



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



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

MEETING MINUTES FROM NOVEMBER, 2022

The November 1st 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. The minutes from the October meeting were approved by the membership.

ATTENDANCE

30 Members attended (20 in person and 10 online via Zoom) - a quorum is currently 18 Members. We had 5 guests (2 in person who both joined at the meeting, plus 3 online).

TREASURER’S REPORT

October 1 – October 31, 2022

Balance as of 09/30/22		\$ 6,295.44
Plus: Deposits: 2022 Dues	\$ 40.00	
2023 Dues	40.00	
Donation	<u>30.00</u>	
	Total Income	\$ 110.00
	Sub-Total	\$ 6,405.44
Less: (No expenses during October 2022)	<u>\$ 0.00</u>	
	Total Expenses	\$ 0.00
	BALANCE AS OF 10/31/22	\$ 6,405.44

BUSINESS

2023 Officer Election

The club elected officers for 2023 at this meeting. Per the By-Laws, the Steering Committee proposed the following slate of nominees: President – Bill Gunn [KB2GUN]; Vice-President – James Reed [KK4JFO]; Treasurer – Susann Swan [K9FMZ]; Secretary – Steve Smith [KC5F]. There were no additional nominees from the floor, and it was moved, seconded and approved by acclamation to elect the slate of officers for 2023 as proposed. The officers elected will take office at the meeting in January. The officers will select two club members who, with them, will compose the Steering Committee, which “shall conduct the business of the Club and make policy and other decisions.” (See *BRARC Info/BRARC By-Laws* on the website for all the details!)



Blue Ridge Amateur Radio Club

Equipment Purchase for Zoom Meetings

Zach Thompson [KM4BLG] last month shared a new audio-visual setup for the club to try during the meeting. It was a combination of a lapel microphone for our speaker and a room microphone which can focus on individuals with noise cancellation, as well as a different web camera. Those on Zoom said the setup worked very well. The Steering Committee decided to purchase a setup of a web camera, room microphone and a lapel microphone like the setup provided by Zach, pending club approval. The expected cost would be about \$400-500. At this meeting it was moved, seconded and approved by acclamation to purchase similar equipment. The Treasurer will make the purchase.

Upcoming Events

Ronnie Parham [K2SST] reminded us of the club visit on **Wednesday, November 9th** to **PARI**, the **Pisgah Astronomical Research Institute** in Rosman. (See <https://www.pari.edu/> for more info on PARI.) The BRARC will pay the cost of the tour for paid club members. It will be \$15 for each non-member. The tour will be from 10:00am-Noon, and those wishing to carpool can meet at the parking lot of the shack at 8:00am to share the over one-hour ride and get there in time for orientation before the tour. Ronnie also reminds everyone to bring cameras. There's lots to see. Contact Ronnie at ronk2sst@bellsouth.net for more information or to sign up.

Carl Stover's [KW4EO] **classes on electronics and radio** on **Thursdays**, October 13th and 20th were well-received. The setup in the club shack was OK, but future classes will need a larger space. Marty Wood [KI4ZDV] helped Carl secure a classroom at the Salvation Army, on the left as you enter. Carl is planning classes there on **November 10th** on CHIRP programming of handheld radios, and on **November 17th** on basic antennas for beginners, each going from **6:30-8:30pm**. The classes will be informal, questions at any time, no charge, and no Amateur Radio License is required. The series will continue in January.

Danny Rector [NA4X] shared that the **Hendersonville Christmas Parade** this year will be **Saturday, December 3rd** and will be an evening parade kicking off from the Hendersonville High School area at **6:00pm**. We will meet at **2:30pm** to be ready to get floats, bands and walkers in place. This year we need more help than ever before, with the possibility of at least five sit-down jobs, if you're concerned about standing for that long. The parade is televised this year, which means we need to start on time and have units in the correct order without gaps. (We don't walk the parade route – we only get it set up and out on time and in order.) It was moved, seconded and approved to purchase 20 Safety Light Wands at a total cost of \$120 for visibility and directing parade units, as sunset is at 5:17pm that evening.

For the Christmas Parade we will use 146.58 MHz simplex as our primary frequency, with 146.52 MHz as a backup. We'll have a net control which will be monitoring both frequencies. Carl Stover [KW4EO] has offered to help anyone with a **2-meter talkie check-out** for frequency setup, basic functioning, etc, but asks that you get with him before the date of the parade.

The **BRARC** December meeting will be a **Christmas Dinner** on **Tuesday, December 6th** at **6:00pm** at the **Golden Corral** in Hendersonville. This takes the place of our regular meeting, and will only have a bit of business before we chow down. We'll also have our regular Zoom meeting set up if you want to join us vicariously.



Blue Ridge Amateur Radio Club

Reports / Notices

Club T-Shirts. Marty Wood [KI4ZDV] is taking orders for club t-shirts, to be ordered following the December 6th dinner meeting. They will be similar to those we've had at Field Day the past two years, with W4YK on the front, but the back will have the BRARC logo. They will cost \$10 for short sleeve, \$12 for long sleeve and \$20 for hooded. Marty will have a few samples for viewing (and for sale) at the December dinner meeting. Orders should be ready by the first of the year. Contact Marty at woodmarty@rocketmail.com for more info.

PRESENTATION

Craig Vogler was our presenter tonight, joining us via Zoom. Craig is the Director of Satellite Engineering at Iridium Communications, a global satellite communications company. Iridium is a constellation of 66 inter-connected low earth orbit satellites operating at an altitude of 780 km (485 miles) that provides 100% Earth coverage for critical communications.

The system was designed to have 77 satellites, and that was the source of the name – the element Iridium has atomic number 77. However, before deployment they reshaped the beams of ground coverage and were able to get the same coverage with 11 less satellites. Craig joked that nobody wanted to rename the system after the element with atomic number 66: Dysprosium.

Iridium satellites are considered Low Earth Orbit (LEO), but they are much higher than Space-X satellites or the International Space Station. They use L-Band frequencies (around 1,600 MHz), which are more resilient to weather than higher bands used by geostationary satellites. The constellation of 66 satellites provides 100% global service area to 86.4° inclination north and south. All are interconnected as a mesh network, providing optimization and redundancy, with a network of ground stations and gateways controlling the hand-offs of calls and data as the satellites pass overhead. Any one satellite only stays in view for seven minutes at the equator.

Along with handheld phone calls and data terminal communications for millions of subscribers, the system is used by many other devices, tracking vehicles and shipments, providing remote monitoring of weather and ocean conditions from ocean buoys, tracking flights and ships around the world, and many other services.

The club thanked Craig for an interesting and informative presentation.

(Thanks to BRARC Treasurer Susann Swan [K9FMZ] for arranging this month's speaker!)

MEETING ENDED

The meeting adjourned at about 8:30pm.

Minutes submitted respectfully by Steve Smith (KC5F), Secretary.

UPDATE ON CARL'S CLASSES

The Chirp class was held in the Salvation Army classroom on Thursday evening Nov 10th. This was our first class held there and it is a very nice place for classes of 10-20 people. We had 8 attendees - OK for a rainy evening.

Basic Antenna Theory will be covered on Thursday, Nov 17th from 6:30 to 8:30 again at the Salvation Army classroom. Resonance, impedance, radiation resistance, antenna gain, antenna patterns, and what affects each of these will be covered. The use and usefulness of the SWR meter will be covered – both Good and Bad !



Blue Ridge Amateur Radio Club

Everyone is welcome, club membership is NOT required.

No classes in December. In January we will resume classes. Please send me suggestions. Some classes are in development, but more ideas would be helpful.

Carl, KW4EO carl.stover@gmail.com 404-872-3969

CALENDAR OF UPCOMING EVENTS

Date	Description
Thu, Nov 17	Class on Basic Antenna Theory – 6:30pm, Salvation Army.
Sat, Nov 19	Informal Breakfast Get-Together – 9am, Ingles 625 Spartanburg Hwy.
Sat, Nov 19	License Exams – 9am by reservation, Ingles 625 Spartanburg Hwy.
Thu, Nov 24	NO BRARC Steering Committee Meeting this month
Mon, Nov 28	Henderson County Ares/AUXCOMM – 6:30pm. Mountain Area Healthcare Preparedness Coalition warehouse at 518 S Allen Rd, Flat Rock.
Sat, Dec 3	Hendersonville Christmas Parade – 6:00pm. First evening Christmas parade! Meet at 2:30pm. Contact Danny, NA4X – we need lots of operators!
Tue, Dec 6	BRARC Christmas Dinner – 6:00pm. Golden Corral, US-64 in Hendersonville. In place of our regular meeting, but you can still attend virtually for a bit of business and lots of fun. Instructions to login are on the BRARC website.
Sat, Dec 17	Informal Breakfast Get-Together – 9am, Ingles 625 Spartanburg Hwy.
Sat, Dec 17	License Exams – 9am by reservation, Ingles 625 Spartanburg Hwy.

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
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



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FM NETS - 6 METERS		
6 Meter Net	53.130 MHz / T100 H'ville	Friday 9:00pm
FM NETS - 220 MHz		
Mount Mitchell 220 Net	224.540 MHz Mt Mitchell	Monday 8:00pm
Mount Pisgah 220 Thurs Net	224.260 MHz Mt Pisgah	Thursday 8:00pm

HF NETS		
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

DIGITAL MOBILE RADIO NETS		
DMR Net	WNC Local Talk Group	Monday 7:30pm
DMR PRN Net	PRN Local Talk Group	Tuesday 8:00pm
WNC Net	WNC System Fusion YS24157	Wednesday 9:00pm
DMR Net	WNC Net Talk Group	Thursday 8:30pm

BLUE RIDGE AMATEUR RADIO CLUB OFFICERS

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