

Section Manager
East Bay Section Newsletter
July, 2024

ARRL East Bay Family,

Field Day is now behind us for 2024, and it seems everyone had a great time, despite the warm weather. For my tour around the Section, I was joined by our East Bay Section Emergency Coordinator, Dan Goldstein, KJ6KEU; and an SWL friend of mine, Howard Walter. We were able to visit ten of the eleven registered sites spread over three of the four counties in our Section. One site closed midafternoon due to the heat and before we could get there. I'm sorry we missed them. Both Dan and I had some excellent conversations with the various clubs, improving our contacts with them.

Dan had the following to offer: "Meeting a dozen teams from four counties made for great conversation. It was also a unique opportunity to meet in person for the first time some folks I had only spoken with remotely. What truly stands out among these men and women is the common love of radio we share. More precisely: The love knowing that radio can help us serve our communities in a disaster. Maybe that's my bias as the Section Emergency Coordinator. It was wonderful seeing the gear put to use, getting to know the people we serve with, and enjoying the camaraderie. Shout out to the Vaca Valley team for providing burgers and sides! Thanks!"

I logged 263 miles on our trip, but I have it lucky. Our Section is geographically small compared to most other Sections. Many of them cover entire states. Ed Wilson, N2XDD, Vice Director of the Hudson Division, drove a total of 947 miles to visit 18 different Field Day sites within his Division. Don't know how he did it.

The League reports that it was a successful weekend nationwide, despite severe weather and extreme temperatures impacting much of the country. As of last Saturday morning, 2,666 log entries had been submitted. At that time, I found 17 submissions from the East Bay Section. The status of all of them was "Complete" except one, which was awaiting documentation. Some of these East Bay submissions were not registered on the Field Day Locator web page and had no club name listed, so I assume they're for individuals. However, some had club names but did not register in advance, and some others were for clubs that did register but the logs were submitted under a call sign different from the one used on the Field Day Loactor page. So I almost missed them while browsing the submissions.

Remember that the deadline for submitting log entries is Tuesday, July 23, 2024. So you still have time, but not a lot. You can check the status of any Field Day log entry at (<https://field-day.arrl.org/fdentriescvld.php>).

Happy Birthday to the Livermore Amateur Radio Klub (LARK), which was founded on July 30, 1959 (65 years!).

Happy Birthday to Nikola Tesla, who was born in Smiljan, Austrian Empire (modern-day Croatia) on July 10, 1856. Tesla essentially created many of the electrical & communications concepts we now take for granted, including AC electrical power systems and wireless communications. See (https://en.wikipedia.org/wiki/Nikola_Tesla).

Congratulations and thank you to the Mt. Diablo Amateur Radio Club and the California Amateur Radio Linking Association; who became affiliated with the ARRL on July 13, 1948 and July 25, 2005 respectively.

* Question:

On which of the following bands is phone operation prohibited?

- A. 160 meters
- B. 30 meters
- C. 17 meters
- D. 12 meters

(See the last page for the answer.)

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Section & Division News:

* Field Day in the News

A story about Field Day was in the June 8 edition of The Daily Democrat in Woodland, Yolo County. I found it at (<https://www.msn.com/en-us/news/us/yolo-county-fair-grounds-to-host-emergency-radio-communications-june-22/ar-BB1nShQc>).

And there was a front-page article about “Amateur Radio: 21st Century Style” in the Tri-City Voice newspaper, for Fremont, Newark, Union City and nearby towns. It’s available at (<https://tricityvoice.com/06-18-24-articles/>). Scroll down the page a bit to find it.

* License Testing at Martinez ARC

The Martinez ARC is sponsoring VE testing on July 13th at 11:00 a.m. They’re a walk-in operation - no preregistration required. They start testing at 11 a.m. at the Martinez meetinghouse of the Church of Jesus Christ of Latter-day Saints, 940 Palisade Dr., Martinez, CA 94553. Enter on the West side. Remember to bring your FRN number; if upgrading, a copy of your current license that they can keep; and \$15. If you need a calculator, please bring your own. Phones may not be used as calculators.

[Thankx to Jim, N6BHX, for the information.]

* Golden Eagle Exercise Wrap-Up

From our East Bay Section Emergency Coordinator, Dan Goldstein, KJ6KEU:

For several years, I’ve been advocating with Bay Area UASI to expand the role of auxiliary communications in the Golden Eagle disaster exercise (formerly known as Urban Shield). In my early days, our team was rarely given more than one or two radio messages to deliver, and normally those messages were sent by voice to an operator standing by at the destination. Over the years, the messages have become more complex, and adherence to ICS forms more standardized. This year, AUXC (auxiliary communicators) were challenged to decide on the best mode (FM/HF/Winlink) and further challenged to get creative solutions on how to deliver the message when the destination was known but a recipient RADO (radio operator) was unknown. We had outstanding participation among the 14 jurisdictions that comprise Bay Area UASI, and the participant feedback was very highly in favor of doing more.

[UASI = Urban Area Security Initiative. See (<https://bayareauasi.org/>).]

* Mt. Diablo Club Donates Books to School Club

Representatives from the Mt. Diablo Amateur Radio Club visited the Heritage High School Amateur Radio Club in Brentwood last month to present them with the ARRL Library Book Set, which includes eleven of the most popular ARRL publications, such as the Handbook, the Antenna Book, the Operating Manual and many others. Spencer Holmes, KM6SJO, a teacher at the school and sponsor of the club, was exceptionally appreciative of the gift. Information about the ARRL Library Book Set is available at (<https://www.arrl.org/library-book-set>).

* CHRS Radio Day by the Bay

The California Historical Radio Society will host its annual Radio Day by the Bay in Alameda on July 20 this year, 8:00 AM to 3:00 PM. They’ll have live music and entertainment, a vintage auction and electronics sale, a 1930s radio play, food trucks, museum tours and more. See their website for more information at (<https://californiahistoricalradio.com/>).

* Scout Eagle Project for Ham Radio

A local Scout working on his Eagle rank has a project to introduce Scouts to ham radio and emergency communications. He’s set up a GoFundMe account so he can pay the fees required for other Scouts to study, test and become licensed by the FCC, and to purchase handheld ham radios. Once they become comfortable talking on the air, for a period of time these Scouts will participate in radio nets similar to those we use to practice our EmComm skills. The radios will then become “loaners” for future Scouts and others to increase the number of amateur radio operators who can help with emergency communications in a disaster. If you would like to support this Scout’s project, go to (<https://www.gofundme.com/f/marcus-kauffmans-eagle-projectscoots-in-ham-radio>).

* Coastal Region Exercise August 22

Save the date of August 22. A major Northern California EmComm exercise is planned for that date.

From our East Bay Section Emergency Coordinator, Dan Goldstein, KJ6KEU:
Imagine: The northern coast of California is hit with an offshore earthquake along the Cascadia Fault. Internet and wireless communication are severely impacted, thus auxiliary communications will be activated. Local partners will be activated by the local OES. EOC is staffed after an estimated 2-3 hours from the initial earthquake. EOC staff will create mutual aid requests and send them to other coastal region counties. An added level of realism will be injected into the exercise by requiring players to send resource status updates to their Operational Area partners. This exercise is focused on auxiliary communications. The challenge involves the technical skill for various modes of communication as well as critical thinking on how to get the message through across 16 counties. It is the largest auxiliary communications disaster exercise in California history. Registration is now open: (<https://humboldt.gov/FormCenter/Office-of-Emergency-Services-23/2024-Coastal-Region-Radio-Exercise-Parti-232>). If you have questions, contact Dan at (dgold94544@gmail.com).

The Cascadia Fault, or Cascadia subduction zone, is a fault line off the Pacific coast that stretches from northern Vancouver Island in Canada to Northern California. “It is capable of producing 9.0+ magnitude earthquakes and tsunamis that could reach 30 m (98 ft).” See details at (https://en.wikipedia.org/wiki/Cascadia_subduction_zone).
[OES = Office of Emergency Services; EOC = Emergency Operations Center]

ARRL News:

* Board of Directors Meeting Agenda

The Board will hold it’s second meeting of the year on July 19-20. The agenda is available at (<https://www.arrl.org/files/file/About%20ARRL/Board%20Meetings/Second%20Board%20Meeting%20of%20Directors%20July%202024%20Agenda.pdf>).

* IT Systems Outage

In early June, ARRL confirmed that their system “was the victim of a sophisticated network attack by a malicious international cyber group. ARRL immediately involved the FBI and engaged with third party experts to investigate.” As reported by the League on June 21, “ARRL staff continue to work with outside industry experts to ensure that all servers have been remediated, tested, and all data has been confirmed. We have also been working to ensure that the network is secure.” Please understand that legal and system security imperatives require that they take a very slow and deliberate process to returning their systems to full operation. So please be patient.

Yesterday, July 1, the League reported that Logbook of the World is back in service. “We are taking steps to help manage what will likely be a huge influx of logs. We are requesting that if you have large uploads, perhaps from contests or from a DXpedition, please wait a week or two before uploading to give LoTW a chance to catch up. We have also implemented a process to reject logs with excessive duplicates. Please do not upload your entire log to “ensure” your contacts are in LoTW as they will be rejected. Lastly, please do not call ARRL Headquarters to report issues you are having with LoTW. You can contact support at (LoTW-help@arrl.org.” You can monitor the announcements on this matter by going to (<https://www.arrl.org/news/arrl-systems-service-disruption>).

* Teachers Institute Kicks Off Summer Program

The ARRL Teachers Institute on Wireless Technology has begun its summer program of classes. It’s a donor-funded professional development program designed to help classroom teachers elevate their STEM programs through the use of wireless technology. Each multi-day program costs teachers a \$100 application fee to attend. All travel, lodging, and other costs are covered by generous donors. Everything I’ve heard about the Teachers Institute is that it’s outstanding. If you are or know of a teacher with any involvement in STEM, you or they should strongly consider applying for the ARRL Teachers Institute. Learn more and start the application process at (<https://www.arrl.org/ti>).
[STEM = Science, Technology, Engineering, and Mathematics]

* ARRL Handbook Discount Offer

If you’ve been thinking of buying a copy of the ARRL handbook 100th Edition, now is a good time. The League is offering the Handbook’s softcover or 6-volume set for \$40.00 when you use the code “HB40”. It’s apparently not advertised anywhere, so just put the code into the appropriate field while checking out. This is a temporary offer and can change anytime, so get your order in soon. See (<https://home.arrl.org/action/Store/Product-Details/productId/2003373095>) for the 6-volume set, or (<https://home.arrl.org/action/Store/Product-Details/productId/2009938479>) for the softcover.

* Club Grant Program

A reminder that the Club Grant program is open for receiving applications, but the deadline is this month. This is an opportunity for clubs to apply for grants up to \$25,000 to fund projects in areas that will motivate and develop active radio amateurs, with an emphasis given to projects that are of a “transformational” nature. The deadline is Friday July 26, 2024 at 4:00PM Eastern Time (1:00 PM Pacific). Your club does not need to be an ARRL Affiliated Club nor a 501(c)(3) organization—all are welcome to apply. Get details and apply at (<https://www.arrl.org/club-grant-program>).

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Government News

* FCC to Consider Handset Unlocking Requirements and Policies

At its next meeting on July 18, the FCC has on its agenda the consideration of “Promoting Consumer Choice and Wireless Competition Through Handset Unlocking Requirements and Policies”, among several other items. A news release with the proposed agenda items and other documents, including a Fact Sheet on the handset unlocking proposal, is available at (<https://www.fcc.gov/document/fcc-announces-tentative-agenda-july-open-meeting-11>). A news release specific to the handset unlocking proposal is at (<https://www.fcc.gov/document/fcc-chairwoman-proposes-mobile-phone-unlocking-requirement>).

* NASA’s Voyager 1 Spacecraft Almost Back to Normal

I reported in the April edition that the Voyager 1 spacecraft, which is now in interstellar space, stopped sending usable data back in November. They’ve been working on a fix since. They made a partial fix in April, getting it to return spacecraft health and status data. In May, they got two of the four remaining science instruments returned to normal mode. And now they finally have all four of them working. The four instruments study plasma waves, magnetic fields, and particles. There’s still some cleanup work to do, such as resynchronizing timekeeping software. According to the article, “Voyager 1 is more than 15 billion miles (24 billion kilometers) from Earth, and Voyager 2 is more than 12 billion miles (20 billion kilometers) from the planet.” If I punched the right buttons on my calculator, that means it takes over 22-1/2 hours for a radio signal to travel between Earth and Voyager 1; each way. It takes almost 18 hours between Voyager 2 and Earth. See the full article at (<https://www.jpl.nasa.gov/news/voyager-1-returning-science-data-from-all-four-instruments>).

* The Reason the U.S. Doesn't Use the Metric System

Many of us occasionally wonder why the U.S. “doesn’t” use the metric system. Well, we do, a lot. But agreed, it’s not most Americans’ first thought when needing a measurement unit. Here’s a link to a short article from the NIST with the above title, in which they provide some more detail and links to even more: (<https://www.nist.gov/news-events/news/2024/06/reason-us-doesnt-use-metric-system>).

[NIST = National Institute of Standards and Technology]

* NIST Webinars

The NIST also has an e-Learning Resources and Training Materials section on their website with some interesting videos. Among them are the Metric Kitchen series, with 5-minute videos on baking various dishes with the Metric system; the Get What You Pay For series, 2.5-minute videos on how weights and measures inspectors make sure you're getting what you pay for; a 14-minute video on how gas pumps are tested for accuracy, and a lot more. See them at (<https://www.nist.gov/pml/owm/owm-products-and-services/e-learning-resources>).

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Other News:

* Extra Class Question Pool, 2024-2028

A reminder that the new Extra Class question pool went into effect on July 1. 82 new questions were created, and 101 questions were eliminated, resulting in a reduction of the number of questions from 622 to 603. Over 350 questions were modified. This pool must be used for all Extra Class exams, beginning July 1, 2024. It’s available at (<https://www.ncvec.org/index.php/2024-2028-extra-class-question-pool-release>).

* IARU HF World Championship

The IARU HF World Championship will be held again on the second full weekend of July (July 13-14, 2024). Its purpose is "To support amateur self-training in radiocommunications including improving amateur operating skills, conducting technical investigations, and intercommunicating with other amateurs around the world, especially IARU member society headquarters stations". For details and rules, see (<http://www.arrl.org/iaru-hf-world-championship>).

* 13 Colonies Special Event

The annual 13 Colonies Special Event celebrates our nation's Independence Day and will be held on July 1-7. There will be a special event station in each of the 13 colonies, along with bonus stations in Great Britain, France and Philadelphia. Very attractive certificates are available. Get details at (<http://www.13colonies.us/>).

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Hamfests And Special Events:

* 08/09-11/2024

Pacific NW DX Convention. Location: Everett, WA. Sponsor: The Western Washington DX Club. Website: <http://pacificnwdxconvention.com>.

* 09/14/2024

Reno Ham Swap. Reno, NV. Sponsor: Sierra Nevada Amateur Radio Society. Website: (<http://renohamswap.com>).

* 10/18-20/2024

Pacificon Convention. Location: San Ramon, CA. Sponsor: Mount Diablo Amateur Radio Club. Website: (<http://www.pacificon.org>)

* 10/18-20/2024

Pacificon 2024 Special Event Station. 1900Z-1900Z, W1AW/6, San Ramon, CA. Palo Alto Amateur Radio Association. 14.270 7.050. QSL. W1AW, 225 Main Street, Newington, CT 06111. (<https://www.pacificon.org>)

Search for all hamfests at (<https://www.arrl.org/hamfests-and-conventions-calendar>)

Search for all Special Event Stations at (<https://www.arrl.org/special-event-stations>)

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Significant Events in Telecomm History – July

** Note: Send me the date and location your club was founded, so I can add it to this list. **

- 07/01/1881 The world's first international telephone call was made between St. Stephen, New Brunswick, Canada, and Calais, Maine, United States
- 07/01/1911 The Wireless Ship Act of 1910 became effective, the first federal legislation regulating radio communication in the U.S.
- 07/01/1941 The first national standards for the broadcast of television went into effect.
- 07/01/1951 The Novice and Technician Class licenses were created by the FCC. The Novice was good for 1-year, non-renewable, low power CW only.
- 07/01/1971 Federal frequency & time signal radio station WWVH began broadcasting from its current location near Kekaha on the Island of Kauai, Hawaii.
- 07/02/1928 W3XK went on the air in Wheaton, Maryland, becoming the first commercially licensed television station in the US.
- 07/02/1939 The Hewlett-Packard Company was founded in a garage in Palo Alto, California by Bill Hewlett and David Packard, producing a line of electronic test and measurement equipment. The "HP Garage" at 367 Addison Avenue is now designated an official California Historical Landmark, and is marked with a plaque calling it the "Birthplace of 'Silicon Valley'".
- 07/04/1838 Edward Davy received a patent for a telegraph system using his mercury dipping electrical relay.

- 07/05/1687 Isaac Newton published the first edition of his Principia Mathematica, widely regarded as one of the most important works in both physics and applied mathematics. The work underlies much of the technological and scientific advances from the Industrial Revolution.
- 07/05/1912 Forty-five Q-codes were formally adopted into international law by the Second International Radiotelegraph Convention in London. The concept of callsign prefixes was also established, giving the U.S. the prefixes KDA-KZZ, N (all), and W (all).
- 07/05/1963 Federal frequency & time signal radio station WWVB was launched near Fort Collins, Colorado, replacing the experimental callsign KK2XEI.
- 07/06/1854 Georg Simon Ohm died in Munich, Kingdom of Bavaria in the German Confederation (present-day Germany) at age 65.
- 07/09/1962 A major manmade geomagnetic storm struck Earth, following the detonation of a thermonuclear warhead 250 miles above the Pacific Ocean—a test called “Starfish Prime.” The event caused an artificial solar storm complete with auroras, geomagnetic activity, and blackouts, including radio and satellite failures.
- 07/10/1856 Nikola Tesla was born in Smiljan, Austrian Empire (modern-day Croatia).
- 07/10/1962 Telstar 1 was launched, the first satellite to relay through space television pictures, telephone calls, and telegraph images, and providing the first live transatlantic television feed.
- 07/12/1999 The final commercial Morse code transmission in the U.S. was sent, using Samuel Morse's original 1844 message, "what hath god wrought", and the prosign sk ("end of contact").
- 07/13/1866 The Great Eastern steamed westward toward Heart's Content, Newfoundland, Canada from Valentia, Ireland, laying the first transatlantic cable.
- 07/13/1948 The Mt. Diablo Amateur Radio Club became affiliated with the ARRL.
- 07/19/1977 The first satellite navigation positioning signal was received from NTS-2 (Navigation Technology Satellite), by Rockwell Collins engineer David Van Dusseldorp in Cedar Rapids, Iowa. This marked the beginning of the Global Positioning System (GPS) era.
- 07/20/1937 Guglielmo Marconi died in Rome, Kingdom of Italy at age 63.
- 07/25/2005 The California Amateur Radio Linking Association became affiliated with the ARRL.
- 07/27/1866 The first transatlantic cable was completed, with its landing in Heart's Content, Newfoundland, Canada from Valentia, Ireland.
- 07/29/1958 President Dwight Eisenhower signed the National Aeronautics and Space Act, establishing NASA.
- 07/29/1985 The Space Shuttle Challenger launched, carrying the first official Shuttle Amateur Radio Experiment (SAREX) payload.
- 07/30/1959 The Livermore Amateur Radio Klub (LARK) was founded.
- 07/31/1940 The first meeting of the National Television Standards Committee (NTSC) was held, with a mission to develop standards for the broadcast of television nationwide. The new standards were accepted by the FCC in May, 1941 and went into effect on July 1, 1941.
- July, 1908 Modern Electrics magazine, published by Hugo Gernsback, printed the first “Wireless Registry” list of amateur stations, including self-designated call signs.
- July, 1948 The first of two parts of Claude Shannon's "A Mathematical Theory of Communication" was published in the Bell System Technical Journal, essentially inventing the field of information theory.

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New Hams:

The new Ham and Upgrade reports are currently not available, due to the IT systems disruption.

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New Upgrades:

The new Ham and Upgrade reports are currently not available, due to the IT systems disruption.

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Question & Answer:

On which of the following bands is phone operation prohibited?

B. 30 meters

[General Class question pool (2023-2027) no. G1A02 (<https://www.ncvec.org/index.php/2023-2027-general-question-pool-release>)]

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If you'd like a better-looking PDF version of this newsletter, or want to refer to previous editions, they're all available on the East Bay Section website at (https://arrleb.org/index.php/files/get_dir/Newsletter).

Until next time, remember that the East Bay Section team is here to serve you, the hams of the East Bay. If you have a question or a problem concerning ham radio, don't hesitate to contact us.

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ARRL East Bay Section Manager

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