



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



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

## MEETING MINUTES FROM JULY 2, 2024

The July 2<sup>nd</sup> meeting of the *Blue Ridge Amateur Radio Club (BRARC)* was held in person and streamed online via Zoom, and began at 7:00pm with the Pledge of Allegiance.

### ATTENDANCE

30 Members attended (19 in person and 11 online), plus 3 guests in person and 2 online.

### TREASURER’S REPORT

June 1 – June 30, 2024

Balance as of 05/31/24		<b>\$ 6,673.48</b>
<b>Plus:</b> Deposits: Dues 2024	\$ 100.00	
Donation from Blue Ridge Bicycle Club	<u>500.00</u>	
	Total Income	<b>\$ 600.00</b>
	Sub-Total	<b>\$ 7,273.48</b>
<b>Less:</b> Expenses: Field Day Supplies from Sam’s	\$ 230.03	
Field Day Food – Harry’s	640.50	
Steve Smith – ARRL Equipment Insurance	<u>90.23</u>	
	Total Expenses	<b>\$ 960.76</b>
	<b>BALANCE AS OF 06/30/24</b>	<b>\$ 6,312.72</b>

### BUSINESS

#### *Upcoming Events*

The BRARC will coordinate the Hendersonville Merchants and Business Association’s **Fourth of July Parade** on Thursday, July 4<sup>th</sup>. We gather at 8am to stage the entries, get them on the parade route in order and head them out for the 10am parade. Susann Swann [K9FMZ] is coordinating communications. It’s lots of fun, and you only need a handheld 2m radio.

The Western Carolina Amateur Radio Society’s **WCARS Hamfest** is Saturday, July 20<sup>th</sup> with gates open at 8am. (6am for vendors.) Smokey Mountain Event Center, 758 Crabtree Road, Waynesville, NC. Talk-In: 147.39+ PL 94.8



## *Meeting Minutes*

### **PRESENTATION**

Our presentation by BRARC member Gary DePalma [AC8NE] was on Software Defined Radio. For tonight, Gary limited the scope to Software Defined Receivers. He covered the following:

- What is a Software Defined Radio?
  - Main Functions of a Radio Receiver
  - Superheterodyne Receivers and history
  - First SDR – 1980's
  - Sampling a signal, including Under Sampling for Aliasing (can be good or bad)
  - Limits to Ideal SDR Designs – Digital Signal Processors to the Rescue
- SDR for Ham Radio
  - Early Hybrid SDR - TenTec Eagle Implementation
  - Boosts in computing power enabled Ideal Direct Sampling SDR like Flex 6700
  - Cutting costs allowed lower cost receivers like SDRPlay RSP1A. (At meeting.)
  - You can have a new radio just by changing the software. The SDRPlay can be a receiver or Spectrum Analyzer just by loading different computer software.
  - Cost-cutting by using RF filters and Aliasing, as in the IC-7300. A single part in the IC-7300 costs \$288, but Icom can sell the radio for only \$1000-\$1400.
- Advantages and Disadvantages of SDR Radio.
  - Advantages: Field upgradable (the software is the radio). Alignment ease and consistent performance. Little or no aging and degradation over time. Possible lower cost. Multiple simultaneous receivers. Almost no linearity issues. Near ideal filters, mixers, etc. are possible.
  - Disadvantages: Digital noise – truncation, ADC linearity, quantizing. Pipeline delay can make real-time break-in CW difficult.

Gary said he'd be glad to email the PowerPoint presentation to anyone if they request it via an email to [ac8ne@arrl.net](mailto:ac8ne@arrl.net)

### **MEETING ENDED**

The meeting adjourned at about 8:15pm.

Minutes submitted respectfully by Steve Smith (KC5F)



## W4YK FIELD DAY 2024 SCORE SUBMISSION

Field Day Base Points		
	CW	Phone
QSO's	401	311
Mode Mult	x2	x1
Pwr Mult	x2	x2
Points	1,604	622
Total Base:	<b>2,226</b>	

Class 3A, 100 watts or less, 712 QSO's. **2,226** Base Points.

(Our digital station made 40 Field Day QSOs, but the log files couldn't be extracted from the personal computer used, and they were not included in the final score.)

Bonuses: 100% Emergency Power (3 transmitters @ 100 points). Media Publicity (100). Public Location (100). Formal Message to ARRL SM (100). W1AW Field Day Message (100). Formal Messages Handled (10 @ 10). Natural Power QSOs Completed (100). Site Visit by Invited Elected Government Official (100). Site Visit by Invited Served Agency Official (100). Youth Participation (2 @ 20). Educational Activity (100). Social Media (100). Safety Officer (100). GOTA Coach (100). GOTA QSOs (19 @ 5). Submitted Entry Online (50).

Claimed Bonuses: **1,685** points. Total Claimed Score: **3,911**.

(In 2023, W4YK had 1,155 QSO's (525 CW, 630 Phone) for a 3,360 Base Score, with Bonuses of 1,250 points and a Total Score of 4,610.)

## VOLUNTEER(S) NEEDED

For a few months, now, I have set up and run the projector, camera, microphones, speakers, computer and Zoom streaming at the BRARC meetings. (Not always successfully, but that's another matter!) I was called out of town on the day of the May meeting and there was no one able to fill in, so we had no Zoom streaming. I won't be here for the October meeting, so I'm asking if someone else can fill in. The equipment is in the club shack, although I also use my phone as a hotspot to handle the streaming, and normally just use my own computer. If you can help out at least at the October meeting, but possibly during other meetings, as well, please let me know. If you don't have a phone with a hotspot option (or a hotspot or unit like a T-Mobile Wireless Home Internet device), we'll need to work that out, too. Thanks – Steve, KC5F. [kc5f@bellsouth.net](mailto:kc5f@bellsouth.net)



## ITEMS FOR SALE

High Sierra antenna. I know it does 40m it should be 10 through 40. For sale with toggle switch, the wires, the hook to trailer hitch with Pole welded on it. Everything for \$200.



I also have 3 Hamshack Hotline phones. \$20 each.



Bill Gunn, KB2GUN. 704-934-1950, [kb2gunb@yahoo.com](mailto:kb2gunb@yahoo.com)

MFJ-1606T 6M Mobile Antenna. Never used. I'll take \$20 for it.

John Johnson, KT4JJ. 828-817-6434, [john.johnson153@gmail.com](mailto:john.johnson153@gmail.com)



## CALENDAR OF UPCOMING EVENTS

Date	Description
Sat, July 20	<b>Informal Breakfast Get-Together</b> – 9am, Ingles 625 Spartanburg Hwy.
Sat, July 20	<b>NO LICENSE EXAMS</b> at Ingles. The VE's will be at the Hamfest giving exams.
Sat, July 20	<b>WCARS Hamfest</b> – 8am, Smokey Mountain Event Center, Waynesville.
Mon, July 22	<b>Henderson County ARES/AUXCOMM</b> – 6:30pm. Mountain Area Healthcare Preparedness Coalition warehouse at 518 S Allen Rd, Flat Rock.
Thu, July 25	<b>BRARC Steering Committee Meeting</b> – 7pm via Zoom.
Tue, August 6	<b>BRARC Meeting</b> - In person in Jackson Park. Also streamed via Zoom.
Sat, Aug 17	<b>Informal Breakfast Get-Together</b> – 9am, Ingles 625 Spartanburg Hwy.
Sat, Aug 17	<b>License Exams</b> – 9am by reservation, Ingles 625 Spartanburg Hwy.
Thu, Aug 22	<b>BRARC Steering Committee Meeting</b> – 7pm via Zoom.
Mon, Aug 26	<b>Henderson County ARES/AUXCOMM</b> – 6:30pm. Mountain Area Healthcare Preparedness Coalition warehouse at 518 S Allen Rd, Flat Rock.
Tue, Sept 3	<b>BRARC Meeting</b> - In person in Jackson Park. Also streamed via Zoom.

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

## AREA HAM RADIO NETS

<b>FM NETS - 2 METERS</b>		
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
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
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



# Blue Ridge Amateur Radio Club

<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)	Wednesday 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	Paul Nice	KQ4ALD	703-657-9783	<a href="mailto:paul.nice@verizon.net">paul.nice@verizon.net</a>
SECRETARY	Steve Smith	KC5F	828-489-6637	<a href="mailto:kc5f@arrl.net">kc5f@arrl.net</a>