



# The Blue Ridge Echo .. Echo .. Echo..



*Official Transmitter of the Blue Ridge Amateur Radio Club - W4YK -*

## MEETING MINUTES FROM AUGUST, 2023

The August 1<sup>st</sup> meeting of the *Blue Ridge Amateur Radio Club (BRARC)* was held in person and streamed online via Zoom, and began at about 7:00pm with the Pledge of Allegiance.

### ATTENDANCE

25 Members attended (19 in person and 6 online), with 1 guest online. One of the members attending had joined tonight: Douglas Lambert [WD4MZC] of Hendersonville.

### TREASURER’S REPORT

July 1 – July 31, 2023

Balance as of 06/30/23		<b>\$ 7,083.67</b>
<b>Plus:</b> Deposits: (none)	\$ <u>0.00</u>	
	Total Income	<b>\$ <u>0.00</u></b>
	Sub-Total	<b>\$ 7,083.67</b>
<b>Less:</b> Expenses: Dinner with July speaker Marv Hoffman from Boone		\$ <u>85.38</u>
	Total Expenses	<b>\$ <u>85.38</u></b>
	<b>BALANCE AS OF 07/31/23</b>	<b>\$ 6,998.29</b>

### BUSINESS

#### *Upcoming Events*

The **BRARC Meeting** on **September 5<sup>th</sup>** will feature different Parks On The Air (POTA) / Summits On The Air (SOTA) setups and a discussion about POTA operations and logging. There will be multiple stations set up outside before the meeting starting at 6:00 to check out. We will also discuss NC Parks On The Air taking place September 9<sup>th</sup>/10<sup>th</sup>.

The **Tour d’Apple Bike Ride** will be **September 4<sup>th</sup>** from 8:00am until 4:00pm. Contact Danny Rector at [rectordl@bellsouth.net](mailto:rectordl@bellsouth.net) if you would like to help.

The **Hendersonville Christmas Parade** will be **December 2<sup>nd</sup>**. It will probably not be televised this year. There is a limit of 120 entries, and car clubs will be limited to ten cars each.



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**Henderson County ARES/AUXCOMM** meets the 4<sup>th</sup> Monday each month at 6:30pm at the State Medical Assistance Team (SMAT) warehouse at 518 S Allen Rd, Flat Rock.

The **Shelby Hamfest and ARRL NC Section Convention** will be Friday through Sunday, September 1<sup>st</sup>-3<sup>rd</sup> from 9am-5pm / 8am-5pm / 8am-1pm at the Cleveland County Fairground, 1751 E Marion St, Shelby, NC. Talk-in on 146.88- No Tone. See <http://www.shelbyhamfest.org/>

## *Meeting Minutes*

Zach Thompson [KM4BLG] thanked all who came to and supported this year's WCARS (Waynesville) Hamfest. He said it was hot, but went well. BRARC member Bill Ponder [KD4RAM] won a Door Prize of a dual-band DMR mobile transceiver.

James Reed [KK4JFO] and Carl Stover [KW4EO] gave a review of our equipment experience at Field Day. We had some equipment problems due to operator errors. One bandpass filter was burned in a manner that suggested transmission through it on the wrong band. Carl was able to repair the filter. The club's IC-718 wasn't working correctly by the end of Field Day, but Carl found that it was a matter of many menu items having been changed, and he returned it to the correct settings. He verified that the rig's power output is about 10% below original specifications, but said that could simply be due to its age. The IT-100 antenna tuner used with the IC-718 is no longer functioning, and Carl said it was beyond his abilities to repair it. He suggested we either have Icom repair it or that we replace it. Carl also looked at the interconnecting cables used between rigs, filters and tuners, etc. He said that several were abused and their connectors were no longer tight. Carl suggested that we review them all.

A recommendation was made at the meeting to buy a second Icom IC-7300 to replace the IC-718. The IC-7300 has a built-in tuner that will only handle up to a 3:1 SWR. Carl said that we should not use rigs at Field Day without an external tuner that will handle a 10:1 SWR. The recommendation was amended to also buy an appropriate tuner, with a total cost not expected to exceed \$1600. There was a quorum of full members at the meeting, and those present voted to APPROVE the recommendation to buy an Icom IC-7300 and appropriate tuner.

## **PRESENTATION**

Our presentation this month was by BRARC member Gary DePalma [AC8NE]. His topic was Vector Network Analyzers (VNAs). Gary said he'd be glad to email the presentation to anyone if they request it via an email to [ac8ne@gmail.com](mailto:ac8ne@gmail.com)

Gary gave an exceptional presentation with plenty of examples, data and (yes) math, but thanks to his manner and explanations, it was interesting and easy enough for all to understand. Email Gary at his email shown above, for the full program. Here's an outline of the topics he covered:

What Is a Vector Network Analyzer?

Examples of VNAs over the years, from \$150,000 down to \$50.

Types of Networks we can analyze in Ham Radio. Cables, Circuits, Amplifiers, etc.

Identifying the Problem to Analyze. There is lots of math being used in each of these measurements, but we let the computer in the device handle it all.

Types of Analyzers. The simplest is an SWR meter, which requires a separate transmitter and antenna. Next is an Antenna Analyzer. No transmitter is necessary, as the



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Analyzer itself transmits a small amount of RF energy. The most complicated is a VNA, which analyzes not only antennas but many types of circuits, cables, etc.

Gary then shared examples of analyzers showing their measurements, including some from our own Field Day antennas of this year.

### Credits and References

After the presentation, Gary had several examples of analyzers for those present to look over. The club thanked Gary for an outstanding presentation.

## MEETING ENDED

The meeting adjourned at 8:30 pm.

Minutes submitted respectfully by Steve Smith (KC5F)

## CALENDAR OF UPCOMING EVENTS

Date	Description
Sat, August 19	Informal Breakfast Get-Together – 9am, Ingles 625 Spartanburg Hwy.
Sat, August 19	License Exams – 9am by reservation, Ingles 625 Spartanburg Hwy.
Thu, August 24	BRARC Steering Committee Meeting – 7pm via Zoom.
Mon, August 28	Henderson County ARES/AUXCOMM – 6:30pm. Mountain Area Healthcare Preparedness Coalition warehouse at 518 S Allen Rd, Flat Rock.
Fri-Sun, Sept 1-3	Shelby Hamfest – Hamfest and ARRL NC Section Convention. (Hamfest info at <a href="http://www.shelbyhamfest.org/">http://www.shelbyhamfest.org/</a> )
Mon, September 4	Tour d’Apple Bike Ride – 8am-4pm – Contact Danny Rector
Tue, September 5	BRARC Meeting - In person in Jackson Park. In addition, you can still attend virtually. Latest instructions to login are on the BRARC website.
Sat, September 16	Informal Breakfast Get-Together – 9am, Ingles 625 Spartanburg Hwy.
Sat, September 16	License Exams – 9am by reservation, Ingles 625 Spartanburg Hwy.
Mon, September 25	Henderson County ARES/AUXCOMM – 6:30pm. Mountain Area Healthcare Preparedness Coalition warehouse at 518 S Allen Rd, Flat Rock.
Thu, September 28	BRARC Steering Committee Meeting – 7pm via Zoom.

## CLUB CALENDAR

The BRARC Club Calendar is on the BRARC website at <http://radioclub.org/> “Club Calendar”.

## AREA HAM RADIO NETS

FM NETS - 2 METERS		
BRARC Net (W4YK)	146.640 MHz / T91.5 H’ville	Sunday 8:00pm
Slow Scan TV Net	146.640 MHz / T91.5 H’ville	Sunday 7:00pm
Henderson County ARES Net	146.640 MHz / T91.5 H’ville	Wednesday 9:00pm



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Anderson Radio Club Net	146.790 MHz Pickens SC	Daily 8:30pm
Blue Ridge Traffic (SC)	146.610 MHz Caesars Head SC	Daily 9:00pm
Good Morning Net	146.910 MHz Asheville	M-W-F 9:00am
WCARS Information Net	146.910 MHz/ T91.5 Asheville	Monday 9:00pm
WCARS Simplex Net	147.525 MHz	Tuesday 8:30pm
Buncombe ARES Net	146.910 MHz / T91.5 Asheville	Wednesday 9:00pm
Transylvania ARC Net	147.135 MHz Brevard	Thursday 8:00pm
6600 Net	145.190 MHz Mt Mitchell	Saturday 9:00pm
Slow Scan TV Net	146.790 MHz (no tone)	Saturday 9:15pm
Oasis Shrine Net	145.190 MHz Mt Mitchell	Sunday 9:00pm
<b>FM NETS - 6 METERS</b>		
6 Meter Net	53.130 MHz / T100 H'ville	Friday 9:00pm

<b>HF NETS</b>		
NC Morning Net	3.927 MHz	Daily 7:45am
SATERN Net	14.265 MHz	Daily 10:00am
NC Evening Net	3.923 MHz	Daily 6:30pm
Tarheel ARES Net	3.923 MHz	Daily 7:30pm
K4UUQ Morning Net	7.228 MHz	M-Sa 7:00am/Sun 8:00
80 Meter Simplex Net	3.843 MHz	Thursday 9:30pm
Get Up and Go Net	28.350/28.360 MHz	Sunday 9:00pm

<b>DIGITAL MOBILE RADIO NETS</b>		
WNC Local DMR Net	WNC Local Talk Group (UHF)	Monday 7:30pm
High Country DMR Net	PRN Local Talk Group	Tuesday 8:00pm
WNC Net	WNC System Fusion YS24157	Wednesday 9:00pm
WNC DMR Net	WNC Talk Group (VHF/UHF)	Thursday 8:30pm

## BLUE RIDGE AMATEUR RADIO CLUB OFFICERS

Title	Name	Call Sign	Phone	Email
PRESIDENT	Bill Gunn	KB2GUN	704-934-1950	<a href="mailto:kb2gunb@yahoo.com">kb2gunb@yahoo.com</a>
VICE-PRESIDENT	James Reed	KK4JFO	828-698-3609	<a href="mailto:jshreed@bellsouth.net">jshreed@bellsouth.net</a>
TREASURER	Susann Swan	K9FMZ	828-747-2250	<a href="mailto:susann93@use.startmail.com">susann93@use.startmail.com</a>
SECRETARY	Steve Smith	KC5F	828-489-6637	<a href="mailto:kc5f@arrl.net">kc5f@arrl.net</a>