

W0BLK
BLACK HILLS AMATEUR RADIO CLUB, INC

3288 Sandstone Lane
Rapid City, SD 57701-5388

Call to Order: The BHARC meeting was called to order at 7:00 pm on 21 April 2023 by President Ryan Lindblom KE0LXT. The meeting was held in the Electrical Engineering/Physics building at the South Dakota School of Mines and Technology, room 208. The online GoToMeeting was offered as an option to participate in the meeting.

The following attended the meeting in-person:

Ryan Lindblom KE0LXT
Andy Pattantus KF0ARA
Chris Jaques KD0RAS
Bob Henriksen KF0AM
Bianca Bidovska KF0KJZ
Jim Woods N0NAC
John S. Wilson W8JSW
Don Kendall N1NOX
Tom Fontaine KE0EYN
Lee Boyles K0LGB
Mike Key K0MDK
Janet Schmidt - no call sign, aspires to get license, Mike's Mom
Delbert Long KD0AYN
Bruce Conlee K0NLE
Gary Peterson K0CX
Betty Rush KA7PJQ
Dave Minnick N9FI
Larry Broomfield KF0LUT
Martin Kocanda WV9M
Nathan Purdy KF0FLB
Larry Brock N0LRB
Lee Boyles K0LGB
Scot Dannenbring WA0SD
Marlene Dannenbring KB0LSC

The following attended the meeting by GoToMeeting:
No remote attendees

Introductions - Each person introduces themselves.

Treasurer's Report: Chris Jaques KD0RAS provided the treasurer's report by email:

Current Balances:

Regular Share:	\$520.33
Checking:	\$2,824.09
14 Month CD:	\$17,237.17
QCWA:	\$353.84

2 outstanding checks, not cashed yet.

\$28.10 to bradfield

\$299.93 SDSMT

Secretary's Report: Andy Pattantyus, KF0ARA sent the minutes from the March meeting to the club members prior to this meeting.

Lee Boyles K0LGB moved, Mike Key K0MDK seconded, to approve the Mar 2023 minutes and the Treasurer's report. Vote: none opposed, motion approved

Committee Reports:

Engineering/Technical Committee: Mike Key

Mike Moore and Mike Key went to the clubhouse last week. MM provided a list of committee members. Don Kendall has a question. Echolink is not working.

Public Relations and Recruitment Committee: Don, Betty and Lee

Betty reports. Last month did the Boy Scouts.

May 6th, VE testing 333 West Blvd. Home Slice, 9:00am

Activities Committee: Ryan Lindblom KE0LXT summarizes planned activities and dates

April 22nd Saturday VHF UHF QSO party 1pm to 4pm, Chris posted the rules and logsheets

May 13th - Fox Hunt

June last weekend BH 100 and Field Day, cookout at the clubhouse

July 8th Tailgate Party at RObbinsdale

July 2nd weekend in July SOTA

Aug 1st weekend 14,000 ft

Aug - Club Build Date

Sept - Veterans March and Annual Meeting

Oct - SD QSO party

POTA on HF because 10 contacts are needed

Terry is seeking volunteers for each event

Old Business:

No old business

New Business:

Weather Service. Realtime, 4 operators. Don Kendall, Nathan Purdy, Don Jarvinen, Ryan Lindblom. When the notice comes, start listening, damage reports, hail, 3 inches in half hour. Forward to the weather service. Don said, did not want "A bit of heavy rain." Need to be specific. They want info on Southern Hills. RC covers West to Gillette, WY,

New Member Applications:

Larry Broomfield KF0LUT. Got license in February. 40 year goal. Shout out to Betty. Betty reached out with encouragement. Born and raised in Kansas. Military for 26 years, in special Ops, and operated radio, got a degree in meteorology. Satellite, digital packets at 300 baud. Look forward to being an active member. Studying for General Class, studying code. Most interested in QRP, and public service. Shout out to Delbert. Old Kenwood, don't plug it in. Made the first contact.

Chris Jaques KD0RAS moves, and Bob Henriksen KF0AM 2nds

Vote: none opposed, motion approved

Bob Franson KD0USN silent key, passed away at 4:45 am this morning. Hospice 5 days ago.

Adjourn:

Andy Pattantysus KF0ARA moved to adjourn the meeting and Nathan Purdy KF0FLB 2nds

Vote: none opposed, motion approved

The meeting was adjourned at 7:16 pm.

Andy Pattantysus, KF0ARA

BHARC, Secretary

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Program - Martin Kocanda - Antenna Design and Modeling

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73 ohms is the characteristic impedance of a dipole in free space

Using EZNEC pro to model antennas, free at EZNEC.com

Larger diameter elements give a broader bandwidth

Idea behind modeling is experimentation

Vertical element 3" diameter

Cubical Quad - Martin's favorite

Loop is 1 wavelength, set up for 15m

2m vertical

6mm $\frac{1}{4}$ ' vertical section

Nice and flat

Antenna is too long

Modeling gets you fairly close

Dipole should be mounted half wavelength above ground