29_Ham_Radio.mp3

Here is a preview of “SHEP” a Documentary Film that covers the “Life and Career of Master Storyteller Jean Shepherd.”

<https://www.youtube.com/watch?v=83rIeZVqdcS>

Shep hit by lightning <https://www.youtube.com/watch?v=akyTVNorXQ8> Consider writing some short vignettes yourself regarding your experiences in Ham Radio. Would like to feature at least one story in any given “MARC Proceedings”.

Confessions of a Teenage “Wannabe” Ham

by Marc Pressman N4DR

Part 1

It was summer of 1966, and the weather was hot and humid. I mowed lawns to earn pocket money. At most, I got only \$5 for an entire afternoon's work. At age 15, I became interested in amateur radio due to the constant mention on the local radio and TV news about Radio Amateurs providing emergency communications during all sorts of natural disasters, as well as making phone-patches for soldiers and sailors overseas.

How was I to learn what was necessary to get the radio license? It seemed like an almost insurmountable goal. The biggest hurdle for me was not so much the written test, as I figured I could study and somehow understand electronics. It was Morse Code!

I did not know where to begin, so like many young folks of the time I went to my school library. There I found a book called “So you want to be a ham?”. I studied this book from cover to cover until I had it completely memorized. Unfortunately, I did not know any hams in my neighborhood, and I did not know how to go about finding one to help me. In the book, it talked about learning the Morse Code.

In those days before the Internet, I had no clue how to learn the code. I read in the back of one of my Boy Scout magazines about a series of 45 rpm records that would teach you the Code. I ordered a set and began to try to learn the code with them. I worked for many weeks listening to the records and trying to learn to copy the code. I got up to a speed of about 5 WPM (mostly memorized), and felt that that would be enough to pass the test!!!

My parents were very understanding of my great desire to get a license. This was very important, because they had to write a note allowing me to “skip school” for

a day, since the exams were only given during the week.

The day finally came when I felt I was ready to take the test. It took me two bus rides to get to downtown Washington, DC. The examination fee was \$10, a princely sum for a 15 year old! The bus stop was only about two blocks from the FCC office. As I walked, my anxiety increased.

When I arrived, I went to the exam room for the first time, and registered. I waited and waited for what seemed like forever, until I was called to take the code test. In those days only General, Advanced and Extra Class tests were given at FCC offices. Novice and Technician class licenses could only be obtained using a system of hams testing new applicants using materials sent to them by mail from the FCC.

I was finally called to take the code test and was told that the test was to be given at 13 WPM! I thought, no problem, I know all my letters and numbers! When the paper tape machine that was used to send code started up, I froze completely, and could not copy a single letter. The examiner came to collect my paper at the end of the test and saw it was blank! He said “come back in thirty days and try again”. I was in tears as I left the office! In those days you could only take a test once in 30 days.

At home, I continued to study diligently with my code records, and

several more visits to the FCC resulting in my at first copying some letters, then some words, then some phrases.

Finally on the fifth time, I was able to get about 25 letters in a row. This would allow me to pass the 5 WPM test for Novice or Technician license, but NOT for the General! The FCC examiner Hal Grenfeld W4GF (SK) was kind-hearted, as he had seen me come in so many times to take the test and fail, that he took pity on me! He said “Let me tell you what I will do. I will give you credit for passing the 5 WPM test, and let you take Element 3 of the written test, and if you pass, to get the General Class license you just need to get your code speed up!”. Element 3 was the written test for both the General and Technician test in those days.

I took the written test and by some dumb luck, I passed the test. (I barely passed). I was then told that I had passed the written, and to go home and await the arrival of my new Technician license by mail. I had not a clue what I would do with my Technician License, since Technicians only had privileges above 50 MHz. Six meters and above at that time was considered mostly for “experimenters”. After waiting many weeks, I received my Technician License in the mail. Now what to do with it??



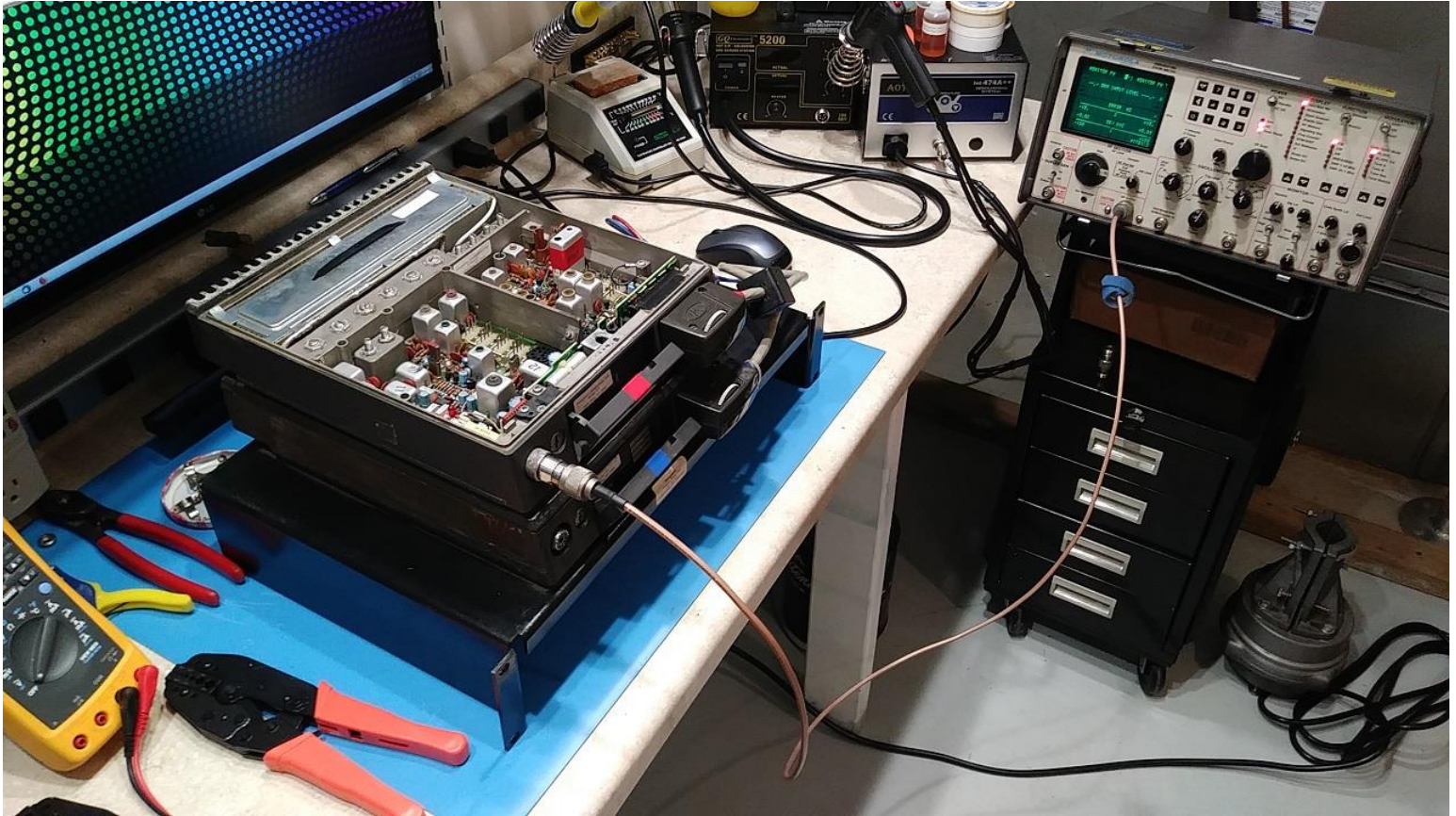
MARC Repeater Support and Maintenance

Sunday, December 2nd NW2M sent out the following report regarding the MARC Repeater System:

MARC East Site Equipment Check, by Al, NW2M.

With the help of Fred, K3CSX, both Terry, W3ESD and Tom, W3TDH were able to gain access to the East Site for another round of maintenance. The "ToDo" list is quite long, but they managed to remove the MARC 2M East Site link equipment and the MARC KV3B-2 APRS node so the equipment could be tested. The 2M link system equipment is first, followed by the APRS node equipment.

Here is a photo of what one node of MARC's 2M link system looks like:



These commercial mobile radios were made by Motorola back in the 1980s with a street price of \$3,000 each. As police, fire, and rescue moved up to the 800MHz digital radio systems, we managed to get these radios for \$35. No one really wants them anymore as they cost more to ship than their sales price. We currently have 11 of them in service (!!!) for our: 2M linking system, our two APRS nodes, and our 6M repeater is a 110 watt model that has been modified to be full duplex. After 10 years of 24x7 unattended service, a checkup is well deserved! This is a corner of Al's bench that you have seen many times.

Technical Corner, by Al, NW2M

So how does your 2M radio signal get relayed back to the main site to be "voted" and then re-broadcasted? I can tell you that connecting two radios together, one acting as a receiver and one a transmitter, is a simple task. "How" we do this is what separates the amateurs from the pros. FM Radio: One of the characteristics of a FM radio signal, is that when it gets weaker and weaker, there is more audio "hiss". This audio hiss is high in frequency and very noticeable from 3,000

Hz and higher. In a nutshell, when several signals are brought together to be "voted", the one with the least amount of signal in the 3,000 Hz region is the "quieter" signal and therefore the strongest signal of the bunch. That is the only job of the MARC 2M Voter- to sample all of the audio inputs (up to 5 simultaneously) and pick the one with the least amount of hiss. It does this very well at a rate exceeding 20 times per second.



Submitted by Ray Gusting, KB3NSS

Our team is well on its way to installation of new microwave dishes to achieve further expansion of our radio coverage from atop the Damascus Volunteer Fire Department. With superb support from **MAIPM (Mid-Atlantic IP Network)** (<https://maipn.org>) members Mike Donahue, Al Taylor KN3U, Eugene Cole NN0M and our leader, President Ron Adams KB3SYA. Two new microwave dishes are being

installed on the upper section of the fire house roof. A reinstatement of D.E.C.T.'s 2 meter/440 antenna is also being placed. Special thanks to all MAIPM personnel who helped with this project.

New officers elected for D.E.C.T. for the coming year:

President: Ron Adams KB3SYA
 1st. Vice President: Doug Noble WA3VKW
 2nd Vice President Stan Kowalski WB3CFJ
 Secretary/Treasurer: Jerry Horwitz N3AA

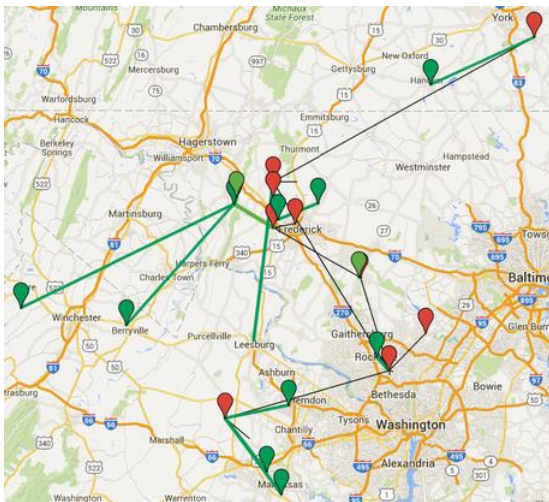
The membership has extended a one year free membership to all MARC members for 2019 and invites all radio enthusiasts to join us at our monthly meetings on the 2nd Tuesday of the month at 7:30 in the board room of the Damascus fire house.

Editor's Note: The following was extracted from <https://maipn.org/> MAIPN website:

The **Mid-Atlantic IP Network (MAIPN)** is an organization established by a group of Amateur Radio operators whose mission is to implement a regional wireless data network consistent with the purposes of the Amateur Radio Service, as stated in the governing FCC regulation, 21 CFR 97:

- * Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications.
- * Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art.
- * Encouragement and improvement of the amateur service through rules which provide for advancing skills in both the communication and technical phases of the art.
- * Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.

MAIPN is part of a national movement within the Amateur Radio community to employ modern wireless technology in our local and regional Amateur Radio networks. We are taking advantage of a new class of low-cost digital microwave radios that have recently appeared in the marketplace. This equipment was originally intended to be used by commercial providers to deliver wireless internet service to customers who are underserved by existing cable and fiber optic networks. However, we have found that this equipment is ideally suited to increase the capabilities of our Amateur Radio networks. We are particularly interested in the uses of this technology to support local emergency management officials, hospitals, and other public and private organizations that provide disaster response services. Our network is modeled on a similar network that already links emergency operations centers and other critical facilities in six Pennsylvania counties along the Mason-Dixon Line. While our focus is primarily in Maryland, DC, and Northern Virginia, our network already links with the Central Pennsylvania network and will eventually extend coverage throughout our service area. Served agencies may use the network for messaging, VoIP telephony, streaming video, audio- or video-conferencing, and other applications.



ON AIR

On November 18, 2018 WB2U happened to be tuning around on 80 Meters looking for some station to work on CW. He heard a number of distinctive sounds near 3.563 MHz; the tell-tale tones of vintage transmitters chirping away. So, Vic gave it a try and replied to W3GMS's CQ on 3.565 at 22:12 Zulu. "Joe" returned with an RST (Readability, Strength, Tone) report of 5NN equivalent to a 599. Vic replied with a 589. Joe then sent,

QTH PA ES OP JOE TX 29 TNT 29 TNT B PWR 18 18 SO HW?

The above MILL font text detailed the stations location as Pennsylvania, the operator name Joe, the transmitter he was using as a 1929 or prior transmitter, where TNT means the transmitter is using a tube type circuit Tuned-plate-Not-Tuned-grid transmitter. Not sure what the "B" stands for; perhaps it was a miscopy, but the PWR indicates Joe was either using 18 Volts input or output; I am not sure which. Joe then asks "HoW" he is being heard? Vic responded with his QTH and NAME and asked Joe for more info:

FB WE ARE OPERATING IN ANTIQUE WIRELESS CONTEST. YOU MUST USE A TX THAT WAS BUILT IN 1929 OR EARLIER BT AGN 1929 OR EARLIER BT ... SELF EXCITED OSCILATOR THAT WAS BUILT IN 1929 TYPE 1Ø TUBE BT U CAN SEE DETAILS OF CONTEST ON ANTIQUE WIRELESS ASSOCIATIONS WEBSITE BT SO HW?

As a result of this QSO WB2U started researching what these "29-ers" were all about. The event, formally called the Bruce Kelly Memorial CW Contest, an event sponsored by the Antique Wireless Association (AWA) <http://www.antiquewireless.org/>. The 1929 QSO Party was started in 1991 and was championed for several years by Bruce Kelley - W2ICE who was an AWA co-founder.

The Bruce Kelley 1929 QSO Party is an annual November AWA event where participants either own an original or build a transmitter using the designs, techniques, and tubes that were available in 1929 and earlier with the purpose of trying to contact as many other 1929 stations as possible. These transmitters can be very simple to build with plenty of help available should you need any guidance.

This is a CW event, but don't worry about your speed. Most stations are using straight keys and speed is whatever you would like it to be. Since early designed gear is used, it is a wonderful blend of whooping, chirping, buzzing, clicking, drifting, swishing, swaying, warbling, and other interesting signals. This is what ham radio sounded like in 1929 and it's 1929 again on the ham bands! As with our other "ON AIR" events, you do not need to be an AWA member to participate.

DAWN PATROL



Weekdays 5:00 –
11:00 AM
MARC Repeater
146.955 -

Another "ON AIR" activity of late has been some activity on 146.955 repeater between 5:00 to 10:30 AM by both commuter Hams driving to work and those early risers flying their radio shacks. This is coming to be called the "Dawn Patrol". The expression relates to the WW1 reconnaissance flights by allied pilots observing enemy positions and movements at sunrise. The term often refers to a surfer's arrival to the beach just before sunrise. Merriam Webster includes the definition that refers to radio and TV station personnel who prepare and put on very early morning programs. Various stations fly into formation at predictable times. "Kit" W3KIT usually shows up between 5:25 & 5:45 AM. Bob WM1E and Bob's wingman Vic WB2U comes

into position by at about the same time as Kit. Marc N4DR shows up around 6:00 AM. Glenn N3COB and Raphael KP4N can be spotted coming out of the Sun around 7:25 AM. Around this time Tim KN4LJF comes into ear shot. Pat N2YOZ pops in at 8:30 AM. Kris K3ICI can join in briefly by 9:00 AM and then by 9:30 Al W3ALH ID's on the way to work. Todd W3EME has joined up while driving near the Silver Hills area. Also heard is Brad KE7U from Clifton, VA., Mike WB2QOK Sterling VA., and N3YHF Phil. So, if you happen to be aloft at these times, join the Dawn Patrol Squadron formation and fly-ride-surf the radio-wind currents on the MARC 146.955 Repeater.

Events, Hamfests, Reports

WINTER FIELD DAY (WFD)

January 26 – 27 2019

Winter Field Day (WFD) commences Saturday January 26th and runs for 24-hours. For details check out <https://www.winterfieldday.com/>.

Some interest seems to be brewing locally. Kris K3ICI, said,

“For winter field day I was planning on tent camping with a modest setup and portable heat/power. My current problem is that I have not found a safe and reliable location that is of decent height and is open during the weekend for overnight tent camping end of January close to or within Montgomery County. Currently best options I have found are actually out in Virginia along 81 which has great height options and tent camping during the time but of course is a bit out of the way.”

Glenn N3COB agrees with Vic WB2U regarding “creature-comforts” and considered renting a “Yurt” at Little Bennett Park but apparently those facilities are not available in January. Glenn provides some scope to operating WFD, to wit,

“Would want to keep amount of equipment used to a minimum as we are all aware participation in setup and tear down can be challenging. Would probably operate off Battery Power and would consider operating QRP going totally digital (FT8, PSK31, RTTY) and CW. I'd suggest sticking to 20, 40 and 80 meters and forget everything else. But that's just a quick and dirty idea, I'm open for most anything else. Operating at the 100 Watt level on battery power will require some sort of charging. I know Bob has a terrific Solar setup we could incorporate. Not to mention his trailer.”

Bruce WA3SWJ, and Kit W3KIT each mentioned operating. Weather and temperature certainly play a role here in terms of motivation. Vic WB2U would like to operate CW but does not plan on deploying a station. Bob WM1E has no definite plans but seems to be looking into what equipment one might need to have in order to be prepared to handle winter portable operations. Tom W3TDH mentioned that the Montgomery County Auxiliary Communications Service have plans afoot to participate in Winter Field Day. There is the possibility they will use the MAIPN van but other options are being looked at. If you participate please take some photos and submit reports to the *MARC Proceedings*.

HAMFESTS

Sun. 01/27/2019 | [Maryland Mobileers Post Holiday Hamfest](#) Odenton, MD, ARRL Hamfest, Maryland Mobileers Amateur Radio Club
<https://sites.google.com/site/marylandmobileers/hamfests-1/hamfest-2>

Sat. 02/02/2019 | [Roanoke Division Convention \(Frostfest\)](#) Richmond, VA, Convention, Richmond Amateur Telecommunications Society (RATS), <http://frostfest.com/wp/>

Sun. 03/24/2019 | [WINTERFEST](#) Annandale, VA, ARRL Hamfest, Vienna Wireless Society.
<http://viennawireless.net/wp/events/winterfest>.

Straight Key Night “SKN” (SKCC)

Straight Key Night is held every January 1st from 0000 UTC through 2359 UTC. Formerly a ARRL event, SKCC is keeping the tradition alive. This 24-hour event is not a contest; rather it is a day dedicated to celebrating our CW heritage. Participants are encouraged to get on the air and simply make enjoyable, conversational CW QSOs. The use of straight keys or bugs to send CW is preferred. There are no points scored and all who participate are winners. See <https://www.skccgroup.com>

Straight Key Century Club (SKCC) Annual “K3Y” Event

K3Y runs from Wed. Jan. 2nd through 31st. It's a perfect time to introduce or reacquaint hams to the fun of hand-keyed Morse code sent with straight keys, bugs, and side-swipers. Members and non-members alike are welcome to hunt the US based K3Y stations and the participating DX stations around the world. Non-members are encouraged but not required to use straight keys for their K3Y contacts. See <https://www.skccgroup.com>

2019 MARC Election Results

Officers

Aleks W3JAG - President
Al NW2M - Vice President
Fred K3CSX - Secretary
Terry W3EDS - Treasurer

Directors

Dennis KD6DPR
David W2LNX
Eugene NN0M
Tom W3TDH
Vic WB2U
Bill KB3WKK

Committees and Assignments

ARES/RACES - Fred K3CSX
Education - David W2LNX
Field Day - Bruce WA3SWJ
MARC Trailer - Al NW2M
Membership - Fred K3CSX

Net Coordinator - Fred K3CSX
Public Info Officer - Aleks W3JAG
Public Service - Paul N3RQV
Repeaters - Terry W3EDS
Repeater License Trustee - Jeff KZ3F
Website - Chris KB3CS

NETS

Local Times unless otherwise noted

Net	Mode	Day and Time	Freq	PL	Purpose	Link
MARC Rapid Deployment Net	FM	Thur 8:00 PM	146.955	None	Rapid Deployment	Marclub.org
MARC Sunday Net	FM	Sun. 7:30 pm	146.955	None	Information	Marclub.org
Public Service Net	FM	Tue. 8:00 pm	146.955	None	Public Service & Emerg	Marclub.org
MARC 6-M Net	FM	Tue 9:15 PM	53.270-	156.7	Information	Marclub.org
Maryland Emerg. Phone Net (MEPN)	SSB-Voice	Daily 6:00 PM (winter times may apply)	3.820 MHz	N/A	Formal Traffic	http://mepn.n3wke.com/
Maryland Delaware DC Net (MDD)	CW	Daily 7:00 pm & 10:00 pm	3.557 MHz	N/A	MDC Section Traffic	http://www.arrl-mdc.net/mdd_net/net.htm
Maryland Slow Net (MSN)	CW	Daily 7:30 pm	3.563 MHz	N/A	Training & Traffic	http://www.bdb.com/~msn/
Baltimore Traffic Net (BTN)	FM-Phone	Daily 6:30 PM	145.330	?	Traffic	http://www.baltimoretraffic.net/
Empire Slow Speed (ESS)	CW	Daily 6:00 pm	3.569 MHz	N/A	Training & Traffic	http://enya.arrl.org/nts/eny-traffic-nets/
Radio Relay International East (RRIE)	CW	Daily 8:00 pm	3.552	N/A	Formal Traffic – Long Haul	https://radio-relay.org/