

THE MONITOR

October 2017

Published Monthly for members of the Amateur Radio Clubs in Virginia's Central Shenandoah Valley

VARA Meeting October 3rd

The Valley Amateur Radio Association, will hold its **October 3rd** meeting at Hometown Grille & Buffet (Old Shoney's) at 30 Sanger Lane, Staunton, VA. Dinner starts at 6:00pm, and the general meeting begins at 7:00pm. All Amateurs, their families and friends are welcome.

MARA Meeting October 5th

The Massanutten Amateur Radio Association, Inc., will hold its monthly meeting on Thursday, **October 5th** at the Wood Grill on Reservoir Street in Harrisonburg. Dinner starts at 6:30 p.m. Meeting starts at 7:30 PM. All Amateurs, their families and friends are welcome.

PVARC Meeting October 6th

The Page Valley Amateur Radio Club will hold its regular meeting on **October 6th** at 6:30pm at **Tactical Walls**. The address is: **611 Williams Avenue**. On the north end of Shenandoah, turn east from US Route 340 onto Williams Avenue, go through the gate, park along the right side of the building. The entrance is around the building to the right. All Amateurs, their families and friends are welcome.

Weekly Friday Luncheon

The Friday **weekly** casual lunch meetings are at Hometown Grille & Buffet (Old Shoney's) at 30 Sanger Lane, Staunton, VA at 11:00AM. Directions: I-81 to Exit 222, Richmond Rd. & Rte. 250. Turn East, Hometown Grille & Buffet will be on the left across the street from Mrs. Rowe's.

Don't get cot in the web, the renewal form for dues is in this month's issue.

VHF CONTESTING AND THE DIGITAL MODES

Marshall Williams K5QE



Amateur Radio has always been about “pushing the envelope”. Year after year, Amateurs have created new antennas, rigs, and low noise amplifiers (preamps), and other such gear. We have discovered and pioneered new modes of propagation previously unknown. For VHF operators, two of the most important of these new discoveries are meteor scatter propagation and EME (earth-moon-earth).

Before we dig into the contesting aspect, there are a few bits of history that we need to look at. First, what is a valid VHF contact? This issue has been decided for many years. For a valid contact to occur, each station must send and receive both call signs, a signal report in a mutually agreed format, and a Roger. Except for EME contacts, the agreed signal report is your Grid.

As in any contest, the idea is to make a good score, staying within the rules. Basically, the ARRL VHF contests are scored by multiplying your total QSO points by the number of unique grids worked. QSO points vary by band and by contest, so look that up. On 6M, each QSO is worth 1 point. If you make 100 contacts with your own grid, you have 100 points. If you make 100 contacts with 100 different grids, you have 10,000 points.

When EME began, it was really tough. It was all CW and signals were really WEAK. Most contact attempts were by schedule. To help with passing all the required information, a very structured protocol evolved. This protocol consisted of careful sequencing of the two stations and a set of “stylized” messages. A typical contact looked like this:

Sequence1—K5QE K8XYZ repeated for the entire sequence. The de was often omitted

Sequence2—K8XYZ K5QE 000 repeated. 000 was the signal report for EME.

Sequence3—R0 repeated. The R is the Roger from K8XYZ and the O is his signal report to me.

Sequence4—RRR repeated.

Sequence5—73 repeated.

The “rules” were that you could not advance to the next sequence until you had received all the necessary information from the sequence that you were on. So, for example, K5QE would not proceed to Sequence2 until he had copied both calls. K8XYZ would not proceed to Sequence3 until he had received both calls AND the 000 signal report. Why was 000 chosen as the signal report for EME? Because there is a lot of power in an O. DAH, DAH, DAH is much easier to copy than DIT DIT DIT when signals are really weak. Even with this structure, CW EME is a tough game, requiring large antennas, very good receivers, and high power.

Then, we have the appearance of Dr. Joe Taylor-K1JT, a Professor of Physics at Princeton. Joe has been a serious VHF operator for years and years. He created the WSJT software suite. This suite of programs has revolutionized weak signal VHF and the importance of Joe and his work cannot be overstated. It is a tour de force.

From Wikipedia we have: **WSJT** is a computer program used for weak signal radio communication

between amateur radio operators. The program was initially written by Joe Taylor-K1JT, but is now open source and is developed by a small team. The digital signal processing techniques in WSJT make it substantially easier for amateur radio operators to employ esoteric propagation modes,

such as high speed meteor scatter and moonbounce.

WSJT (now at v10) has software to implement several different modes, but the two most important to VHF contesting are FSK441 for high speed meteor scatter and JT65. FSK441 was optimized for very short “bursty” signals, which is exactly what you get when a VHF signal “bounces off” a meteor trail. FSK441 has become obsolete, now replaced by MSK144 found in WSJT-X, but FSK441 revolutionized meteor scatter operations.



JT65 comes in three flavors, JT65A for 6M, JT65B for 2M 222 and 432, and JT65C useful for bands above 432MHz. A typical JT65 QSO looks like this:

Message1—K5QE W8XYZ EM89

Message2—W8XYZ K5QE EM31 000

Message3—R0

Message4—RRR

Message5—73

Clearly, these messages are almost exactly the same as the CW messages and they functioned in the same way. Note the GRIDS in addition to the signal report of 000. K5QE is not allowed to begin sending Message2 until he has a good decode of Message1.

Why is this software so important to VHF contesting?

FSK441 allowed meteor scatter contacts to be made with stations in the 500 mile to 1200 mile distance. Clearly, if you work someone that is 900 miles out via meteor scatter, that is a contact that you would not normally be able to make. Also, the contact is most probably a new grid in your log. We often added 30+ grids into our logs using FSK441 late at night when the bands are “closed”. It really boosts the score.

Again, remember that FSK441 has been replaced by MSK144 in the new WSJT-X suite which is an even better software for meteor scatter.

JT65 has allowed medium and smaller stations to work some serious DX on the VHF bands. Using EME, you can work a lot of “rare” grids that you could not otherwise work. We often work 50+ unique grids in Europe during the ARRL contests using 2M EME. You certainly are not going to work Germany on 2M any other way. With JT65, awards like DXCC and WAS are still difficult, but certainly doable.

Somewhere in all this, the HF community “discovered” JT65. They began using it on the various HF bands because you could make contacts that otherwise were not possible using SSB or CW. A software package appeared called JT65-HF. This package kept the digital signal coding techniques of WSJT, but unfortunately changed the messages, making the two packages incompatible with each other. WSJT-HF only implemented JT65A but does not

tell you this. WSJT-HF introduced what I call the “funny little numbers” for signal reports rather than the Grid or 000. You would see things like R+02 or R-06, where the -06 was the signal report. In the VHF world, the “funny little numbers” don't mean anything and have NO value. We need GRIDS.

Then, the WSJT working group produced the software called WSJT-X, now up to version 1.8.0 RC2. Several new modes appeared in WSJT-X. The most important to VHF contesting are MSK144 for meteor scatter (replacing FSK441) and a new mode called FT8 which seems suited for medium range tropo contacts. JT65A, JT65B, and JT65C are still there but require careful setup. Unfortunately, in my view, the new program defaulted to the “funny little numbers” format for the various messages. Thankfully, the old formats can be had by checking a few boxes, but of course unless you know the history and what the messages are supposed to look like, you will not get this right. The result is program incompatibility.



Let's start with MSK144. Getting the SETUP right is very important with this software. On the main page, click the “TX even/first” box if you are intending to transmit on the first sequence, then click Auto Seq. By agreement, shorthands are NOT used on 6M but are used on the other bands, so set SH

appropriately for the band you are going to use. Click on File/Settings and fill in your call and grid. Click the Enable VHF/UHF/microwave features box. Click on the Radio Tab and chose your PTT method and Com port. Then click on the Advanced tab and click on the FT8 and MSK144 Contest Mode box. Click OK to return to the main page. You should see that the messages are correct now for VHF contesting—GRIDS and no “funny little numbers”. It is important that both stations are using “Contest Mode”. If one station is sending the numbers and the other one is on the Contest Mode, the decodes don't work right. A final issue is the F Tol parameter. Ideally, it should be set for 200 cycles, however this requires a LOT of computer horsepower. If you set it smaller, say 50 cycles, and the station on the other end is off by 60 cycles, you will never get a decode. SO, if you set F Tol wide, it may eat up all your CPU cycles. If you have it too narrow, you don't get a decode, even if you can hear the meteor.

For FT8, click Auto Seq on the main page and the same settings as above. Enable VHF/UHF/microwave features, the correct PTT method and port on the Radio Tab, and the FT8 and MSK144 Contest Mode box on the Advanced Tab. At this point, you should see that the messages are correct....GRIDS not numbers.

Now let's look at JT65. You can use JT65 for long haul tropo contacts, but it is most useful EME. As I said above JT65A, JT65B, and JT65C are still in WSJT-X, but you must have them setup correctly or you will not get the correct messages. On the front page, provided that the "Enable VHF/UHF/microwave features" is checked, you will see a new box that says Submode A with up/down arrows. If you wanted JT65A for 6M, leave this box set on Submode A. If you wanted JT65B for 2M, you would change to Submode B. This is really a "gotcha" because if the DX station is on JT65B and you are on JT65A(Submode A), decodes will fail. Now, click the SH box and you will see the correct messages (no little numbers).

Let us assume that you now have the setup screens correct and the software is working. We want to talk about how each mode is actually being used today.

MSK144: The "national calling frequency" for MSK is 50.260MHz on 6M. During non-contest times, you can go there and call CQ. You will often make a random contact that way. There is a page called the PingJockey reflector (<https://www.pingjockey.net/cgi-bin/pingtalk>) where meteor scatter ops hang out. You can chat with other MS ops, make schedules, and then run them. Many run their scheds right on 50.260Mhz, but others move off the calling frequency just to avoid QRM. During contest times, if everyone tries to run their scheds on 50.260MHz bedlam is almost guaranteed, so moving off .260 is wise.

A national "calling frequency" for 2M is not yet firmly established. Some are using the old meteor scatter frequency of 144.140MHz, while others are touting 144.150Mhz. Of those two, I would tend to support the 144.150Mhz frequency as frequencies below that are in the middle of the EME band on 2M. I don't believe that there are any agreements for the other bands, but this is not a problem....just use the PingJockey reflector and make a sched with the other station. You can put a LOT of grids in the bag using MSK meteor scatter. You would be wise to practice up with this mode.

SHAMELESS PLUG: MSK144 has made meteor scatter on 222 relatively easy. Many will tell you that "you can't do MS on 222", but they are wrong. We worked every station that ran with on 222 in the last contest. If everyone would make an effort on 222, there would be a lot more points in the logs.

FT8: The "national calling frequency" for FT8 on 6M is 50.313MHz(please don't ask me where they come up with these frequencies). Right now, everyone seems to want to run all their FT8 on 50.313MHz. During a contest, this is obviously going to be a mess. Some mechanism is going to have to be worked out so that contesters can "spread out".

Remember, the WJST suite is supposed to be for weak signal work. Some of the very best VHF contest operators have commented that they are seeing two stations work on FT8 with S9+ signals on both sides. If signals are loud, you should be using SSB or CW rather than FT8. WHY? Because you can easily work a loud SSB station in less than 10 seconds. It takes a full minute to work someone on FT8, even if everything is perfect. Why use up a minute of contest time, if 10 seconds will do?

JT65: The 2M EME band is 144.100MHz to 144.150Mhz. If you have a 2M EME setup, you can work a lot of stations that you could not work any other way on 2M. It does not take a huge station these days. One long yagi or two medium length yagis and QRO power will do the job. Interestingly, almost every one of those will be a new grid. You can work 60-70 contacts in Europe and almost never dupe a grid. The NOUK EME-1 reflector is where the EME guys mostly hang out. Check it out at <https://www.chris.org/cgi-bin/jt65emeA>. The EME-1 page is a "sister page" to the PingJockey page. There are other reflectors in Europe that are popular with some.

I know that JT65 can be used to work long haul tropo in some cases. You should remember that a "perfect" JT65 contact takes 4 minutes(6 minutes if you both send 73). That is a lot of time to put into one contact. For EME or tropo, JT65 is just a slow mode. SSB is much faster if signals are even halfway decent.

The intent of this article is to be informative and educational. I hope that it has been a little of both. If we, as VHF ops, "get on the same page", everyone will make more contacts and have more fun.

GL es 73 **Marshall K5QE**

The Official Results of the 2017 Virginia QSO Party

Here, with the help of several local hams more familiar with Excel than I am. are the official results of our local hams, to the best of my limited ability(still had to do a lot of manual sorting).

Again, note the outstanding efforts of **W4ZAO**, **KD9LA**, and **W4PJW**; honorable mention goes to **K4DJG** and **WA4NUF**.

The Shenandoah Valley Wireless club didn't do too badly, either; we were 5th, with 13 operators sending in logs with the contest name included; 220,720 points, up from 177,980 points of last year.

Call	Mode	Band	Pwr	Score	Q's	Place in VA in Category
W4ZAO	PH	ALL	LOW	83,592	540	2nd
KD9LA	PH	144	LOW	260	20	1st
W4PJW	MIXED	ALL	LOW	69,324	453	2nd
K4DJG	DIG	ALL	LOW	12	3	1st of 1
N4BCC	PH	ALL	LOW	22,272	216	6th
WA4NUF	PH	40	LOW	3,014	137	3rd of 8
W4PFM	MIXED	ALL	LOW	19,824	206	10th
W4GRC	MIXED	ALL	LOW	15,910	163	12th
N1QEQ	MIXED	ALL	LOW	5,394	89	18th
AD4TJ	MIXED	ALL	LOW	2,295	51	27th
N4EDI	PH	ALL	LOW	1,656	46	31st
WA4FJC	PH	ALL	LOW	156	13	
KF4FC	MIXED	ALL	LOW	24	4	
K4PZC	PH	40	LOW	1	1	
KI4STU	PH	40	LOW	1	1	

Better luck next year!

73, **David AD4TJ**



Report from the Hurricane Irma Storm Zone

Dennis Phillips, NS4K



(Orlando) Hurricane Irma's full punch moved just west of Orlando in the wee hours of Monday morning of September 11th. At my home on the east side of downtown, we experienced hurricane force gusts but no flooding. I had no house or car damage. We did lose the contents of our refrigerator, caused by the extended loss of power, and we will need some foliage and lawn fix ups.

Before the storm, I removed and charged up my riding lawn-mower lead acid battery and attached alligator clips from the terminals to a car cigarette lighter plug-in USB connector! We could sit in the house and keep our cell phones up and my 2-meter handy-talkie through the storm.



Cell phone coverage (AT&T) only got ragged a few times.

We cooked on the Propane grill and burner and never fully lost water and sewer service.

My Ham shack was secure and all my guyed antennas remained standing. On support pole for a 10-meter

vertical has a 10-degree bend. Many the plastic tie wraps which held the coax feedlines to the pole did snap but that may have been because they are not UV tolerant and were brittle. I could go on 2 Meter low power with the battery and several repeaters keyed up but there was little storm activity other than ham stations reporting they were out of commercial power.

Orlando Utilities is city owned and they brought in emergency workers from all over the country east of the Rockies.

Much of the work from the 3 Phase neighborhood feed was done on our street by a power crew from the City of Pratt, Kansas (40 miles west of Wichita). I joked with them that now I can say that we met the "Wichita Lineman". The verse in the Glen Campbell song says, "And I need you more than want you" was certainly true!"

Pictured is the 3 Phase feed from the main road. The very top wire is a ground wire for lightning protection. The 3 large wires stacked under that are each one of the 3 phases. Power is distributed in 3 phases within each 60 Hertz cycle. They are 120 degrees apart. Big power users get their power in 3 phases to save costs. You buy power by kilowatt hours, so if you can get 3 times the power in the same amount of time, you save money! Homes almost all use single phase and your pole transformer gives you two 120-volt feeds. Combined they give you 240 single phase. Math wise, the Root Mean Square (.707) of average power of a single phase is much higher on 3 phases for the same amount of time. Special transformers are needed in the high power supply (B+) of a radio transmitter (usually closed Delta, sometimes Wye) to rectify the phases in usable DC. <http://www.electronicstutorials.ws/accircuits/rms-voltage.html>

In the photo, I circled my single-phase street feed on the bottom phase wire. You can see the breaker to my street is open and hanging down. The next wire below that is called the "common wire" which is not normally hot. You can see the tree limb on that! Then the bottom wires are telephone, internet and cable TV.

On the other side of my street at the end of the block you can see where a big concrete power pole fell and demolished two sheds in their backyard They also replaced two poles on that street circuit, including this concrete one!



Here was looking across the main road to the 3-phase feed with the tangled wires. Notice that power run also had a tripped breaker which I outlined.

Five days in the hot weather without air-conditioning is stressful. They had to restore some single-phase street poles back to plumb as well as reconnect service drops from the pole transformers to the house masthead (the pole above your outside meter) where the feed wires pulled loose.

My most useful role was looking at my neighbor's connections to see if they had been damaged.

Here was one on my neighbors who had his service wires and the common cable rip out. Here 2 days later, the electrician is writing the bid to fix it so that when the line crew came by to reattach the service, it would be safe.



His house has 125-amp service and the old FPE breakers. The first thing the electrician did was shake his head and say, "I can get the mast fixed but you have a lot more problems down the road!" I have an FPE box also. My house was built in 1958. I intend to soon do an Eaton internal retrofit and change out the old and dangerous Stab-Lok breakers to Cutler-Hammer.

The whole FPE breaker fiasco has been a decades long electrical fire safety nightmare. For more details read <https://diy.stackexchange.com/questions/62320/should-all-federal-pacific-panels-be-replaced>

The catenary arch that the power wire forms as it hangs



from pole to pole can oscillate in a very high wind and bring down the line

Underground utilities would be a big help in non-flooding areas, but that is more expensive than above-ground power.

In the Valley, usually ice-storms caused the most problems with stress of power lines. We did have the Derecho winds a few years back when I lived there. In Florida, we not only have frequent lightning storms, but we must contend with Hurricanes. We got through this one!

Dennis Phillips

19th Annual Shenandoah 100 Mile Bike RACE

100 on the east coast. The challenging and fun course is the largest NUE event. The route takes 500 bicyclists

19th Annual Shenandoah 100 Mile Bike RACE

September 3, 2017

Yes, that's right - a Race - Not just a gentle ride down tree shaded back roads, but a RACE! An actual real Race with nearly 500 riders (425 finishers) going at break-neck speeds. The prizes were numerous, in categories for both men and women, but the Race itself was Not our Priority! We wanted to make sure that the Riders who needed assistance were cared for appropriately. The race begins and ends at Shenandoah Campground, Stokesville, Va. This can be, and has been, a very dangerous race. There is a history of serious medical instances - so much so, that



there are safety monitors placed at significant locations with a history of serious wrecks. The organizers provide their own Medical Doctor who is present during the entire activity just in case something terrible happens (and it has). David KD9LA escorted the doctor around the course all day - at the ready - if a special need were to arise.

There was a local ham radio equipped Rescue Squad Unit on site for the start of the race and they stayed on course for a

significant part of the day (KK4RLS KM4YIA). In addition, maps of the course had been provided to the local 911 dispatchers in advance. Fortunately we didn't have to call upon their services often. One rider, with an apparent collar bone injury, had to be transported to RMH hospital. Other reported injuries included a significant laceration to the leg and a person with a foot injury who was literally carried down the mountain to the rescue squad truck. The rest of the day was quite uneventful - unless you were one of the unlucky ones. We ended up with a variety of skinned knees, scrapes and bruises commonly associated with an unexpected meeting with an "immovable object".

Check out this quote from

http://www.mtntouring.com/mountain/htm/home/page_home.htm

"The Shenandoah Mountain 100, held in Virginia's George Washington National Forest is the only true big mountain

over 6 large mountains and along amazing scenic singletrack. It is second in popularity only to the Leadville 100. The Virginia event that has long been the keystone of the NUE Series always has some excitement in store."

Local Amateur Radio operators have assisted with this race for many years. It has not always worked out so well. There have been obstacles to overcome but through improved cooperation and understanding with the organizers of this event, it has become very successful, and provides good learning experiences for how best to utilize our radio communications abilities. Our presence is greatly appreciated and we definitely serve a good purpose by providing accurate, timely communications in emergencies. Only about 20% of the course is covered by cell phone service. The remaining 80% of the course depends on Ham Radio for emergency communications.

Every year we have a "mixed bag" of ham radio operators who volunteer to assist with this race. Some are well experienced, others are "new to the game". We all learn something and enjoy working together for the "common good". Each year we get new folks involved and this year was no exception.

How many of these participants' callsigns do you recognize? We had several first timers - can you pick them out?

W4PJW, KB2LOZ, KA1LSK, KK4JWC, WA4FJC, N1QEQ, KM4LHR, KD9LA, N4USS, KK4RLS, N3GLZ, KM4TDC, KM4YIA.

We do NOT participate in this activity for money or prizes or rewards or even the nice shirts we get - we share our time, radios and talent to benefit the riders. In return, our two local clubs are afforded special consideration at the Stokesville Campground, for our annual Field Day activity the 4th full weekend every June. The campground has



large open areas just right for putting up our antennas. The bathroom facilities and large covered pavilion are a great attribute for those of us who make the annual trek here to "Play Radio" and hone our skills.

Please consider joining us in the future to assist with this race or any other "special event" in our area. Join us - you will be welcome and remember also that these activities are NOT just for Club Members - that includes the annual Field Day too. If you want to help out, we will find a place for you - Club Membership is NOT Required. Encourage your ham radio friends to join one of the local Radio Clubs or get on the internet mailing list of "Valley Hams" to stay in touch.

Copy and paste this link to see a video of this year's race:
<https://www.pinkbike.com/video/477861/>

Here is a link to a lost of the racers' finishing positions:

http://www.mtntouring.com/mountain/htm/shenandoah_mountain_100/SM100-results/SM%20100-2017%20results%20overall.pdf

Jeff W4PJW



PVARC Secretary's Report

September 1, 2017 Meeting Minutes

The meeting was called to order by President **Dave Firestone K4DPF** at 6:30 PM at Tactical Walls in Shenandoah. (Thanks to Tim KM4TGC and **Carrie KM4WDX** for the donation of the use of the facility!)

12 members were in attendance

The Secretary's report and Treasurer's report were approved.

Old Business:

Committee reports:

Field Day: Awaiting ARRL results.

EMCOM/Public Service: A thorough review of the support to the Luray Triathlon was held. Several suggestions for improved coordination with the first responders were developed including 1) hand copies of our station location map to the Rescue Squad, 2) obtain physical street addresses for our locations (for reporting locations suitable for GPS), 3) report locations of the Rescue Squad vehicles, 4) co-locate a ham at the county EOC. The support to the Page Valley Road Race bicycle event was reviewed as well.

Web site: hosting and domain name have been renewed, some software updates as well

Trailer: Contributions to make up the difference between the price and the authorized funding were solicited and several members offered donations. Purchase is proceeding.

Purchase of a computer projector was discussed and deferred until after the trailer purchase has completed. Several suggestions for alternates were discussed.

Continued discussion of the club connection to the hospital (or lack thereof). **Bob W4RMF** presented some of the history and current status. Several suggestions for improvements were made and some optimism for relationship improvements was expressed.

New Business:

President **Dave Firestone K4DPF** announced a board meeting at his house on Sept 7

Mark N4YSA reported on a letter to a potential donor requesting a donation related to the trailer purchase.

The meeting was adjourned at 7:18 PM, followed by a presentation of mesh Broadband Hamnet communication by **Bob KI4VFP**.

Respectfully submitted by **Gary Fischer K6OZ**, PVARC Secretary

MARA Secretary's Report

MARA Secretary's Report – Aug. 3, 2017

General Meeting called to order at Wood Grill, Harrisonburg, by **President Andrew Pearson (N4RCE)** at 7:32 p.m. 25 members and 6 guests were present. Introductions were made all around.

New Member Vote: None

New Member First Reading: **Chad Emswiler (W1GOT)**, **Jimmy Withrow**.

The Secretary's Minutes for last month's meeting approved as published in the **Monitor**,

The Treasurer's Report for last month approved as published in the **Monitor**.

Committee Reports:

ARES: Bryan Daniels (K4RMY): This **Saturday (9/9)** A small group will check out the Shenandoah 500 Motorcycle Ride route for communication trouble spots for the upcoming event on **Sept. 30 – Oct.1**.

Repeater Committee: David Fordham (KD9LA): The planned introduction of **digital operation by the 145.130 repeater** on Massanutten Peak is being deferred until after the fall activity rush.

VE Committee: Gayle Shull (KU4XN): Next regular test session will be at **9:00 A.M., October 14**, at **Woodmen Life**, Rt 42 in Dayton.

Public Service Committee: Bryan Daniels K4RMY: We need more volunteers to cover the Sept. 30 – Oct. 1 Shenandoah 500 event. **David Collins (N4WDC)**, also a member of that event's sponsors, is going to ask the committee for free gas cards for the volunteers.

David Fordham: Volunteers needed for the **Sept. 9**

VFW 100 mile bike ride (Call John Keller – W4ZAO for

information).

Ray Ritchie (K4NRA): The **Oct. 1 Camp Still Meadows horse ride** will be at **Willow Spring Farm on Little North Mtn. Road**.

David also asked for volunteers for the **Sept 16 50 mile bike ride**.

Andrew Pearson (N4RCE): **Pointed out that 2018 MARA officials** will be elected at our **Oct. 5 meeting**. He got volunteers for the nominating committee this evening.

Old Business: None.

New Business: David advised us to be prepared for hurricane **backlash**.

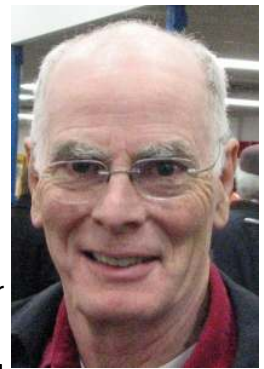
Next Meeting: October 5.

50/50 Drawing: Of \$54 in tickets sold, **\$27** was won by **David Fordham**, with \$27 going to the MARA treasury. Congratulations, David!

Time Adjourned: 8:00 p.m.

Program: Andrew Pearson arranged a mock national disaster exercise. Each table was assigned a different location in the U.S. We each had to decide what our best practice should be, what equipment, antennas, and other resources we would need, what ham radio bands and modes would be best, and what organizations we would need to establish communications with. A jury of our guests was appointed to determine the highest ranked four tables for their plans. Without naming names, the table that didn't even get an honorable mention was the Secretary's!

Respectively submitted, **Herb Slade, AA2BF, Secretary**



VARA Secretary's Report

September 5, 2017

On Sept. 5th the **Valley Amateur Radio Association's** meeting was brought to order at 7 pm by president **John Keller W4ZAO**. Everyone introduced themselves as usual. John recognized **Angie Nash KM4FAI** for getting her General ticket at the testing at Dayton. The 50/50 drawing for \$8.50 was won by **Ray Colvin KE4HVR**.

ARES report: David Tanks AD4TJ, EC for Augusta County amateurs, talked about the upcoming hurricane Irma, to be prepared in case the path brought it our way; check radios, batteries, food supplies, etc. He reminded us that during an emergency listen to the 146.850 repeater for

info about a possible call-up. The net will be the 2nd Thursday of the month, and asked for a volunteer for Net Control as he would be out of town; **David Fordham KD9LA** said he would do it, with the net to be held on 146.490 simplex.

Secretary's report: David made a motion that the minutes be accepted as printed in the newsletter; seconded and passed.

Treasurer's report: Greg Czerniak W4GRC read his report; motion made, seconded, and passed to accept the report.

Upcoming Events: John reminded us of the Valley



Veterans bike ride Sept. 9; Melissa Patrick and Randall Wolf of the event, gave us details on the operation. John said we would need about 10 to 12 hams, so we are close to that now. **Jeff Rinehart W4PJW** would be driving the event director around, and **Dave KD9LA** will be Net Control from his home in Weyers Cave.

The **Grindstone 100** foot race is October 6-8; **Geep Howell WA4RTS** from Lynchburg, is one of the lead hams for that event; we need lots of help for that; there will be a website with the ability for the hams to sign up for a particular spot and time(as was used last year and maybe the year before that); Google " Grindstone 100 " to find it. The Fall Foliage bike ride is October 21-22. Lots of hams are needed to cover this event. The Shenandoah 500 motorcycle event is Sept 30-Oct. 1.

New members: the applications of **Kevin Numbers KC8MTV** of Staunton, and **Pat Morgan AK4VQ** of Augusta County, were read for the first time.

Christmas Banquet: with time getting late to reserve a spot, the Golden Corral in Waynesboro was able to accomodate us on December 12th, from 6 to 9 pm.

The VARA club picnic will be Sept 16th, at noon, at the

pavilion overlooking the skate board park. The club will provide hot dogs and hamburgers, and utensils. Everyone is to bring a covered dish or 2 and your own drink.

New business: John said we need to form a nominating committee to find hams interested in filling the slots of President, Vice President, and Treasurer. Greg volunteered himself, **Ray Colvin KE4HVR** and **Fred Evans N4KYM**. Please be willing to serve!

David brought us up-to-date on contests and Special Events happening in August.

Wayne Boyer N4EYZ said that the estate items from **KC5ROT(SK)** are not selling well. If not sold locally he will probably take to the FrostFest.

Buddy Padget KI4BR has had in his possession the original charter for the **VARA** club from the ARRL; it is 40 years old! **John WB4KIT** gave it to him to hold onto. It was given to the present club secretary(me) to hold onto for the next 40 years.

With no other business to discuss the meeting was closed at 8:03 pm.

Respectfully submitted, **David AD4TJ**, VARA Secretary

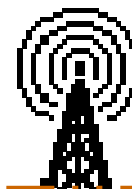
MARA Treasurer's Report

August 21, 2017 to September 20, 2017

Opening Balance		<u>\$1,092.31</u>
Income: Memberships	\$24.00	
50/50 - September Meeting	\$27.00	
Misc. Donation (AA2BF)	\$1.00	
Total Income:		<u>\$52.00</u>
 Expenses: Electric	 \$22.46	
Liability Insurance	\$266.00	
Total Expenses:		<u>\$288.46</u>
 Balance September 20, 2017		 <u>\$855.85</u>

Submitted by **Foster Farone, WF40** ,

MARA Treasurer



IOTA News: The new RSGB IOTA website will officially be launched on September 14th:
<https://iota-world.org/en/>

How's DX

9Q, DEM. REP. OF THE CONGO. Fernando, EA4BB (ex-9Q5BB, D2BB, ST2BF, TU5JL, TZ6BB, Z21BB), is now active as 9Q6BB from Kinshasa (eastern part of the country) for up to the next 3 years. Activity has been on 20/17 meters using CW. Operations are QRP using an Elecraft KX2 w/5w into a Vertical telescopic whip 5.2m antenna. QSL via W3HMK.

CE9, Antarctica: Raj/VU3LBP remains active from the Antarctic station Bharati (WAP IND-04, WW Loc. MC80co) until November 2017. QSL via I1HYW.

CE9, Antarctica: Sebastian/SQ1SGB is working on the Polish Antarctic station "H. Arctowski" and will show up on the air as HFOARC until mid October from the South Shetland Islands (AN-010, WW Loc. GC07su), on 40m and 20m (SSB, JT65 and JT9). QSL via SQ1SGB (d).

EA, Spain: From September 18 to October 5, Javier/EA1HEO and Age/LA5PMA will activate the special event callsign EG1ESA of the "European Space Agency" (ESA). QSL via DLOESA (d/B), LoTW, eQSL, ClubLog.

E4, PALESTINE. Janusz, SP9FIH, will once again be active as E44WE from Bethlehem between October 18-29th. Activity will be on 30/15/12/10 meters using SSB, PSK63 and possibly RTTY. He will also be active in the CQWW DX SSB Contest (October 28-29th) as a Single-Op/Single-Band (15m)/Assisted/Low-Power entry. QSL via his home callsign or ClubLog's OQRS. For more details and updates, see: <http://www.e4.dxpeditons.org>

ARUBA, P4. Operators Jim, K8JH and Mike, KB8KB will be QRV as P40N and P40M, respectively, from September 27 to October 3. Activity will be on various HF bands using CW, SSB, RTTY, PSK31 and FT8. QSL both calls for this activity direct to home calls.

P4, ARUBA. Mat, DL4MM, will once again be active as P4/DL4MM from the P40L contest QTH between January 24-31st, 2018. He will participate in the CQ 160m CW Contest (January 27-29th) as P40AA and a Single-Op entry. Activity outside of the contest, will be on both CW and SSB with a focus on the lower bands. He will pay special attention for EU, AS and JA. QSL via DL4MM direct or LoTW (Bureau).

SP, Poland: HF700LUB celebrates the 700th anniversary of the

city Lublin until August 2018. QSL via SP8AB. POLAND, SP. Special event station HF700LUB is QRV until August 2018 to celebrate the 700th anniversary of the city Lublin. Activity is on the HF bands using CW, SSB and various digital modes. QSL via SP8AB. In addition, look for 3Z20ILLW to be QRV from the Jaroslawiec Lighthouse, ILLW PL-0014, during the International Lighthouse/Lightship Weekend. QSL via bureau.

IOTA's

AF-021; ZS8, Prince Edward and Marion Islands: David/ZS1BCE will be stationed on Marion Island until May 2018 and plans to operate during his spare time as ZS8Z on HF. QSL via ZS1LS.

AF-078. Carabane Island Vlad, UA4WHX, is now QRT from the Gambia and is currently active as 6W/UA4WHX/p from Carabane Island, Senegal. Activity has been on 17 meters using CW and SSB (possibly Digital modes). As always, his length of stay unknown at this time. QSL via his home callsign.

AN-001— div., Graham Land West (Adelaide Island) group: Alan/ MW0YCC will be active from the Rothera Research Station/Adelaide Island and other locations until April 2018 as VP8DPJ. QSL only via eQSL.

NA-102 - FG, GUADELOUPE. Philippe, F1DUZ, will once again be active as FG4KH from Guadeloupe (NA-102) between October 17th and November 7th. Activity will be on all HF bands as well as 6 meters using SSB, the Digital modes (JT65, FT8, Hell) and with 2m/70cm Tropo, TEP and EME on JT65B. He also plans to participate in the CQWW DX SSB Contest (October 28-29th). QSL via his home callsign, direct or by the Bureau. Web sites for EME and TEP infos and the logs online are at:

144 MHz: <http://fgdpxpeditionf1duz.monsite-orange.fr>
 432 MHz: <http://fg4kh-eme-70cm.monsite-orange.fr>

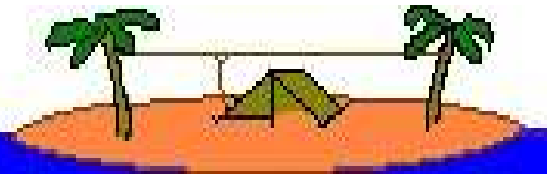
OC-024 - T32, EASTERN KIRIBATI. Ken, KH6QJ, will once again be active as T32AZ from Kiritimati Island (OC-024) between October 5-10th. Activity will be on 40/20/15 meters, but will focus on 40 meters using CW and SSB. He also plans

This month's bulletin was made possible with information provided by NC1L, QRZ DX, The Weekly DX, The OPDX Bulletin, 425 DX News, The Daily DX, DXNL, Contest Corral from QST, the ARRL Contest Calendar and WA7BNM web sites. Thanks to all.

to be in VK/ZL Oceania SSB Contest (October 7th). QSL via his home call, direct or by the Bureau.

SA-006 - PJ4, BONAIRE. Operators Eric/K9ES and Charles/AD4ES will be active as K9ES/PJ4 and AD4ES/PJ4, respectively, from Bonaire (SA-006) between November 21-28th. Activity will be on all bands. QSL K9ES/PJ4 via K9ES.

QSL AD4ES/PJ4 via AD4ES. Both operators will be in the CQWW DX CW Contest (November 25-26th). Eric/K9ES will sign PJ4E as a Single-Op/Single-Band (80m) entry, and Charles/AD4ES will sign PJ4I as a Single-Op/Single-Band (20m) entry. QSL PJ4I and PJ4E via LoTW. PLEASE be advised that both PJ4E and PJ4I are re-issued callsigns.



Contests & QSO Parties

For more details and information, go to:

<http://www.hornucopia.com/contestcal/contestcal.html>

October 2017

- 1 North American SSB Sprint Contest
- 1 UBA ON Contest, SSB
- 1 Peanut Power QRP Sprint
- 1-4 Classic Exchange, Phone
- 2-8 IQRP Quarterly Marathon
- 3 ARS Spartan Sprint
- 3 German Telegraphy Contest
- 4 Phone Fray
- 4 432 MHz Fall Sprint
- 4 UKEICC 80m Contest
- 4-5 CWops Mini-CWT Test
- 5 NRAU 10m Activity Contest
- 5 SARL 80m QSO Party
- 6 NCCC RTTY Sprint
- 6 NCCC Sprint
- 6-8 YLRL DX/NA YL Anniversary Contest
- 7-8 ARRL EME Contest
- 7-8 GTC CW Cup
- 7 Microwave Fall Sprint
- 7-8 Oceania DX Contest, Phone
- 7-8 SKCC Weekend Sprintathon
- 7-8 Russian WW Digital Contest
- 7-8 TRC DX Contest
- 7-8 International HELL-Contest
- 7-8 California QSO Party
- 7 FISTS Fall Slow Speed Sprint
- 7-8 WAB HF Phone
- 8 RSGB DX Contest
- 8 UBA ON Contest, CW
- 8 UBA ON Contest, 6m
- 9 4 States QRP Group Second Sunday Sprint
- 9 RSGB 80m Autumn Series, CW
- 10 10-10 Int. 10-10 Day Sprint
- 11 NAQCC CW Sprint
- 11 Phone Fray



- 11-12 CWops Mini-CWT Test
- 13 NCCC RTTY Sprint
- 13 NCCC Sprint
- 14-15 Makrothen RTTY Contest
- 14-15 Oceania DX Contest, CW
- 14-15 Scandinavian Activity Contest, SSB
- 14-15 Arizona QSO Party
- 14-15 Pennsylvania QSO Party
- 14 FISTS Fall Unlimited Sprint
- 14-15 PODXS 070 Club 160m Great Pumpkin Sprint
- 15 Asia-Pacific Fall Sprint, CW
- 15 UBA ON Contest, 2m
- 16 Run for the Bacon QRP Contest
- 16-20 ARRL School Club Roundup
- 16-17 Telephone Pioneers QSO Party
- 18 Phone Fray
- 18-19 CWops Mini-CWT Test
- 18 RSGB 80m Autumn Series, Data
- 20 NCCC RTTY Sprint
- 20 NCCC Sprint
- 20 MCG Autumn Sprint
- 21-22 Araucaria World Wide VHF Contest
- 21-22 JARTS WW RTTY Contest
- 21-22 10-10 Int. Fall Contest, CW
- 21 RCB XYL Test
- 21-22 New York QSO Party
- 21-22 Stew Perry Topband Challenge
- 21-22 Worked All Germany Contest
- 21-22 South Dakota QSO Party
- 21 Feld Hell Sprint
- 22-23 Illinois QSO Party
- 22 RSGB RoLo CW
- 25 SKCC Sprint
- 25 Phone Fray
- 25-26 CWops Mini-CWT Test
- 25 UKEICC 80m Contest
- 26 RSGB 80m Autumn Series, SSB
- 27 NCCC RTTY Sprint
- 27 NCCC Sprint
- 28-29 CQ Worldwide DX Contest, SSB





Page County Va. ARES Frequencies



Repeaters	Simplex
146.625 131.8	Page ARES Channel 1 146.55
146.670 114.8	" " " 2 146.40
443.350 203.5	" " " 3 146.45
	" " " 4 146.50
	" " " 5 147.45

ARES Contacts

Mark Hensley	EC	N4YSA	540-578-1133	n4ysa@gmx.com
Morgan Phenix	AEC	K4RHD		phenix@centurylink.net
Bob Forrest	AEC	WO4MI		wo4mi@arri.net

Call Up Procedure

Call up for the **Page County ARES** members will be via **146.625R & Page ARES Channel 1. 146.55 simplex**. You will be advised of the emergency and you assignment. In the event of power loss, inclement weather or other emergency, monitor the Call up frequencies at the top of the hour.

VE Testing (No, we're not talking about Canada)



Our next session will be **October 14, 2017**. Sign-in starts at 9:00 am, followed immediately by testing. Bring your ID, your original license and a copy of same. The fee is \$15.00. If you are an accredited VE and would like to help, contact **Gayle Shull, KU4XN** at gshu7411@gmail.com
GAYLE, KU4XN



Get Involved!

Don't forget: The local ARES groups hold regular nets to let you check out your radio equipment, antennas, and other station gear. Take advantage of these opportunities to get signal reports and get to know the other local hams. **All Amateurs are welcome!**



The **Page County ARES Net** meets the first Sunday nights on the local **146.550 simplex**, the second Sunday on the **146.670 (PL 114.8)** repeater, and the remaining Sundays on the **146.625 (PL 131.8)** repeater, at 8:00 pm local time.

The **Rockingham County ARES Net** meets Monday nights at 8:00 pm local time, the first Monday on **146.550 simplex**, all other Mondays on the **147.225(+)** repeater (PL 131.8).

The **Augusta County ARES Net** meets the second Thursday of each month at 8:00 pm local time, usually on the **146.850** repeater (PL 131.8).

The **NVTN (Northern Virginia Traffic Net)** meets daily on the **147.300 (PL 131.8)** repeater at 7:30 pm local time.

The **Old Dominion Emergency Net** meets every first and third Monday on 3.947 kHz at 6:30 pm local time. **All Amateurs are welcome!**

The **VSBN (Virginia Sideband Net)** meets daily on **3.947 MHz** at 6:00 PM local time. **All Amateurs are welcome!**

The **VLN (Virginia Late Net)** meets daily on **3.947 MHz** at 10:00 PM local time. **All Amateurs welcome!**

***Deadline for newsletter articles is the 20th of the preceding month of publication.**

Calendar of Local Events

October

1 Shenandoah 500 Motorcycle

1 Page County ARES Net (146.550 Simplex)
2 Rockingham County ARES Net (146.550 Simplex)
2 Old Dominion Emergency Net (3.947 kHz)

3 VARA Club Meeting

5 MARA Club Meeting

6 PVARC Club Meeting

6 Friday Luncheon

6-8 Grindstone 100

8 Page County ARES Net (146.625, PL 131.8)

9 Columbus Day

12 Augusta County ARES Net (146.850, PL131.8)

13 Friday Luncheon

14 VE Testing

15 Page County ARES Net (146.625, PL 131.8)

16 Old Dominion Emergency Net (3.947 kHz)

20 Friday Luncheon

20 Deadline for November newsletter submission*

20-22 Fall Foliage Bike Festival

22 Page County ARES Net (146.625, PL 131.8)

23 Rockingham County ARES Net (147.225, PL 131.8)

27 Friday Luncheon

29 Page County ARES Net (146.625, PL 131.8)

30 Rockingham County ARES Net (147.225, PL 131.8)

31 Halloween

November

2 MARA Club Meeting

3 VARA Club Meeting

3 PVARC Club Meeting

3 Friday Luncheon

5 Page County ARES Net (146.550 Simplex)

5 Daylight Saving Ends

6 Rockingham County ARES Net (146.550 Simplex)

6 Old Dominion Emergency Net (3.947 kHz)

7 Election Day

12 Page County ARES Net (146.625, PL 131.8)

13 Rockingham County ARES Net (146.225, PL 131.8)

13 Augusta County ARES Net (146.850, PL131.8)

17 Friday Luncheon

19 Page County ARES Net (146.625, PL 131.8)

20 Old Dominion Emergency Net (3.947 kHz)

20 Rockingham County ARES Net (146.225, PL 131.8)

20 Deadline for December newsletter submission*

23 Thanksgiving

24 Friday Luncheon

26 Page County ARES Net (146.625, PL 131.8)

27 Rockingham County ARES Net (147.225, PL 131.8)



The club newsletter, *The Monitor*, is provided free of charge monthly to all members of all three clubs via email distribution, in PDF format. However, it is the individual club members' responsibility to notify the newsletter editor directly of all changes in email address. Electronic back issues are available on the MARA website: <<http://mara.ws>>

Members not receiving the electronic Monitor in a timely fashion (e.g., before their monthly club meeting) should notify the newsletter editor promptly to investigate and resolve the problem with distribution. Members who are using the latest updated version of Adobe Reader and experience trouble opening the Monitor email attachment can contact the newsletter editor for assistance.

Club Information

MASSANUTTEN AMATEUR RADIO ASSOCIATION, Inc.

President: Andrew Pearson, N4RCE
Vice President: Bryan Daniels, K4RMY
Secretary: Herb Slade, AA2BF
Treasurer: Foster Farone, WF4O
Board (exp 2017): James Franklin, W4SIU
Board (exp 2016): Bob Steere, N1QEQ

<http://mara.ws>

MARA meets the first Thursday of each month at Wood Grill Buffet on Reservoir Street in Harrisonburg, Virginia.

Dinner begins at 6:30 pm,
the business meeting begins at 7:30 pm

Visitors are always welcome.

Dues (\$12 per year) should be mailed to:

MARA
PO Box 1882
Harrisonburg, VA 22801

VALLEY AMATEUR RADIO ASSOCIATION

President: John Keller, W4ZAO
Vice President: Ed Varner, N4EDI
Secretary: David Tanks, AD4TJ
Treasurer: Greg Czerniak, W4GRC

<http://w4xd.com>

VARA meets the first Tuesday of each month at the Hometown Grill & Buffet off Richmond Road in Staunton, Virginia

Dinner starts at 6:00 pm,
the business meeting starts at 7:00 pm

Visitors are always welcome

Dues (\$15 per year) should be mailed to:

VARA
418 Oriole St.
Staunton, VA 24401-1661

PAGE VALLEY AMATEUR RADIO CLUB

President: Dave Firestone, K4DPF
Vice President: Gene Frazier, KJ4HFO
Secretary: Gary Fischer, K6OZ
Treasurer: Juergen Lunkowitz, W3LUV
Board Member (exp 2018): Tim Matter, KM4TGC
Board Member (exp 2017): Gary Fischer, K6OZ

<http://www.k4pmh.org>

PVARC meets the first Friday of each month at Tactical Walls at 611 Williams Avenue in Shenandoah, VA.

The meeting begins at 6:30 pm

Visitors are always welcome.

Dues (\$12 per year) should be mailed to:

PVARC
PO Box 245
Luray VA 22835-0245

The Monitor is published monthly by MARA, Inc. for members of the three amateur radio clubs in the Central Shenandoah Valley.

Distribution is in Adobe PDF format via email attachment to all club members in good standing.

Clubs differ in their policies regarding paper copies. Contact the president of your respective club for information on paper copies.

Back issues are freely available on the MARA website starting a few months after publication.

Since the clubs derive their revenue from memberships, the Monitor is not to be made regularly available on a timely basis to individuals who are not club members. Occasional complimentary current copies are provided to prospective members free of charge.

Clubs may also formally decide to provide complimentary copies at club expense to various constituencies. Contact your respective club officers for more information.

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Renew Your Club Dues HERE!

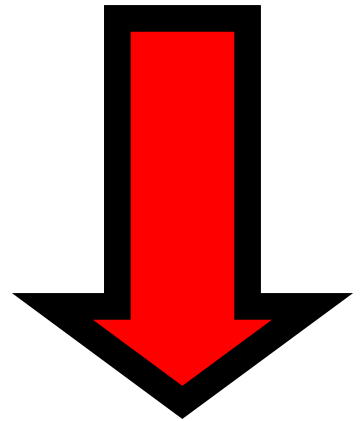
RENEW

RENEW

RENEW

RENEW

RENEW YOUR CLUB MEMEBERSHIP!



Check the box next to the club for which you are renewing

Membership Renewal Form

NAME: _____ CALLSIGN: _____ CLASS: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP CODE: _____

HOME PHONE: _____ WORK PHONE: _____ CELL PHONE: _____

CELL PHONE (If you want it in club records for emergency purposes, not the roster!): _____

EMAIL ADDRESS: (print legibly!!) _____

MEMBER ARRL (Y/N) _____ REGISTERED VA ARES (Y/N) _____ SKYWARN ID: _____

Are you available for Workday Daytime Emergency Call up? (Y/N) _____

Checks, Money Orders or exact change would be greatly appreciated.

VARA members mail with \$15 to:

VARA

418 Oriole St.

Staunton, VA 24401-1661

MARA members mail with \$12 to:

MARA,

PO Box 1882

Harrisonburg, VA 22801

PVARC members mail with \$12 to:

PVARC

PO Box 245

Luray VA 22835-0245

MARA/VARA/PVARC

c/o John Spillman
168 Bosley Drive Ext.
Stanley, VA 22851

Phone: 540-860-1332

Email: kt4cbva@gmail.com

Return Service Requested

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