



PBARC Reflector

For Amateur's By Amateur's

Letter From The Vice President
Shane Driskill KG5SRO

Well I hope everyone enjoyed the last newsletter as much as I did. We have some good articles written by our members in this months edition . I do want to give you an update on Larry N5JWJ . He is in rehab and gaining strength every day. He will be going home in a week or two; lets pray for his quick recovery.

We would like for all to join us in any event that the club is having. There is an events page on the website that is updated often.

It was good to see Bill KC5MN, Dale N5RAC , Carolyn KC5PUR, their grandson, and Terri KG5SRP at the Cane Creek State Park activation.

Most of all have fun and enjoy the hobby we all love.

73 KG5SRO

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Special points of interest

- Marks Mill Activation
- DMR
- Project Page

Marks Mill State Park Glen Wolf N5RN



February 3, 2018

Cleveland County Arkansas

GRID: EM33us

Weather: ~50 degrees and a slight wind

This is my second activation. Had some help with this one. Shane, KG5SRO, and his daughter Michaela.

We started the day with a breakfast at the Corner Café in Watson Chapel. A nice little restaurant that serves a pretty good breakfast. It's become one of my favorites since I was introduced to it about a year ago.

After breakfast we head towards Marks Mill State park. It wasn't a long drive at all down US-79. When we finally got there and saw the park well let me say it didn't fit my vision of the park. It is nice and clean. Picnic tables and a pavilion. I was used to visitor center and a big parking lot. Marks Mill isn't that.

We surveyed the park and decided how we were going to setup. Shane was going to try his "potato launcher" to help in putting up an end-fed 20 dipole. After a few tries he had it figured out. We got one end of the end-fed up about 50 feet. We had to add another piece of coax to get the antenna hooked to the radio.

As Shane was putting up the 20M End-fed, I began assembling the Buddipole to try it again. Setup went a little quicker than with the it did when I activated Toltec. Experience I figure. I set the Buddipole up for 20M as well. I hooked up the Buddipole to a Icom 706MKIIg. Shane hooked the 20M end-fed to a Kenwood TS50.

Alternating calling CQ on 20M neither of us were hearing much of anything. Scanning up and down the 20M band proved to be non-productive. Cell service and internet service is spotty at the park but Shane using his Verizon service was able to get enough of a signal to get a propagation forecast. For 20M it was poor but for 40M it was good. We could confirm that 20M was all but dead. We talked for a bit about our next steps.

I knew I could configure the Buddipole for 40M so that was my game plan. I then remembered that I had brought a brand new in the bag 40M dipole. Shane and I talked and we decided to take down the 20M end-fed and replace it with the 40M dipole. A decision that would prove to be a good move.

As we were setting things up a recently licensed technician named Richard Beckner, KG5VRC stopped by and introduced himself. We got to know him a little bit and explained what we were doing. K5SLL stopped by and visited. Steven was very familiar with the area and was able to share some information about the Marks Mill park and the surrounding parks. KK5ZD also stopped by since he was in the area attending a meeting.

The swap out of the 40M dipole took about 10 to 15 minutes max. I was hearing stuff on the Buddipole but not having much luck with making contacts. Shane hooked up the 40M dipole to the TS50. After searching to find a frequency that we could use to avoid the MN and VT QSO party participants Shane threw out a CQ. It took a few tries but we finally got a contact. We asked that he spot us and he said he would. It took about 10 more minutes of calling CQ but then the contacts started to pick up.

We actually got a run going for a few minutes. Signal reports were great. Generally, 57 to 59+. The 40M dipole was working great. The Buddipole was hearing the signals as well but wasn't getting much of a signal out. So, we stayed with the 40M dipole.

After all was said and done we got 25 contacts in the log. A big bump from the 6 I made at Toltec a few weekends earlier. When we hit twenty-five the activity began to fall off so we decided that we would go QRT for a bit and do some lunch.

Shane had brought a grill, some burgers and fixings and a fryer to make some French fries. It didn't take him too long to get it all setup and going. Soon we were enjoying a good meal just sharing some stories.

It was getting late in the afternoon and we all agreed that we wanted to see the Marks Mill cemetery before we headed back to Pine Bluff/White Hall. So, we began the process of packing up everything.

After about 4 hours of activating the park, we headed to the cemetery. That was a very interesting side trip. We found out that there is a lot of civil war history to be explored in this area. Future activations will hopefully allow us to explore more of the region and its history.

Overall it was a successful activation. Learning more about what antennas to try. The old tried and true dipole is proving its worth.

I'm already excited about the next activation.



Upcoming Events

Hamfest Fort Smith— April 7

Railroadiana - April 7 9am-4pm
(Railroad Museum in PB)

Ozarkcon QRP Conference
April 6-7 Branson, MO

Parks On The Air - April. 21
(Arkansas Post)

Parks On The Air - May

Arkansas QSO Party
May 12

(All dates are tentative)

Russellville Hamfest 2018

This was my second ever Hamfest and it probably should have been my first, because after having been to Jackson, MS this one was so much smaller. However the one thing I did enjoy was the forums that they were putting on. I decided to join the DMR class and meet up with Dale N5RAC. But then I realized this was the same time as the ARRL forum and moved over to the next room. Sorry Dale Didn't mean to leave you but I wanted to hear what was going on in the ARRL. Dave Norris N5UZ did a very good job talking with us and going over some of the changes and explaining the state of the ARRL.

The next forum that I attended

was the ADXA forum and I have to say I learned a lot. I have a lot of work to do to bring down the noise floor of my station . I also learned that you want a pooched radiation pattern on your antenna to have the best chance of hearing someone. That is when I learned that I am a true ham because I looked down and behold I have acquired the pooched pattern in my stomach already. Life is great.

It was also nice to see my brother in law (Eric Taylor KG5SXN) come up for his first Hamfest. I would also like to mention he now has his general license.

Russellville Hamfest 2018

ARRL Membership

I encourage all that are not already members of the ARRL to join. The organization has a lot to offer for books, merchandise, videos, testing material and a host of other things. Also it is fighting for our rights to continue operating as we know it today . The ARRL does more for us than any other organization.

Thank you all

Shane Driskill KG5SRO

Newsletter

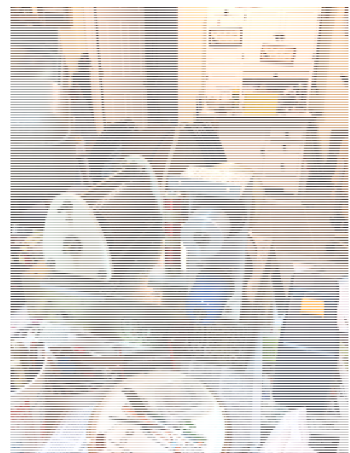
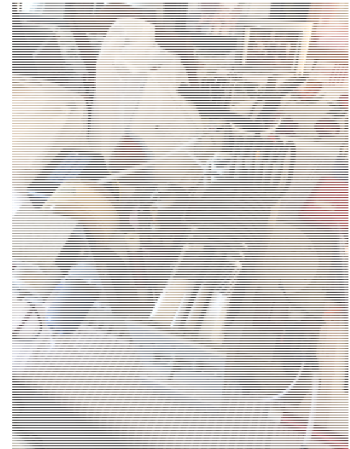
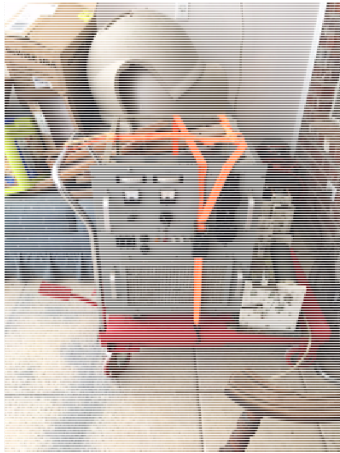
I hope you enjoyed the first copy of the newsletter. I hope each of you will contribute an article or two in the future. Special thanks to Glenn (N5RN) , Dale (N5RAC) , and JJ (N5MNX) for helping with this months newsletter.

Projects Page

This is a project that JJ N5MNX sent me that he and his brother (Doug W5RR)have been working on.

Top picture is what we started with old unfinished 4CX1500B amp that never worked. Design was really Complicated Class AB1 and never got all the bugs worked out. I prefer the old Grounded Grid Amp's much simpler design and easier to work on.

This is the latest project building another amp with Russian Tube GS-35B as final PA. I'm trying for 160/6 Meters using Rotary Inductor rather than a Band Switch. Did get the old Henry back working again but it took longer than I thought it would but there were more burnt/shorted components than I thought there were. Almost a double handful. But I guess when parts get old they do tend to go bad as in life I guess.



DMR

DIGITAL MOBILE RADIO

What is DMR? DMR (Digital Mobile Radio) is an open and published international digital radio standard that specifies the 2-slot (channel) TDMA communications. DMR is amateur radio's newest digital protocol. DMR radios are produced by several manufacturers and they all work together as long as they are Tier II compliant, as most are.

DMR also satisfies the FCC's narrow banding mandate by being 6.25 kHz equivalent. It's actually more spectrum efficient than other 6.25 kHz modes since no guard band is needed for the two channels. Think of DMR as 1/3 the channel bandwidth of a 25 kHz analog signal with TWICE the number of voice channels. It also offers extended battery life, and has superior voice quality over other digital voice modes.

There are several different digital radio modes. Digital Mobile Radio is one mode. Icom's Dstar is another. Yaesu's Fusion is another. There are also Tetra, P25, and the commercial Icom and Kenwood versions.

The three most popular now in ham radio are Icom's Dstar, Yaesu's Fusion, and DMR. DMR seems to be the most popular and fastest growing mode. The first two are basically proprietary to the perspective manufacturer. If you want to go that route, you need to buy that brand of radio, or get something called a software



DMR is offered by several manufacturers. The highest cost radios are made by Motorola, all the way down to the lowest cost radios made by a company called Tytera, and other Chinese brands. Some HT's are less than \$100. All DMR radios can talk to each other. Most DMR radios also work on analog, so you don't have to carry two radios.

DMR repeaters are usually linked together through the internet. An individual can put up a DMR digital ham repeater, connect it to the internet and all the DMR repeaters linked together can be configured to communicate with each other. In Arkansas there are at least 25 DMR repeaters on the air, with many more to come. Most are on UHF, but a few are on VHF.

If you are not in range of a local repeater you can still talk on DMR using a Hotspot. A Hotspot is essentially a tiny repeater connected to the -



internet that links your radio to the network. This allows you to use your HT to connect to the repeater and talk group of your choice. You connect the Hotspot to the internet using your home or cell phone internet service. Some Hotspots have built in WIFI and some require a travel router to bridge the Hotspot to WIFI service. You can even take it mobile and talk on your local repeater from anywhere you have cell or WIFI service.

Repeaters Search: 25 Results

DMR ID	Callsign	City	State/Prov	Country	Frequency	Color	Offset	Timeslot	Trustee	Network
310501	K5NSX	Little Rock	Arkansas	United States	442.65000	1	+5.000	TS1 TS2	AE5AU	BrandMeister
310502	W5NWA	Harrison	Arkansas	United States	442.90000	1	+5.000	TS1 TS2	N5NBJ	BrandMeister
310503	KE5LXK	Springdale	Arkansas	United States	442.45000	1	+5.000	Mixed Mode	NX5V	BrandMeister
310504	AC5XV	Little Rock	Arkansas	United States	443.12500	2	+5.000	TS1 TS2	AC5XV	BrandMeister
310505	DMRXS	Little Rock	Arkansas	United States	438.45000	1	-7.6	TS1 TS2	N5QM	DMRX
310506	K5NSX	Little Rock	Arkansas	United States	145.17000	1	-0.600	Mixed Mode	AE5AU	BrandMeister
310507	W5NWA	Ridgeway	Arkansas	United States	444.15000	1	+5.000	TS1 TS2	N5NBJ	BrandMeister
310508	W5AUU	Conway	Arkansas	United States	443.75000	1	+5.000	TS1 TS2	N5OMW	Brandmeister
310509	KG5GJU	Clarkridge	Arkansas	United States	443.22500	1	+5.000	TS1 TS2	KG5GJU	Brandmeister
310510	K5BRM	little rock	Arkansas	United States	443.92500	1	+5.000	TS1 TS2	K5BRM	brandmister
310511	KG5GJU	clarkridge	Arkansas	United States	443.22500	14	+5.000	TS1 TS2	KG5GJU	brandmesister
310512	W5STR	Cabot	Arkansas	United States	442.47500	1	+5.000	Mixed Mode	AF5WN	Brandmeister
310513	W5DSD	Malvern	Arkansas	United States	444.52500	1	+5.000	TS1 TS2	W5DSD	Brandmeister
310514	NZ5E	Bono	Arkansas	United States	442.21250	1	+5.000	TS1 TS2	NZ5E	Brandmeister
310515	K5CS	Russellville	Arkansas	United States	442.36250	1	+5.000	TS1 TS2	K5CS	Brandmeister
310516	K5NSX	Sherwood	Arkansas	United States	443.90000	1	+5.000	Mixed Mode	AE5AU	BrandMeister
310517	KC5MMW	Mena	Arkansas	United States	147.99000	1	-3.480	TS1 TS2	KC5MMW	Brandmeister
310518	N5CG	Benton	Arkansas	United States	443.60000	1	+5.000	TS1 TS2	K5TEL	Brandmiester
310519	KG5JPJ	Rogers	Arkansas	United States	442.52500	1	+5.000	TS1 TS2	N5UFO	Brandmeister
310520	W1ZM	Searcy	Arkansas	United States	444.87500	1	+5.000	TS1 TS2	KJ5ORD	BrandMeister
310521	W5KMP	Fayetteville	Arkansas	United States	443.12500	1	+5.000	TS1 TS2	W5KMP	Brandmeister
310522	W5AUU	Conway	Arkansas	United States	145.21000	1	-0.600	Mixed Mode	N5OMW	Brandmeister
310523	KG5JPK	Eureka Springs	Arkansas	United States	443.42500	1	+5.000	TS1 TS2	KF5MMW	Brandmiester
310524	WD5JPG	Malvern	Arkansas	United States	444.55000	1	+5.000	TS1 TS2	WD5JPG	brandmiester
310525	K5PXP	Mt. Nebo	Arkansas	United States	443.40000	1	+5.000	TS1 TS2	K5CS	Brandmeister

DMR Continued

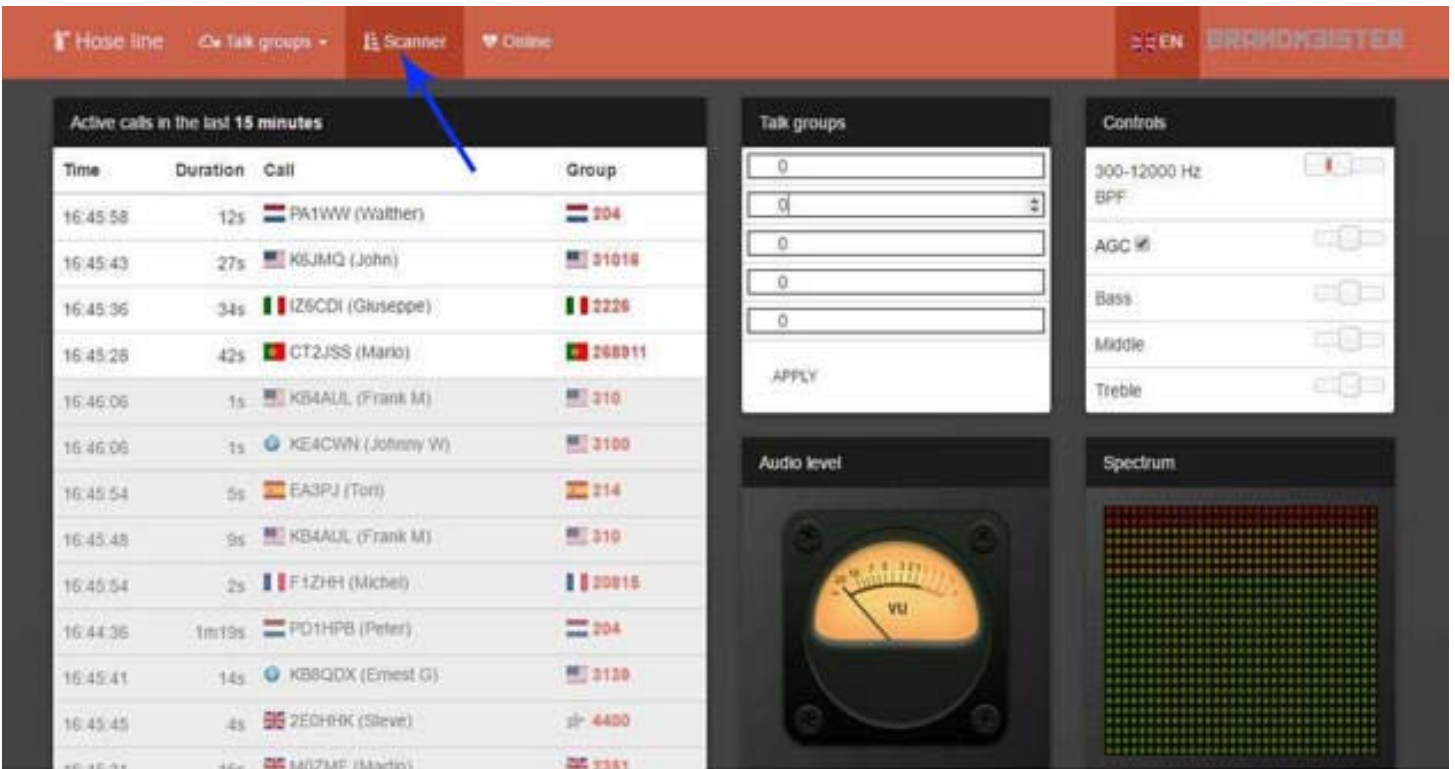
DMR has what's called talk groups. There are LOTS of DMR talk groups. Repeater owners decide which ones they want on their machine. For example there is a talk group 310. You program that talk group into your radio, and are able to talk to anyone on any repeater that also has this talk group in their radio, and in the repeater they are using. There are DMR repeaters everywhere in the world. There are many local, regional and worldwide talk groups.

There are two main DMR networks, dmr-marc.net and brandmeister.network. Most Arkansas repeaters are using brandmeister.

To get a taste of what DMR is like without spending any money connect your computer to hose.brandmeister.network you will see a display of active calls in the last 5 minutes.

To listen in click on talk groups and enter the talk group you want to listen to. Popular talk groups are 3100 USA nationwide, 3105 Arkansas, and 310501 Little Rock. There is also a an APP for smartphones that allows you to listen in. The audio quality on hoseline is not as good as what you would hear on your radio on a local repeater, but give it a try and see if you catch the DMR bug.

73 N5RAC



The screenshot shows the BrandMeister website interface. At the top, there are navigation tabs: "Hose line", "Talk groups", "Scanner" (highlighted with a blue arrow), and "Online". The "BrandMEISTER" logo is in the top right corner. The main content area is divided into several sections:

- Active calls in the last 15 minutes:** A table listing recent calls with columns for Time, Duration, Call, and Group.
- Talk groups:** A list of talk groups with input fields for each, and an "APPLY" button.
- Controls:** A panel with various settings including frequency (300-12000 Hz), BPF, AGC, Bass, Middle, and Treble.
- Audio level:** A VU meter showing the current audio level.
- Spectrum:** A spectrum analyzer display showing the frequency spectrum.

Time	Duration	Call	Group
16:45:58	12s	PA1WW (Walther)	204
16:45:43	27s	K6JMQ (John)	31016
16:45:36	34s	I26CDI (Giuseppe)	2226
16:45:28	42s	CT2JSS (Mario)	26811
16:46:06	1s	KB4AUL (Frank M)	310
16:46:06	1s	KE4CWN (Johnny W)	3100
16:45:54	5s	EA3PJ (Toni)	214
16:45:48	9s	KB4AUL (Frank M)	310
16:45:54	2s	F1ZHI (Michel)	20815
16:44:36	1m19s	PD1HPB (Peter)	204
16:45:41	14s	KB9QDX (Ernest G)	3120
16:45:45	4s	2EDHKK (Steve)	4400
16:45:41	4s	M07MF (Martin)	2381

FT8 Digital Mode Shane Driskill KG5SRO

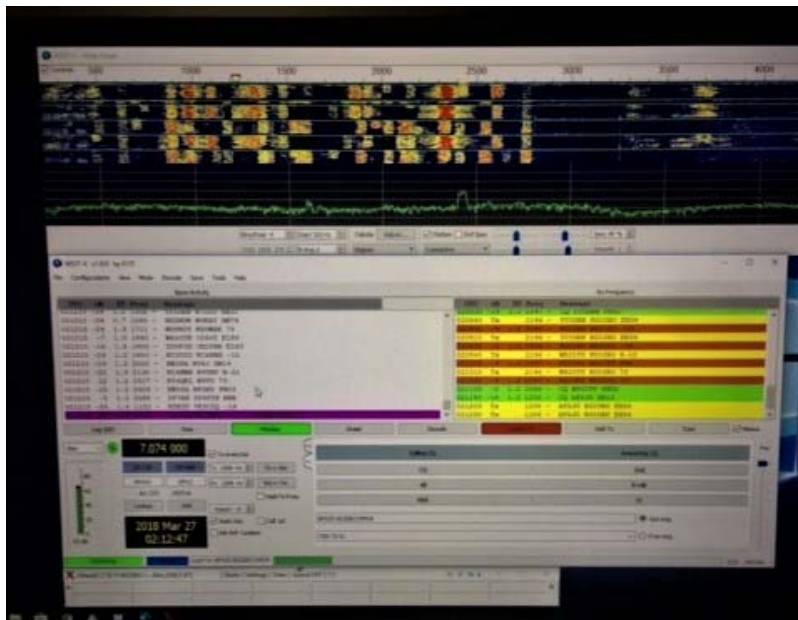
Digital modes, well I cant say much about them because the only one I have done so far is FT8. I began my journey by downloading WSJT-X then realized I needed to hook up a sound card to make it all work. So I borrowed a Signalink USB external sound card and started trying to get everything to read each other. Well after a while I suckered Keith KK5ZD to help get me hooked up. We did get it to work but only in simplex mode and FT8 runs in split mode. However we did make my first contact on simplex after a period of the words no one wants to see (RIG FAILURE). Glenn N5RN told me that for my ICOM 718 to sync to the computer I needed a CI-V interface which he let me borrow to see if it worked and it did...FT8 up and running.

At first I was not happy with this at all. Find someone you want to make a contact with, double click and wait. When the contact turns red your making a contact. Point and click, no conversation, no personal contact.

I continued to try it for another week and things started getting better, however, I couldn't put out more than 30 watts or the program would shut down. This became very frustrating and I almost quit messing with it all together. But after yet another brain storming session between Glenn & I we decided to try putting ferret cores on the in and out of the Signalink and ta da it worked. Now I can push 100 watts if I want to. Then it happened I made contact with two DX stations in one night and that was all it took. Still going strong LOL.

But the greatest thing since sliced bread was the program recommended by Glenn called JT Alert. After getting it synced with DX Lab and WSTJ-X, every contact made is automatically logged into my log book and uploaded to LOTW. WOW!!!

73 KG5SRO



PBARC Officers

President: Larry Carroll N5JWJ

Vice President: Shane Driskill KG5SRO

Treasurer: Glenn Wolf N5RN

Web Site: WWW.PBARC.NET

Email: See contact us on website

Web Site Updating

If there is anything you want to see on the website please contact us so we can make that happen. Glenn N5RN has added a links page to the list since the last newsletter. If there are any links you want to see added please let us know.

Sellers Corner

Shane Driskill KG5SRO

If you have a need for standout arms, tilt plates, or anything metal for your antenna tower please let me know and I'll see if I can come up with something to fit your needs. It will be a lot cheaper. My Email is stmd76@yahoo.com

