



Section Manager **East Bay Section Newsletter** December, 2022

ARRL East Bay Family,

A lot is happening in December. SkyWarn Recognition Day (today, Dec 3); Pearl Harbor Day (Dec. 7th); Pacific Division Annual Members meeting (Dec. 10); your property taxes are delinquent (also Dec. 10); Christmas, New Year's Eve. This December also brings the 90th anniversary of the first ham license ever issued in the U.S.; and the 100th anniversary of the first verified amateur radio signal from Europe to be received in North America. Don't forget that all of December is Youth on the Air (YOTA) month. Get more on most of these events below; and see the Significant Events list near the bottom for several more important December anniversaries in Ham history.

Once again, have a Merry Christmas, Happy Hanukkah, Joyful Kwanzaa, Pleasant Boxing Day, Delightful Dewey Decimal System Day, Sublime Saint Lucia's Day, Amusing Saint Stephen's Day, Beautiful Bacon Day, Wonderful Winter Solstice, Merry Monkey Day, drunken New Years; or whatever else gets you warmed up and ready for the long winter.

Section & Division News:

* Pacific Division Meeting

You should have received a note earlier this week from Kristen McIntyre, K6WX, our Pacific Division Director, inviting you to her annual Division meeting, to be held on Saturday December 10th at 10:30 AM PST (1830Z) via Zoom. As Kristen says, the meetings "give you a chance to interact and ask questions, and they give me some great feedback for the upcoming ARRL Board Meeting in January." If you didn't get her message, let me know and I'll email you the Zoom link when she sends it out.

* East Bay Youth Coordinator on YouTube

The ARRL HQ recently released a short video promoting Young Hams on Giving Tuesday. Alexia Snethen, KM6LGG, our own East Bay Section Youth Coordinator, is the first person of several appearing in the video, talking about why they love amateur radio. Congratulations, Lexi! Check it out at: (https://www.youtube.com/watch?v=ns6VR8h-8T8) [YouTube, 00:01:09]

* Pacificon Interviews

Dave Casler, KE0OG, is the author of QST's "Ask Dave" column each month and a popular ham radio YouTuber. Although he lives in Colorado, he attended Pacificon again this year and recorded a number of short interviews with some of the vendors and non-profit exhibitors. Most are about 2-1/2 to 3 minutes long; the longest one is about 6-1/2 minutes. Here's a list of the organizations he interviewed:

-- Island Amplifier, representing German companies RF-Kit and Beko Electronics

-- Powerwex -- Impulse Electronics -- Bridgecom Systems

-- Elecraft -- Yaesu -- StepIR

-- Icom America -- ZumRadio

-- ABR Industries -- FlexRadio -- ARRL

-- SOTA (Summits on the Air) -- POTA (Parks on the Air)

The videos are available at: (https://www.youtube.com/c/DavidCasler/search?query=Pacificon).

[Thankx to Lauren, WA6CIE, for the tip.]

* EmComm Net Correction

I've been advised of a correction to the list of EmComm Nets in the Section that was included in my newsletter last

month. The following listing no longer meets and has been replaced by the "West Contra Costa County EMCOMM Net" on Thursday evenings, which was included in the list last month. So, if you kept that list, please delete this net: Wednesday

6:45 PM: West Contra Costa County-ARES/RACES Net; WD6EZC; 145.110 MHz, Split, PL=82.5 [Thankx to Don, NI6A, for the correction.]

* QCWA Chapter Special Event Station

Our local chapter of the Quarter Century Wireless Association (QCWA) will host a Special Event Station on Friday, December 9 in celebration of the QCWA's 75th Anniversary. They'll be operating CW and SSB from 6:00 AM to 10:00 PM using the call sign W2MM. If you want to work the station, contact Ron, K6XC, for details at k6xc[at]earthlink[dot]net. Also, see the Other News section below for more on the QCWA anniversary.

And if you've been a ham for at least 25 years, join QCWA and our local chapter. Contact Tim, K6BIV, at k6biv[at]mac[dot]com.

* Clubs Planning License Training Classes

- -- The Benicia ARC has started planning to resurrect their highly respected one-day "ham-cram" class. It will include both Technician and General Class training. No date or location has been confirmed yet. For details when they're available, check in on their website occasionally at (https://beniciaarc.com/).
- --The Emergency Amateur Radio Club of Hawai'I will provide several online-only 7-session Technician courses next year. The first one begins January 9, 2023, with others beginning in March, June, July and October. Contact (skawamae[at]gmail[dot]com) for details.
- -- The Mt. Diablo ARC has opened registration for their 8-session Technician licensing course, beginning January 10 on Zoom only. It will be followed by a VE test session, then two Get-on-the-Air (GOTA) classes. They plan to hold General and Amateur Extra Class courses later in the year. Get the details and register at (https://www.mdarc.org/education-and-testing/class-details).
- -- If your club is planning license classes or similar events, let me know so I can get them into this newsletter. I'll need to know before the end of the previous month at the latest. Earlier is better.

ARRL News:

* ARRL Foundation Accepting Scholarship Applications

The ARRL Foundation Scholarship Program is accepting applications for more than 100 scholarships to deserving radio amateurs pursuing higher education. Individual scholarships range from \$500 - \$25,000. All applicants must be active, FCC-licensed amateur radio operators and submit a completed online application by 12 PM Eastern Time on January 4, 2023. That's 9:00 AM Pacific Time. Requirements for each scholarship are exacting and must be followed in detail, so potential applicants should read the instructions carefully. See (http://www.arrl.org/scholarship-program) for details, eligibility requirements for each scholarship and a link to the application.

* Kids Day

Kids Day is a semi-annual event designed to promote Amateur Radio to our youth. Older hams are encouraged to share their station and love for Amateur Radio with their children or other young people. The next Kids Day is the first Saturday in January, Jan. 7, 2023. It will run from 1800 UTC through 2359 UTC (10:00 AM to 3:59 PM Pacific Time, if I counted all my fingers correctly). Get details at (http://www.arrl.org/kids-day).

* Giving Tuesday at ARRL

Giving Tuesday was last Tuesday, November 29, 2022. It's a growing annual movement where individuals and organizations, like ARRL, come together to unleash the power of radical generosity. Many ARRL programs and services are not covered by membership fees alone. Your contributions have a tremendous impact on ARRL's ability to promote and protect amateur radio and better serve its members. This year, ARRL's theme for #GivingTuesday was Young Hams, hence the item above about our East Bay Youth Coordinator. Even though Giving Tuesday has passed, you can still donate to help our numerous programs for young hams; the Student Membership Discount; Youth Licensing Grants;

Outreach to Teachers and Schools; Collegiate Amateur Radio Program; Kids Day and School Club Roundup; and many youth programs such as Amateur Radio on the International Space Station (ARISS) and outreach to scouts. If you can help the ARRL this holiday season, go to (www.arrl.org/give).

* Executive Committee Meeting Minutes

The agenda and minutes of the Executive Committee Meeting, held on October 24, have been released. The agenda is at (http://www.arrl.org/files/file/ARRL Executive Committee Meeting Agenda 10_24.pdf) and the minutes are at (http://www.arrl.org/files/file/EC Meeting 10_24 Final.pdf).

Government News

* New FEMA Online Course

The Federal Emergency Management Agency (FEMA) Emergency Management Institute (EMI) has released a new online study course and exam, titled "Preparing the Nation for Space Weather Events". The course identifier is IS-66. ARRL Director of Emergency Management Josh Johnston, KE5MHV, took the course and passed the exam. He said the course "explains the levels of response the government uses in regard to [these] events. [It] would be a good training course for any ham to gain a better understanding of how space weather affects communications here on Earth. "It only takes about 2 hours to complete online. A FEMA student ID is required, and is free from the EMI website. See (https://training.fema.gov/is/courseoverview.aspx?code=IS-66&lang=en).

* FCC Releases Broadband Coverage Maps

In my October newsletter, I reported on the coming release of much more detailed maps of broadband coverage throughout the U.S. Those maps have now been released at the below link. On the home page, you can search by a specific address, which will pull up a map of that location along with an indication of its coverage. There are also Area Summary and Provider coverage maps available. You can zoom in to an area the size of a residential block, or out to the entire U.S. You can look at fixed, mobile or combined broadband coverage. You can filter the results by technology (3G, 4G, 5G, etc.) You can also submit a "Challenge" to the FCC if you think some of the data is wrong. You can even download data files by state in various categories. The maps will be updated roughly every six months. While browsing through the East Bay Section, I was surprised at the number of areas that had poor or no coverage. This will be a valuable resource for many of us. See it at (https://broadbandmap.fcc.gov).

* BIPM Proposes Ending the Leap Second

The International Bureau of Weights and Measures (BIPM, using the French acronym) is the international organization established by a treaty first enacted in 1875 to develop and maintain international measurement science and measurement standards. It's the home of the International System of Units (SI) [the Metric System] and the international reference time scale (UTC) [Universal Coordinated Time]. The BIPM held its 27th meeting of the General Conference on Weights and Measures last month and approved seven resolutions. Two of them are particularly interesting to hams.

Resolution 4 will essentially eliminate the leap second for at least the next century, effective no later than 2035. The leap second was originally created because UTC does not exactly match the time it takes for the Earth to make one complete rotation. As a result, an additional second would be added to UTC (and so the world's clocks) every several years to compensate. Since 1972, 27 leap seconds have been added. But the Earth's rotation speed is changing, to the point that a negative leap second may need to be inserted, something never foreseen. This, along with the differences in the way the leap second is applied around the world, and major and growing problems with incorporating it into our increasingly complicated technologies, led to this proposal. One second very several years may not sound like much, but most of today's technology (e.g., cell phones) depend on nanosecond or better accuracy; so yeah, it's a big deal. The BIPM website is at (https://www.bipm.org/en/).

A PDF of the Resolutions discussed here is available at (https://www.bipm.org/documents/20126/64811223/Resolutions-2022.pdf/281f3160-fc56-3e63-dbf7-77b76500990f). [PDF, 32 pages.]

[Note: the document is in both French and English. The English version begins on PDF page 19. Resolution 4 is on PDF page 25.]

A CNET article that explains much of this in plain language, along with some additional background, is at: (https://www.cnet.com/science/leap-seconds-will-expire-by-2035-easing-time-trouble-for-tech/?ftag=CAD090e536).

* BIPM Adds Prefixes to the Metric System

Another of the resolutions the BIPM approved at the same General Conference on Weights and Measures held last month was Resolution 3, which adds four new prefixes to the SI (aka the Metric System). Prior to this change, the largest official prefix in the SI was the "yotta" with a value of 10^{24} (a one followed by 24 zeros); and the smallest was the "yocto" (10^{-24}) (a one to the right of the decimal point, followed by 23 zeros). The new ones are the "ronna" (10^{27}) and the "quetta" (10^{30}) at the top; and the "ronto" (10^{-27}) and the "quecto" (10^{-30}) at the bottom. Please don't ask me to pronounce those "Q" words. These are needed to more easily quantify the ever-increasing amount a data humans create and other things such as the huge objects in the universe; as well as the ever-smaller measurements being made in the quantum mechanics world. See the above link to the PDF of the Resolutions, where Resolution 3 begins on PDF page 24. You may also want to look over this National Public Radio article, which explains more background and why it was done. (https://www.npr.org/2022/11/19/1137985619/metric-system-measurement-prefix).

Other News:

* SkywarnTM Recognition Day

SKYWARNTM Recognition Day is observed annually on the first Saturday in December to commemorate the contributions that SKYWARNTM radio operators make to the National Weather Service. This year, it's on December 3. SKYWARNTM is a national network of volunteer severe weather spotters that are trained by the NWS to report instances of tornadoes, severe thunderstorms, hail, and flooding. Many of the spotters are hams. In some parts of the U.S., these spotters also report on snowfall and ice accumulation in their local areas. Register, get operating procedures and details on how to participate at (https://www.weather.gov/crh/skywarnrecognition).

[Thankx to the Sierra Nevada Amateur Radio Society newsletter, "Cracklin' Static", for the tip.]

* QCWA 75th Anniversary

The Quarter Century Wireless Association (QCWA) is celebrating its 75th anniversary this Monday. It was founded in New York City on December 5th, 1947. To commemorate the event, the December issue of its newsletter will have 75 pages, including the rich history of QCWA and a special surprise. They will also hold a W2MM Special Event Station for a week, Dec 3-10. If you wish to activate W2MM, please reach out to Activities Manager, John Kludt, K7SYS, at (activitiesmanager@qcwa.org) to set up a schedule. All stations working W2MM will be able to download a commemorative certificate. See (https://qcwa.org/w2mm-special-event.htm) for details.

* National Weather Service Real-Time Data Feed

A group called Affirmatech has released version 2.0 of WXWARN, software that uses the National Weather Service (NWS) real-time weather data feed. It constantly monitors NWS weather updates and displays user-selected alerts as they're issued. It can be configured to display a simple heads-up, unfolding weather conditions at the county, statewide, or regional level, or severe weather alerts for the entire US. WXWarn 2.0 is useful for individual use, but also for volunteers supporting amateur radio emergency communications as part of the complement of resources they use. The software is operating-system agnostic, runs entirely in a browser, and so can be used with a PC, phone, tablet or similar device. It's available at (https://wxwarn.affirmatech.com).

* Great ShakeOut 2022 Results

Winlink users sent some 771 DYFI (Did You Feel It?) exercise reports to the US Geological Survey (USGS) during ShakeOut 2022 on October 20. Of those, 65% were sent via RF and 35% via Telnet (internet). Among the lessons learned were that more training with geocoordinates (latitude and longitude in degree decimals) is needed (e.g., use a negative longitude for the U.S., not positive). The next International ShakeOut is on October 19, 2023. The full report is at (http://www.arrl.org/ares-el?issue=2022-11-16#toc02).

* Ham Radio YOTA Month

December is Ham Radio YOTA Month around the world. According to the Youth on the Air website, "The idea for this is to show the amateur radio hobby to youth and to encourage youth to be active on the ham radio waves." Awards and a QSL program are available. Get the information and join the fun at (https://youthontheair.org/yota-month/).

* Winter Field Day

Mark your calendar now for Winter Field Day. Held the last full weekend in January, it will be on January 28-29 in 2023.

The nifty thing about Winter Field Day is that is can be worked from the comfort of your home or at a remote location. You can use all HF, VHF, or UHF bands and any mode. Get all the details at (https://winterfieldday.com/).

* Quartzfest

And if you have an RV, make plans to spend a week in the Desert at Quartzfest, scheduled for January 22-28 next year. Details are at (https://quartzfest.org/).

* American Legion Amateur Radio Club Ending National Program

The American Legion has sponsored a national amateur radio club for a number of years, and it grew to become one of the largest in the nation. However, they recently announced that the club "is no longer operating as a national program, due mainly to a lack of licensed ham radio operators on staff. Legion ham radio clubs and programs, meanwhile, continue to operate successfully at the local level." If you're a Legion ham that belongs to a Bay Area post with a ham station, I'll be happy to pass along information about your station via this newsletter.

* Ham Radio University – 2023

A reminder that Ham Radio University will be January 7, 2023. Forum topics are now posted on their website, and registration will open on December 18. See (https://hamradiouniversity.org/).

Hamfests And Special Events:

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* Division Hamfest Reminders

None scheduled

- * Special Events In or Near our Division
- -- December 3-10:

QCWA W2MM Special Event Station 2022. 12/03/2022, 0001 UTC to 12/10/2022, 2359 UTC. CW: 3.540 7.035 14.040 21.050 28.050 SSB: 3.810 7.244 14.262 21.365 28.325. (https://gcwa.org/w2mm-special-event.htm).

-- December 9:

QCWA Bay Area Chapter 228 W2MM Special Event Station. CW and SSB from 6:00 AM to 10:00 PM Pacific Time. Contact Ron, K6XC, for details at k6xc[at]earthlink[dot]net for details.

-- December 10:

Pearl Harbor Remembrance Day (12/7/41). Dec 10, 1700Z-2359Z, NI6IW, San Diego, CA. USS Midway (CV-41) Museum Ship. 14.320 7.250 14.070 PSK31 DSTAR on PAPA repeaters. QSL. USS Midway Museum COMEDTRA, 910 N Harbor Drive, San Diego, CA 92101. (www.qrz.com/db/ni6iw)

-- January 14:

Commemorating last MIG shoot down in VietNam war by Midway F-4 Jan 14, 1700Z-2359Z, NI6IW, San Diego, CA. USS Midway Museum Ship. 14.320 7.250 14.070 PSK31 DSTAR on Papa system repeaters. QSL. USS Midway Museum Ship COMEDTRA, 910 N Harbor Drive, San Diego, CA 92101. www.qrz.com/db/ni6iw

-- January 28-30:

California Discovery of Gold Jan 28-Jan 30, 1700Z-0100Z, AG6AU, Coloma, CA. El Dorado County Amateur Radio Club. 7.248 14.248 21.348 28.348. QSL. El Dorado County ARC, P.O. Box 451, Placerville, CA 95667. (http://edcarc.net/)

Search for all Special Event Stations nationwide at (http://www.arrl.org/special-event-stations)

Significant Events in Telecomm History – December

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

- 12/01/1966 Federal radio station WWV in Greenbelt, Maryland went off the air at 0000 UTC and the new station near Fort Collins, Colorado simultaneously went on the air.
- 12/01/1983 Astronaut Owen Garriott, W5LFL, aboard the Space Shuttle Columbia, made the first ham radio contact from a human in space to someone on Earth. The contact was with Lance Collister, WA1JXN, in Frenchtown, Montana.
- 12/4/1850 William Sturgeon, inventor of the electromagnet, died in Prestwich, Lancashire, England at age 67.
- 12/05/1947 The Quarter Century Wireless Association (QCWA) was founded in New York City.
- 12/06/1923 President Calvin Coolidge gave an address to Congress that was the first presidential speech to be broadcast over the radio
- 12/07/1941 Pearl Harbor, Hawaii and other locations were attacked, bringing the U.S. into World War II. Radio station KTU in Honolulu broadcast several hours of live updates during the surprise attack.
- 12/08/1864 James Clerk Maxwell proposed a theory of electromagnetic radiation in a lecture to the Royal Society of London. He stated that "light and magnetism are affections of the same substance".
- 12/09/1921 Radio station KWQ went on the air in San Jose. It became KCBS in 1949.
- 12/10/1945 ENIAC (Electronic Numerical Integrator and Computer); the first programmable, electronic, general-purpose digital computer; was first put to work for practical purposes. It was in continuous operation until 1955.
- 12/12/1901 Guglielmo Marconi claimed to have received the first trans-Atlantic radio signal, in St. John's, Newfoundland, Canada from Poldhu, Cornwall. (Some dispute the claim.)
- 12/12/1912 Representatives of the Department of Commerce and Labor at the Brooklyn Navy Yard issued the first Certificate of Proficiency to Irving Vermilya, W1ZE, making him the first officially licensed radio amateur in the U.S.
- 12/12/1961 The world's first amateur radio satellite, OSCAR 1, was launched into space. It was also the first privately owned satellite and the first secondary payload. It orbited for 22 days before reentering the atmosphere.
- 12/14/1931 Alan Dower Blumlein filed a patent in London, UK for a two-channel audio system called "stereo".
- 12/17/1797 Joseph Henry was born in Albany, New York. He was the first Secretary of the Smithsonian Institution, inventor of the first practical electrical relay & namesake of the unit of Inductance.
- 12/17/1902 The world's first radio message to cross the Atlantic Ocean occurred, from Glace Bay, Nova Scotia, Canada.
- 12/18/1890 Edwin Howard Armstrong, inventor of FM (frequency modulation) radio and the superheterodyne receiver system, was born in Chelsea, Manhattan, New York.
- 12/18/1958 Signal Communications by Orbiting Relay Equipment (SCORE) was launched, becoming the world's first purpose-built communications satellite.
- 12/19/2006 The FCC issued a Report and Order ending the requirement for Morse Code proficiency from all amateur radio licenses. The R&O took effect February 23, 2007.
- 12/23/1947 The first transistor was completed at Bell Labs in Murray Hill, NJ by Walter H. Brattain and John A. Bardeen -- under the direction of William B. Shockley.
- 12/23/1975 The Metric Conversion Act was signed into law by President Gerald R. Ford, making the metric system "the preferred system of weights and measures for United States trade and commerce".
- 12/23/1994 The FCC adopted final rules implementing vanity call signs in the Amateur Service.
- 12/23/2009 The volunteer civilian communications program supporting the military changed its name to the "Military Auxiliary Radio System". It was previously the "Military Affiliate Radio System".
- 12/24/1906 The first radio broadcast for entertainment and music, and the first transmission of amplitude modulation, was transmitted from Brant Rock, Massachusetts to the general public, by Reginald Aubrey Fessenden.
- 12/24/1922 The first verified amateur radio signal from Europe was received in North America. The signal originated from the RSGB station (G)5WS at Wandsworth in South London, as part of the Third Transatlantic Tests.
- Dec., 1915 The first issue of QST magazine was published. The price was 10 cents.

New Hams:

KN6WHS Colin Santos Brentwood (General)
KN6WEJ John Ornelas Brentwood
KN6WFJ Benoit Maag Danville
KN6WII Albert Tsui Danville

KN6WCK	Annabelle Chu	Fremont
KN6VZP	Tzietzel Ramos	Hayward
KN6VZR	Jayjay Ramos	Hayward
KN6WEK	Richard Laurenzo	Castro Valley
KN6WFA	Brian Zoraster	Livermore (General)
KN6WEW	Christopher Ray	Martinez
KN6WBQ	Greg Bahue	Napa (General)
KN6WFH	Venkata Amuru	Oakley
KN6WCO	Paul Bartholow	Pleasanton
KN6WBC	Joaquin Guzman	Rodeo
KN6WAF	Destin Manalo	San Leandro
KN6WAH	Ruben Esteban S	an Leandro
KN6WAG	Anna Rose Esteban	San Leandro
KN6WEQ	Ryan Jacobs	San Ramon
KN6WIN	You Zhang	Union City
KN6WEM	Weylin Jensen	Walnut Creek
KN6WEN	Nicole Merchain	Oakland
KN6WAP	Andres Chaidez	Berkeley
KN6WIJ	Aarabhi Achanta	Berkeley
KN6WCF	Benjamin Weinstein-Ra	un Berkeley (General)
KN6WIH	Khai Sam	Berkeley
KN6WAV	Teddy Yeh	Berkeley

Teddy Yeh Berkeley KN6WAV Vacaville KN6WAQ Robert Demadura

New Upgrades:

KN6SXH	Curtis Smith	Brentwood	(General)
KN6UWF	Jonathan Keller Lundbe	erg Fairfield	(General)
KN6QNE	Scott Foster	Fremont	(Extra)
KF6HST	Sameer Tiwari	Fremont	(Extra)
KN6SXI	Rajiv Govindjee	Lafayette	(General)
KN6WFA	Brian Zoraster	Livermore	(General)
KN6WBQ	Greg Bahue	Napa	(General)
W6NIK	Nik Lutz	Rutherford	(Extra)
KC6QVE	Martin Poles	Vallejo	(General)
KN6TFS	David Blanchard	Walnut Creek	(General)
KF0JZI	Michelle Collins	Oakland	(General)
KN6WAX	Luke Peters	Berkeley	(General)
KK6YGS	Harold Nelson	Vacaville	(General)

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.

Mike Patterson, N6JGA

ARRL East Bay Section Manager

N6JGA@ARRL.org

https://www.arrleb.org

East Bay Section Discord: https://discord.gg/DNAAfC7hax ARRL HQ Help Desk: 888-277-5289 or hq@arrl.org

Index of Contacts at ARRL HQ: http://www.arrl.org/contact-arrl