

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 16 Jan 2026 by President Ryan Lindblom KE0LXT. The meeting was held in the EE/Physics Building at the South Dakota School of Mines and Technology, room 251A.

The following attended the meeting in-person:

Gary Peterson K0CX
Andy Pattantyus KF0ARA
Bob Henriksen KF0AM
Steve Maro K2WRM
John Murphy AJ0GM
Arie Lecroix KF0LVF
Delbert Long KD0AYN
Jim Larkin KF0TSF
Jeff Larus KF0TSG
David Minnick N9FI
Jon Lambert (new to the club)
Ryan Lindblom KE0LXT
Eric Neumann N4QFD
Larry Broomfield AC0WT
Larry Brock N0LRB
Mike Key K0MDK
Terry Fuller AD0HL
Chris Jaques KD0RAS

Introductions: Each attendee introduces themselves.

Secretary's Report:

Working on the signature sheet for the Black Hills Federal Credit Union

Sent out minutes for Oct 2025 and Nov 2025. Need approval

Jeff Larus KF0TSG moves to accept the Oct 2025 club meeting minutes and the Nov 2025 club meeting minutes, and Larry Broomfield AC0WT 2nds. Vote: none opposed, motion approved

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

Current Balances at Black Hills Federal Credit Union:

Regular Share: \$5.20
High yield Savings: \$4,093.84
Checking: \$1855.75
6 Month CD: \$8,160.58 matures in May 2026
12 month CD: \$8,160.59 matures in November 2026
Paypal: \$82.98

Disbursements since last meeting:

\$1,760.97 transferred amount from Paypal to checking

Dues/Donations:

\$218

Disbursements:

SDSMT Room Rental \$25
\$86.83 8/25/2025 → 9/25/2025
\$26.27 clubhouse electric 9/25/2025 → 10/25/2025
\$86.83 clubhouse electric 10/25/2025 → 11/25/2025

Pending Disbursements:

Need signatures on checks
\$25 Room rental for January
\$83.61 clubhouse electric 11/25/2025 → 12/25/2025

Andy Pattantys KF0ARA moved to approve the Treasurer's report, and Mike Key K0MDK seconded, Vote: none opposed, motion approved

Committee Reports:**Activities Committee:** Larry Broomfield AC0WT and Delbert Long KD0AYN

Larry Broomfield AC0WT reports; plan is based on the starting point from Terry Fuller AD0HL
Ryan Lindblom KE0LXT reports that the Board and the committee met in December
Winter Field Day Jan 24th and 25th. Johnson Siding Fire Station #2
Feb 9th through the 13th, school roundup
Feb 20th, Feb club meeting
Feb 21th, Winter Auction, Faith Lutheran, 17 Indiana St.

Public Relations and Recruitment Committee: Don Kendall N1NOX (absent)

No report

Engineering/Technical Committee: Mike Key K0MDK

Internet at the clubhouse is down.
Ubiquity repeaters from Mike Key's house to establish a connection

Delbert Long KD0AYN suggests putting it into the same place as the previous dish
These are flat panel outdoor rated devices.

Mike Key K0MDK has fiber at the house. May need a POE

Terry Fuller AD0HL suggests that the club can cover the equipment expenses

John Murphy AJ0GM, said that Suntek is closing shop. Went to T-Mobile Internet

ARES Committee: Ryan Lindblom KE0LXT reports:

Meshtastic is off and running.

Andy Pattantyus KF0ARA reports on current status

Larry Broomfield AC0WT suggests a subgroup in groups.io

Andy Pattantyus KF0ARA will present Meshtastic as the program in February

All. Discussion about file storage, either Google Docs, or [Groups.io](https://groups.io) wiki

John Murphy AJ0GM says that our club is not listed as a club where points can be reported for
Winter Field Day.

Since the committee reports brought no action, there was no call for approvals.

Summary of Community Service Activities

No community service activities since the November 2025 club meeting

Summary of Education Activities

The program at the BHARC club meeting each month is education.

Old Business:

Jeff Larus KF0TSG suggested using West River Electric (WRE) for the technician's class. WRE
has a beautiful community room. Jeff will provide contact information to WRE. Goal is to get a
Technicians class going in February.

New Business:

Chris Jaques KD0RAS. Adding subgroups to groups.io requires a paid subscription.

Andy Pattantyus KF0ARA. We will use the Google Drive.

New Member Applications:

Jon Lambert and Arie LeCroix are interested.

Announcements:

None

Adjourn:

Chris Jaques KD0RAS moved to adjourn the meeting and Andy Pattantyus KF0ARA 2nds.

Vote: none opposed, motion approved

The meeting was adjourned at 7:33 pm.

Andy Pattantyus, KF0ARA

BHARC, President and Acting Secretary

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Program - Gary Peterson - Facilitated Technical Discussion

Voice mode uses a lot of bandwidth

Voice is 300 Hz to 3000 Hz

Excessive microphone gain and excessive drive to an amp will create a lot of spectral garbage.

Stay within the ALC range

QST publishes the volunteer monitors every month

The FCC sends out warning letters.

Most transceivers have adjustable equalization. Cut it off below 300 Hz and above 3000 Hz

To check transmit audio, transmit into a dummy load, and pick up audio on a 2nd radio, record and listen. Don't use headphones, because that includes bone conduction.

John Murphy. JS8 uses 80 Hz of bandwidth.

MCW - Modulated Carrier Wave. Code Practice Oscillator in front of a

Faster keying makes a wider bandwidth.

Conjugate matching theory

60 ohm - j20

$\frac{1}{2}$ wavelength

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60 ohm +j20

50 ohms

The antenna tuner will actually tune your antenna.

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