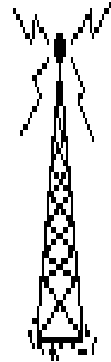


The Blue Ridge Echo . . Echo Echo



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

Volume 23, Number 5 - May 2010

The Prez Sez — Wow! It was great to finally have a meeting after two months of snow storms. **Now in just the blink of an eye we are having forest fires because of dry conditions.** We want to encourage you to keep your radios in good condition and charged up in case of a local emergency. I just want to thank Duke for running the Dupont Half Marathon and Gene for running the MS Walk. I really appreciate these guys' taking the time to organize and run these events and I also want to thank all those who volunteered to help.

Our next event is the Biltmore Endurance Ride on the Biltmore Estate. **We could really use some help on this event.** If you would like to help you must contact me ahead of time so that I can get your name on a list to get into the estate. My email address is rectordl@bellsouth.net and my phone number is 828-329-8863. I know the people that we serve at these events are very appreciative of what we do. Thank you and we will see you at the May 4th meeting.

73,
Danny Rector

Our Next Meeting: May 4, 2010

7:00 pm – Duke, W4DK, Radio in Liberia

MEETING MINUTES OF APRIL 6TH, 2010 — It was good to see everyone at the meeting, especially our two visitors. We had Ora, friend of Ronnie, K2SST; and Hal Martin, KI4RD. We had a total of 27 present for the meeting. This was the first meeting we have had since January, due to inclement weather.

The minutes were approved as published in the ECHO. Lil Clark, KG4GFP, gave the treasurer's report, and this was approved also. Lil reported a total of \$1,598.60 in the treasury at the time of the meeting.

Danny, AJ4HZ, opened the meeting with the group reciting the pledge of allegiance. Next came announcements and a call for volunteers for the upcoming public service events. The field day activities will be at Fletcher Park, Fletcher, N.C. on June 26th and 27th. A thunder and lightning show will be there to entertain us. A vote was taken to buy band-pass filters for the 10, 15 and 160 meter bands. The motion passed.

Michael, AI4GR, gave us an overview of the N.C. QSO Party. Our club did well this year, and Michael emphasized that the roving score really helped our over-all score. Our club has been participating in more contests, and is getting better at it!

Upcoming events:

Dupont half-Marathon	April 10	Duke Knief, W4DK
M/S Walk	April, 17	Gene Mathis, KG4SXE
Biltmore Horse Endurance Run	May 1	Danny Rector, AJ4HZ Dick Smith, W4RSS
Field Day	June 26 and 27	
July 4th Parade	July 4 th	Jonathon Williams, KF4NVX

Rusty Jones, KS4JGQ, presented an excellent PowerPoint program on RTTY, including what equipment is needed in the shack to operate in this mode. Rusty explained that RTTY is a continuous carrier that shifts between two frequencies. Basically, what is needed in the modern day shack to operate RTTY are the transceiver, a computer, and a sound card interface to connect the computer sound card to the radio. It is also very helpful to have rig control that can be operated from the computer. Rusty shared several URLs to learn more about RTTY procedure, software, and logging software. He said it was one of his most favorite ways to contest.

Fifty-Fifty was won by Sid Hendricks.

Meeting adjourned.

Respectfully submitted,
Sid Hendricks, W4IOE

BRARC Helps the MS Walk – On Saturday, April 17th, Gene, KG4SXE, organized our assistance with the Multiple Sclerosis Walk in Hendersonville. We operated from 2 rest stops, the home location at the elementary school, and the SAG vehicle. The weather was delightful, and all went well. Participating were:

Michael, AI4GR	Wayne, KF4HOG	Bob, KD4OKT
George, KG4LQX	Gene, KG4SXE	Harry, N4ZVX
Frankie Ryttenberg		

The rear row of the photo shows Harry, Frankie, George, Bob, Wayne; kneeling in front is Gene.



Echoes from Bearwallow Mountain — We all use the 146.64 MHz, WB4YAO/R, repeater that communicates with us from atop Bearwallow. We use it for Nets; it helps us assist with parades, and bicycle rides; and it keeps us in touch with each other. We know it's way up there at 4,232 feet. But how did it get there? And how does it operate?

To get some answers, your reporter met with Martin Harris, W4FOT, at his home in Etowah. Martin maintains the repeater, and controls it from his shack. As can be seen in the figure, his ample radio gear also is used to chase DX.

An informal group of local amateurs placed the repeater on the mountain in the early 1970s. The trustee for the repeater was, and still is, Dan Kimball, WB4YAO. Martin was in the original group and served as control operator. Its call sign was WR4ALC until the late '70s when the FCC dropped the WR series of repeater calls. It then took on Dan's call of WB4YAO/R.



Output power from the 120W repeater is set to about 70W. It feeds 50' of hard line driving a vertical antenna on a 40' tower. Should commercial power be lost, there is battery back-up which lasts 2 or 3 days, depending on usage. Transmitter power reduces to 10W during those occasions. The photo on the left shows the outside of the air-conditioned container housing the electronics, and affords a good view of the tower with its 2m antenna on the right.



Inside the container are the repeater and ancillary equipment that keeps it going. This includes a 70cm link to Martin's shack to control the repeater. The link uses a vertical Yagi mounted about midway up the tower. A separate 70cm link is used to receive IRLP signals from an internet connection on a Linux-based computer in Martin's shack. The downlink to the computer is via a 2m link. All this RF linking is needed because the mountaintop lacks an internet portal.



There are so many functions at the repeater site (some of them not covered here) that a rather complex control network is needed. It's the heart of the installation. Ever resourceful, when no commercial controller proved suitable Martin designed, built, and installed his own. Wow!

Sweepstakes Results are In – The ARRL has finalized results for the 2009 November Sweepstakes. We competed from the shack using W4YK in the Multi category. Posted results reflect ARRL's computer-driven log-check program which verifies that we correctly recorded our contacts. It checks for busted QSOs where we noted the wrong call (these carry a penalty), Not-In-Log reports where we are not in the called log, and incorrectly copied exchanges.

After all corrections, we are credited with 325 QSOs, and 75 multipliers. (We missed only 5 mults.) Total score was 48,750. This placed us #106 of 192 entries in our category. Better yet, we came in second of the 5 Multi entries in North Carolina.

We could have scored higher, but the Log Check Report uncovered a 6.5% error rate. This is an improvement over last year's 7.5%, but doesn't reach even the average Multi error rate of 5.2%. We continue to improve year-over-year, and a focus on accuracy should make next year even better.

Mark Your Calendar —

1 May	– Biltmore Ride
26 – 27 June	– Field Day
4 July	– Hendersonville Parade
18 September	– Picnic

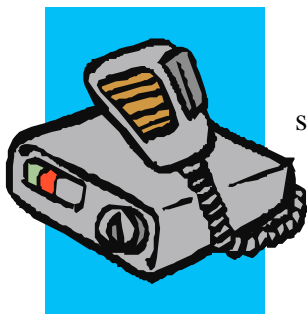
Please notify the editor if dates change, or as new events arise.

ITEMS FOR SALE

- 1) Yaesu FT 900 Transceiver and FP 800 Power supply **\$450.00**
- 2) Ameriton AL 80B Amplifier **\$800.00**
- 3) Kenwood MC 60 Microphone **\$75.00**
- 4) MFJ 1621 Antenna System 40/10 mtrs **\$40.00**
- 5) Daiwa CN 720B SWR meter **\$75.00**

Contact **Danny**, rectord@bellsouth.net

If you have items for sale, or need something, notify the editor.



PTT ■■■■ .. Our club again has been awarded Special Service Club status by ARRL. We will hold that designation until December 2011, when we must reapply.

The Monday night 440 Net, 442.225 MHz, and the Friday night 6m Net, 53.63 MHz, have shifted to their summer schedule. They will now start at 9 pm. These are fun nets, so join in.

Our own Michael, AI4GR, has been awarded a certificate for the 2009 CQ World-Wide WPX contest. He won the single-op, wire antenna category for Call Area 4.

— AI4GR is clear.

Blue Ridge Amateur Radio Club
Points of Contact

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President:
Danny Rector, AJ4HZ - 828-698-3231
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Vice President:
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828-553-8116 will@willstech.com
VE Testing: Sid Hendricks, See above
Membership: - Lil Clark, See above
Public Relations: Dick Smith, See above
Trustee: Steve Smith, KC5F - 828-697-6388
kc5f@arrl.net

Financial Report: April 2010 - Lil Clark

Balance as of 3/31/10	\$ 1827.12
Plus: Deposits	110.00
Less: Expenses	<u>279.52</u>
Balance as of 4/20/10	\$ 1657.60

\$

Purpose: The purpose of the club is to further the exchange of information and cooperation between members, to promote radio knowledge, fraternalism and individual operating efficiency, and to promote and conduct programs and activities as to advance the general interest and welfare of amateur radio in the community.

Elmers: We have many "Elmers." An Elmer is a knowledgeable amateur radio operator who is willing to help new hams and "students" with questions or procedures and help them to understand more about the hobby.

Volunteer Examinations: Once per quarter, our volunteer examiners provide an opportunity to get your amateur license or to upgrade your present status.

NEXT SESSION: May 8, 2010

Contact Sid, W4IOE, for details.

Classes: We occasionally have classes so you can learn how to get your own amateur radio Technician class license.

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A message from the editor..... Articles and submissions for the Echo should be sent by the 15th of each month.

If you have something to add to our newsletter, send it to: Michael, AI4GR.

Call me at: 828-891-8970 or E-mail me at:
ai4gr@arrl.net

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Club Information

Address: Blue Ridge Amateur Radio Club
PO Box 831, Horse Shoe NC 28742
Website: <http://www.radioclub.org/>

Dues: Our dues cover the period from January through December. Dues for additional related members in the same household as a Full or Associate member are one-half the applicable rate. Dues for full-time students of an accredited school are one-half the regular rate as long as student status is maintained. New members joining between July and December pay one-half the applicable rate for membership through the end of the year. This year's dues are \$20.00 per person; \$10.00 per additional family member.

Please send your renewals to: Lil Clark, 15 Autumn Glen Ct., Brevard, NC 28712

Meetings: We meet at the Stoney Mountain Activity Center at 7:00 pm on the first Tuesday of each month.

Nets and On-The-Air Activities

Net	Freq / PL	Day	Time
<i>BRARC Net</i>	146.640 MHz/ 91.5	Sunday	8:00 PM
<i>Henderson County ARES Net</i>	146.640 MHz / 91.5	Wednesday	8:30 PM
440 Rag Chew	442.225 MHz/107.2	Monday	9:00 PM
Red Cross Communicators	146.640 MHz/91.5	Sunday	9:00 PM
Mount Mitchell 6m Net	53.630 MHz/100	Friday	9:00 PM
QCWA Chapter 76	3.625 MHz (SSB)	Saturday	8:45 AM
Buncombe ARES Net	146.910 MHz/ 91.5	Wednesday	9:00 PM
Good Morning Net	146.760 MHz	M-W-F	9:00 AM
WCARS Info. Net	146.910 MHz/ 91.5	Monday	9:00 PM
6600 Net	145.190 MHz	Saturday	9:00 PM
Blue Ridge Traffic (SC)	146.610 MHz	Daily	9:00 PM
Mount Pisgah 220 Net	224.260 MHz	Sunday	9:00 PM
Mount Mitchell 220 Net	224.540 MHz	Monday	8:00 PM
Rutherford County ARES Net	147.240 MHz/ 94.8	Wednesday	8:00 PM
Tarheel Emergency Net	1.943 MHz (SSB)	Daily	7:30 PM
NC Morning Net	3.926 MHz (SSB)	Daily	7:45 AM
SATERN Net	14.265 MHz	Daily	10:00 AM
NC Evening Net	3.923 MHz (SSB)	Daily	6:30 PM
Carolinas Slow Net	3.571 MHz (CW 5-8 wpm)	Daily	8:00 PM
Carolinas Net (Late)	3.573 MHz (CW 15-18 wpm)	Daily	10:00 PM
Carolinas Net (Early)	3.573 MHz (CW 20-22 wpm)	Daily	7:00 PM

If this information has changed, please contact Michael at ai4gr@arrl.net.



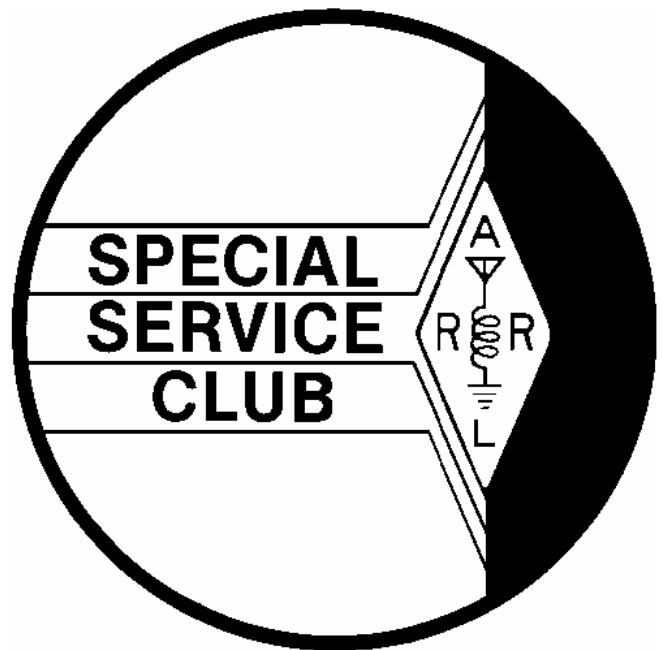
Club Meeting Tuesday
May 4th, 7:00 pm
Stoney Mountain Activity Center



Subsequent club meeting
June 1st, 7:00 pm
Stoney Mountain Activity Center



Henderson County ARES
Training Session
Fourth Monday of month
Etowah Lions Club, 7pm



– Find us on the web at < <http://www.radioclub.org> > –