

THE EAST BAY AMATEUR RADIO CLUB, INC.

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THE BLOWN FUSE

CLUB STATION W6CUS

VOLUME LXIX NUMBER 2

FEBRUARY 2021

EBARC Meetings

February 12, 2021, 7:30 p.m.

To Be Announced

Check your email for Zoom link



The Executive Board meets monthly before each general meeting. For the date, time, & location, contact President Jay Sparks, at rajama@pacbell.net.

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The Blown Fuse is published monthly by the East Bay Amateur Radio Club, Inc. and is free to its members. *The Blown Fuse* welcomes articles of interest to its members and amateur radio in general. *The Blown Fuse* reserves the right to edit or reject any material submitted. Material submitted becomes the property of *The Blown Fuse*. Permission is hereby granted to reproduce material printed herein provided proper acknowledgment is given. Editor: Sharon Primbsch, AA6XZ

Deadline for Mar. issue: Tues., Feb. 23rd

[Articles may be submitted by "snail" mail, by dictation over the 'phone 510-741-8227, or by e-mail to aa6xz@earthlink.net

February 12th EBARC Meeting

The February 12th general EBARC meeting will again be held as a virtual Zoom meeting only. The Zoom link will be sent via email and be posted on ebarc.org. We hope you join us! Because of the pandemic, future meetings through March 2021 will also be held via Zoom.

President's Message Jay Sparks, KJ6HSH

Greetings members! A new year brings new beginnings. Three committees have been formed to guide us in this coming year. Please consider joining one or more. Meetings are via Zoom and welcome to all. Thanks to Katie for preparing this proposal.

Storage - Chair Jay Sparks: Ensure that the club property of EBARC is properly stored and accessible to club members. This includes determining storage location, managing inventory (recommending acquisition, sale or disposal of inventory), and tracking equipment lent to club members.

Steering - Chair: Katie Carney: Examine, and potentially define (or redefine) the purpose and mission of EBARC, ensuring that the wide variety of ham radio segments and interests represented by our membership are addressed in programs and activities.

Field Day - Chair: Mathison Ott: Plan and manage EBARC's presence at the annual summer ARRL Field Day Event. Included is promotion of EBARC's presence at the event and encouraging the participation of members.

Please give some thought to joining a committee or participating (via Zoom). As always, comments are appreciated.

Treasurer's Report December 2020 Maria Hauger, KI6ENT, 2020 Treas.

DECEMBER GENERAL FUND¹

Beginning Balance\$11,472.05

Income:

Individual Renewal: KJ6RHF:\$30.00

Family Renewals: KJ6WSS & KK6ZPM;
W6AKB, KB6LHP, KG6LXL, &

KI6ELP70.00

Donations with dues5.00

Earned Interest0.04

Total General Income:\$105.04

Disbursements:

Total General Disbursements\$0.00

Ending Balance\$11,577.09

(portion as petty cash \$40.00)

(portion as a US Bank CD... \$5,000.00)

¹\$100 earmarked for youth scholarships

DECEMBER PAYPAL ACCOUNT

Beginning Balance\$96.80

Ending Balance\$96.80

Many thanks to Michael McMillan, K6MCM, for preafrooding this month's *Blown Fuse*.

Elizabeth Friedman, American Hero Peter Hoffman, W6DEI

New technologies often have unforeseen and unintended consequences. Radio was no exception. Though radio technology may not have spawned the science of cryptography, it certainly gave it a major boost. With the advent of radio, communication was suddenly no longer private. Anyone with a receiver and good antenna was privy to any and all radio communication. This had grave implications for the military in particular. Early radio was a major impetus for the development of increasingly sophisticated encryption schemes as well as the counter measures of code breaking. Perhaps no individual was more seminal in the development of early decoding techniques than Elizabeth Friedman (nee Smith) who sadly has never received the recognition she is due. Her contributions to the allied forces in World War I and World War II cannot be overstated, and yet her legacy remains largely in obscurity to this day.

Elizabeth Friedman was born in 1892 in Indiana to a large, traditional Quaker family. From an early age she displayed a curiosity and thirst for learning that would not be thwarted by society's expectations or the limitations it placed on women and girls. Largely self-taught, and fighting the sexism that interfered with her intellectual pursuits at every turn, she still managed to make monumental contributions to early cryptography. Her efforts were critical to defeating our enemies in both world wars and even to bringing down the cadre of gangsters, like Al Capone, that plagued the country during the prohibition years (they used encoded radio messages too).

Here's one example of her many contributions. In the 1930s, Nazi Germany had an extensive network of spies in South America. Via HF radio they regularly communicated information on the location of American commercial vessels, prime targets of German U boats. The resulting loss of life and cargo was significant. Hitler had issued a \$250,000 reward to the captain of any U boat that could sink the Queen Mary, the largest and most important American vessel. Elizabeth Friedman broke the codes of the spy network, allowing the U.S. to know the whereabouts and intentions of the German U boats. The Queen Mary was able to take evasive maneuvers and escape the threat. The egomaniacal FBI Director, J. Edgar Hoover, decided to begin rounding up these spies and claim the attendant glory. However, it only wounded the spy network rather than crippling it. Worse, it telegraphed our punch, letting the Germans know we'd cracked their codes. Naturally their encryption techniques grew more complex, and Elizabeth and her fellow code breakers were forced back to square one. The implications could have been horrific, as Germany was plotting coups in Argentina, Brazil, Chile, and Bolivia. Imagine the U.S. having to fight on a third front (besides Europe and the Pacific), namely our own soil, invaded through South America. It was largely through the work of Elizabeth Friedman that this was avoided. She never received any public credit for these efforts.

Thankfully Elizabeth's story is now being told. A simple Google search will reveal much about her life's work for anyone interested. A terrific documentary on her life was produced by the PBS series *American Experience*. It can be streamed at: video.kqed.org/video/the-codebreaker-dcbakk/. It's peppered with Morse code transmissions, but even the best CW operator won't be able to read them unless they also possess the incredible decryption skills of Elizabeth Friedman, a true American hero.

Will Solar Cycle 25 Dazzle or Fizzle in 2021?

Jeff Miller, KJ6RHF, recommends this article from *Universe Today*.

<https://www.universetoday.com/149468/will-solar-cycle-25-dazzle-or-fizzle-in-2021/>

RF Seismograph?

Jeff Miller, KJ6RHF, also recommends this website: <https://groups.io/g/MDSRadio>. It discusses *Modulation Demodulation Software Radilo*. The project is to use amateur radio transceivers to detect earthquakes using shortwave radios and PCs. The software connects the radio and the computer together at the IF level, and hence allows for a SDR (Software Defined Radio) interface. It goes even a step further and does TX with the modulation done in software.

January 2021 General Minutes Todd Teachout, KM6HFU, Secretary

The EBARC general meeting was held January 8, 2021, virtually, via the Zoom internet conferencing application as a result of COVID-19 pandemic restrictions. 31 people attended. Katie was the Zoom control. President Jay called the meeting to order at 7:40 p.m.

Officer Reports:

3rd VP / Membership: Sharon reported that two Individuals and one family renewed their membership since last report. The January 2021 *Blown Fuse* was prepared and sent out. Members who have not yet renewed will be sent one more issue of *The Blown Fuse*. Deadline for next issue is January 26th, articles needed. No VE Test sessions in Oakland for January or April 2021 due to the pandemic restrictions. VE test cost could rise to \$50 from

\$15 if the FCC adopts a proposed \$35 license fee.

Secretary: Todd reported that draft December general meeting minutes were published in the January *Blown Fuse*. Call for corrections. None offered. He recommended that the group approve the minutes. Motion to approve by Todd, seconded by Sharon. Vote; minutes approved by affirmation.

1st VP / Programs: Katie reported that Peter Hoffman would be giving a presentation about QSLs shortly. Given the surge in COVID infections everywhere, there is a strong likelihood that Winter Field Day will not occur. If it does occur, it may be a virtual event. Katie will send out updates as they become known. Ham Radio Outlet does not yet have the list of people who attended the December EBARC Meeting who are eligible for a \$10 discount. Katie will be visiting HRO on January 9th to provide them the list. Katie announced the Storage Committee met on January 7th. Some consideration is underway to reconfigure advisory committees into: Steering Committee, Storage and Equipment Committee, and Field Day Committee. She thanked Mathison on behalf of the club for distributing the Field Day 2020 awards.

2nd VP / Hospitality: Mathison reported that the pandemic restrictions are limiting face-to-face meetings, therefore is preventing the typical refreshment preparations. He indicated that he is a member of the ARRL Mesh Committee and will be giving a presentation on subject to the Mt. Diablo Amateur Radio Club at their February meeting on February 19th. He distributed a 39-page PDF file that contains his presentation points. He is looking forward to Field Day 2021.

Treasurer: Outgoing 2020 Treasurer Maria reported the club income this month includes revenue from renewal dues, donations, and interest. There were no expenses. Beginning Balance = \$11,472.05. Income = \$105.04. Ending Balance = \$11,577.09. Incoming 2021

Treasurer Audrey has begun the process of taking over the Treasurer duties. Maria and Audrey and other officers will coordinate to make the transition smooth and orderly.

President: Jay thanked everyone for coming to tonight's meeting. We're going to accomplish good things in 2021.

Presentation: The History of QSLing

Peter Hoffman, W6DEI, described QSLing, which is the practice of sending of QSL postcards to confirm radio contacts. His talk recognized efforts from the early days when the first card was "invented" to the present when electronic QSLs are the norm. The presentation included a number of QSL cards from EBARC members as well as international cards from Peter's collection. Peter described the satisfaction that arises when amateur radio operators connect. It is an important cultural aspect of the hobby, and it seems to work regardless of age, race, gender, or nationality. If you have any questions on QSLing Peter would be happy to entertain them.

Announcements:

Ron Smith noted the passing of the Los Angeles Dodgers baseball team manager, Tommy LaSorda yesterday. Peter Hoffman shared a story about the Dodgers, too.

The second Virtual Ham Expo will be happening on March 13-14, 2021. Organized by Eric Guth, it is like a Pacificon event from your home computers. Registration starts 1/4/2021. Presentations will be available until 4/12/2021. More info at: <https://www.qsotodayhamexpo.com/>

Meeting adjourned 8:50 p.m. Next general meeting is 7:30 p.m. February 12, 2021.

Watch your snail-mail! The 2021 EBARC Roster will arrive about mid-February.

Have you heard about the atomic scientist who swallowed some uranium? She got atomic ache.

*What is the first thing you need to split an atom?
A fission license.*

*What does a scientist's dog do with bones?
Barium.*

Future Bay Area Events

- Current Bay Area Public Service Events: See www.ebarc.org, click on "Current Events", then scroll to "Calendar of Bay Area Ham Radio Public Service Events."
- EBARC, ORCA, and ARCA sponsor joint ARRL VEC Amateur Radio test sessions quarterly at 9 a.m. in the Media Room, 1605 Martin Luther King Jr. Way (at 16th St.), Oakland. Because of COVID, there are tentative plans for 4th Sundays in Jul and Oct in 2021. The fee is \$15. Candidates must preregister at davidotey@comcast.net or call 510-741-8227.
- East Bay Section ARRL ARES; arrl.volunteerhub.com/lp/eb. CoCoCo ACS Training: Details from "DJ" djovida, KJ6DJ, kj6dj@arrl.net, (415) 215-6658, or via RACES net, 6:45 p.m., Thursdays on 145.11 MHz. Also see Sheriff Office's Communications Unit David Nielson, K6CDN, davidnielson@yahoo.com

The East Bay Amateur Radio Club, founded in 1947, is a California non-profit organization of amateur radio operators in Contra Costa and Alameda counties. The club is open to anyone interested in amateur radio. Annual dues are \$30 for individual membership, \$35 for a family membership, and \$10 for students K-12. For information, send email to ebham.office@gmail.com, contact any EBARC officer, see Web page www.ebarc.org, or write EBARC, P.O. Box 1393, El Cerrito, CA 94530. You can also follow us on Twitter using @w6cus, or on Facebook's "East Bay Amateur Radio Club."

2021 East Bay Amateur Radio Club Executive Committee

Jay Sparks, KJ6HSH, President.....	384-4233
Katie Carney, KN6APB, 1 st VP - Program Chair	326-3886
Mathison Ott, KJ6DZB, 2 nd VP – Hospitality / Field Day Chair	701-0234
Sharon Primbsch, AA6XZ, 3 rd VP - Membership / <i>Blown Fuse</i> Editor.....	741-8227
Todd Teachout, KM6HFU, Secretary	799-6051
Audrey Nieman, W6BBQ, Treasurer / Finance Chair	682-7938

2021 EBARC's Other Committee Heads and Contacts

W6CUS Trustee / Webmaster; Martin Rothfield, W6MRR	202-262-6345
Club Station Manager; Stanton Gleason, KD6SWU.....	385-4044
Education; Ken Fowler, KO6NO.....	222-0830

AMATEUR RADIO NETS

NET	DAYS	LOCAL TIME	FREQ, MHZ
"Over the Hill Gang" Breakfast/Commute Net	Mo-Fr	0710 (PL 82.5-)	145.110
Contra Costa Com. Club Digital Net (by arrangement)	Tue*	1900 (PL 82.5+)	444.275
Contra Costa Communications Club Net	Tue	1930 (PL 82.5-)	224.300
"QRM Net"	Tue	1930 (PL 82.5-)	224.300
UCB ARC (W6BB) EMMCOMM Net	1 st Wed	1200 (PL 131.8+)	440.900
UCB ARC (W6BB) EMMCOMM Net	1 st Wed	1200 (PL 107.2-)	145.490
UCB ARC (W6BB) EMMCOMM Net	1 st Wed	1200 simplex	145.430
UCB ARC (W6BB) Club Net	Wed	1900 (PL 103.5+)	442.275
West Contra Costa EMCOMM Net	Thu	1845 (PL 82.5-)	145.110
KARO/ECHO ARES EMCOMM Net	Thu	~1900 simplex	146.415
NALCO ARES EMCOMM Net	Thu	1915 (PL 131.8+)	440.900
Oakland ARES Emergency Communications Net	Thu	1930 (PL 77-)	146.880
Contra Costa Communications Club Net	Thu	1930 (PL 82.5-)	145.110
Bay Shores Richmond EMCOMM Net	Sat	0900 (PL 82.5-)	145.110
Bay Shores Richmond EMCOMM Net	Sat	0915 (PL 82.5-)	224.300
Bay Shores Richmond EMCOMM Net	Sat	0930 (PL 82.5+)	444.275

ACS West CoCoCo: "DJ" djovida, KJ6DJ, kj6dj@arrl.net, (415) 215-6658.*
Frequencies: #1=145.110, #2=147.570s.



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