



Repeater ID: WA6KQB

Frequencies 145.110, 224.300, 444.275 PL 82.5

WA6KQB - Home Page: <http://www.wa6kqb.org>



The Holiday Party



The 4Cs holiday party took place on December 8, with food, gifts, and good conversation! A big thanks goes to Jan AC5RB for organizing the event, and to all who brought delicious dishes, as well as those who helped with set up and clean up. Check out the photos on the next page, courtesy of Wing K6YDE.



Technical Notes

Howdy KE6BEE

Thanks to Bay Area Mesh for supporting the 4Cs site with an equipment grant

The Bay Area Mesh (BAM) organization has coordinated and built an [extensive high bandwidth ham radio data network](#) on 2-5GHz bands across the Bay Area region, using the [AREDN ham radio firmware](#) applied to long distance WiFi radios. The 4Cs site is an important hub on this network with links to Mt. Diablo, the North Bay, Marin, and San Francisco. This resilient data network can operate independent of the internet in disaster scenarios, with widespread internet and cellular service outages, including allowing high bandwidth traffic like a video feed from a movable camera on the tower. In normal times, we also use the network to access the internet from the 4Cs site to support the Winlink gateway on 441.500, Allstar and EchoLink connections to the repeaters and remote management of the repeater controller. As the number of mesh radios and associated equipment (like small computers) at our site grew, the steady electrical load outgrew the capacity of the existing solar battery system to maintain consistent off-grid power for the mesh gear, especially in the winter.

A couple of years ago BAM received a large [ARDC grant](#) and has been distributing funds to support projects on the network. To upgrade the off-grid operations of the mesh, BAM is granting the 4Cs a very large 10kWh Lithium iron phosphate (LiFePO4) battery and associate components, as well as upgrades to a couple of mesh radios, total value about \$2400. In addition to providing a robust power supply for the mesh equipment, the new battery will allow us to get more generation out of the existing solar system and improve the resilience of the repeater power supply as the mesh and repeater batteries will be connected. Some additional solar panels from another source may also be installed to further expand the capacity of the system. [This link shows a solar production and load model](#) using typical weather over a year to demonstrate what it takes to get year-round power autonomy off-grid. A lot of extra storage capacity is needed for just a few times a year with the worst conditions. Thanks to the Bay Area Mesh and Tim Wilkinson KN6PLV (lead AREDN software developer) for supporting mesh network operations at the 4Cs site.

Contra Costa Communications Club Board Meeting Minutes 12/15/2024

The Zoom meeting was brought to order at 10:12 am by President Wing Lok K6YDE. Also present were Treasurer Audrey Nieman W6BBQ, Secretary Jan Kuhl AC5RB, and board members DJ Djovida KJ6DJ, Howdy Goudey KE6BEE, and Alvin Todd KK6UQX. Absent was Xia Horowitz K2XIA.

The purpose of the Board meeting was to select the next team of Officers for 2025. The results were as follows:

President: Alvin Todd

Vice President: DJ Djovida

Treasurer: Audrey Nieman

Secretary: Jan Kuhl

Trustee: Howdy Goudey

Membership Chairman: Wing Lok

Technical Committee Chairman: Howdy Goudey

Communicator Editor: Xia Horowitz

The new Board will take office in **January 2025**. Meeting adjourned at 10:22 AM.

Respectfully submitted,

Jan Kuhl, Secretary

Membership Reminder!

2025 Membership dues are payable now through February 15. It's \$30.00 for regular membership, \$20.00 for retiree membership, and \$300.00 for a life membership. A second family member with a paid regular or retiree membership is \$20.00. Please make your check payable to CCCC, Inc. and mail it to:

Contra Costa Communications Club, Inc.
PO Box 20661
El Sobrante, CA 94820-0661

Treasurer's Report:

December 17, 2024

Audrey Nieman, Treasurer W6BBQ

Checking Account

Balance Forward: \$ 6140.67

Income:

Holiday Party \$ 120.00

Dues \$ 139.00

Disbursements:

Holiday Party Prizes \$ 278.55

Checking Account Balance: **\$ 6121.12**Savings Account

Balance Forward: \$ 2632.64

Interest \$ 0.02

Balance **\$ 2632.66**Total funds: **\$ 8753.78**

Contra Costa Communication Club Inc -- Net Schedule

*Indicates EchoLink connection active on both 144.110 and 444.275 MHz

Day	Time		Net Controller	Net Name/Repeater
Monday Morning*	7:10am		Audrey W6BBQ	Over the Hill Net 144.110/444.275 MHz
Tuesday Morning*	7:10am		Jan AC5RB	Over the Hill Net 144.110/444.275 MHz
Tuesday Evening	7:30pm		dj KJ6DJ	220 Net 224.300 MHz
Wednesday Morning*	7:10am		Howdy KE6BEE	Over the Hill Net 144.110/444.275 MHz
Thursday Morning*	7:10am		Xia K2XIA	Over the Hill Net 144.110/444.275 MHz
Thursday Evening*	7:30pm	Wk 1	Audrey W6BBQ	Club Net
		Wk 2	Audrey W6BBQ	144.110/444.275 MHz
		Wk 3	Jan AC5RB	
		Wk 4	Xia K2XIA	
		Wk 5	dj KJ6DJ	
Friday Morning*	7:10am		Alvin KK6UQX	Over the Hill Net 144.110/444.275 MHz
Saturday morning	9:00am		Alvin KK6UQX	Bay Shores EmComm 145.110 MHz
	9:15am		Alvin KK6UQX	EmComm 440 Net 444.275 MHz
	9:30am		Alvin KK6UQX	EmComm 220 Net 224.300 MHz
	9:40am		dj KJ6DJ	FL Digi Training Net 444.275 MHz

Club Officers

President: Wing Lok, K6YDE Wingklok@gmail.com

Treasurer: Audrey Nieman, W6BBQ Audrey.nieman@gmail.com 510-682-7938

Secretary: Jan Kuhl, AC5RB Jkuhl1313@yahoo.com 510.-846-3829

Membership: Audrey Nieman Wa6kqb@comcast.net 510-682-7938

Board of Directors

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Alvin Todd, KK6UQX Amchibi9@gmail.com 510-426-2574

Xia Horowitz, K2XIA Xiahorowitz@gmail.com 925-323-6665

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Audrey Nieman, W6BBQ audrey.nieman@gmail.com 510-682-7938

Howdy Goudey, KE6BEE Howdy.goudey@gmail.com 510-684-9097

Technical Committee

Howdy Goudey, (Chair), KE6BEE (2023) Howdy.goudey@gmail.com 510-684-9097

Jay Fenton, KE6WSS (2023) Jayfenton@gmail.com 510-236-8460

djovida, KJ6DJ (2023) Djovida@gmail.com 510-237-4332

Mathison Ott, KJ6DZB, Mathisono@gmail.com 510-701-0234

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EMCOMM Contra Costa County

Alvin Todd, KK6UQX Amchibi9@gmail.com 510-426-2574

PACKET

Howdy Goudey, KE6BEE Howdy.goudey@gmail.com 510-684-9097

Packet Node ELSO (NetRom) / KELSO (KA-node); Mailbox WA6KQB-1

Packet Winlink email gateway: 441.500, WA6KQB-1

NARCC

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Newsletter

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