

Section Manager
East Bay Section Newsletter
January, 2025

ARRL East Bay Family,

New License Reports are back!!! At long last, the ARRL IT gurus have been able to restore access to the New Ham Reports I was including near the bottom of each month's newsletter. Because of that, this newsletter is extra long, as I catch up on the reports from the last six months of 2024. Unfortunately, the New Upgrades report is still off-line, but should be back soon. Adding to this edition's length, there's a pot load of year-end stories to tell.

The Mt. Diablo Amateur Radio Club was founded on 01/09/1947, a youthful 78 years ago. Congratulations, MDARC!

Congratulations and thank you to the San Leandro Radio Club and the Livermore Amateur Radio Klub (LARK) for becoming affiliated with the ARRL on January 16, 1974 and January 18, 1964, respectively.

I hope your Christmas was quite Merry and your New Year's celebration worth the hangover. Now the long holiday drought begins. Martin Luther King Day is later this month, but Easter isn't until April 20th.

*** Question:**

How does a higher sunspot number affect HF propagation?

- A. Higher sunspot numbers generally indicate a greater probability of good propagation at higher frequencies
- B. Lower sunspot numbers generally indicate greater probability of sporadic E propagation
- C. A zero sunspot number indicates that radio propagation is not possible on any band
- D. A zero sunspot number indicates undisturbed conditions

(See the last page for the answer.)

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Section & Division News:

*** Pacific Division Member Meeting**

Pacific Division Director Tony Marcin, W7XM, is hosting a Division-wide member meeting on Saturday, January 11, 2025 at 10:00 AM, held on Zoom. Hopefully, you received his email announcing the meeting, including a link to register for it. In case you didn't, that link is (<https://us06web.zoom.us/meeting/register/xH7c04IVQrSMaVNqGp34SQ>). He's asking us all to pre-register this time to ensure he has enough slots on his Zoom license to allow everyone to attend. So register and mark your calendars now so you don't miss it.

*** Richmond Councilwoman Becomes a Ham**

Soheila Bana, KO6GTV, Richmond California councilwoman and head of the city's Public Safety Committee, passed her amateur radio license test and is now a licensed Technician class amateur radio operator. On Saturday November 9, 2024, the Brickyard Landing Home Owners Association (HOA) hosted a one-day Technician License Class and VE Test Session. The HOA has an active amateur radio/Community Emergency Response Team (CERT) presence and supports "reasonable" antenna requests to further that objective. They are also looking at creating a club station in their common area facility for their licensed members. Bana is working to bring VE Test Sessions to the city's community center so that more people can discover amateur radio and be better prepared to respond in the event of a city-wide emergency. In addition to Bana, there were 18 newly licensed hams from Richmond, Berkeley, San Francisco, Oregon and South Dakota who attended the VE Session.

* Coastal Region Radio Exercise

California state OES Region II, the Coastal Region, consists of 16 counties along the coast from Monterey County north to the Oregon border, and a few counties adjacent to those coastal counties. It includes all of the ARRL East Bay Section and is one of three Regions in the California OES organization. Its annual communications exercise is scheduled for Thursday, May 1, 2025, and amateur radio has a major role. A planning meeting for that exercise is scheduled for Friday, January 10, 2025, 3:00 – 5:00 PM. If you or your organization have questions or is interested in participating in the exercise, please contact Greg Waters, Humboldt County OES, at (gwaters@co.humboldt.ca.us).

[OES = Office of Emergency Services.] [Thankx to Don, NI6A, and Greg, KJ6OUI, for the information.]

* Section Manager Elections

Nominations for the Nevada and San Joaquin Valley Section Managers are open. If you know someone in those sections that's interested in being the Section Manager, they need to consult the information at (<http://www.arrl.org/section-terms-nomination-information>). Included on that page is a link to the Section Manager Nomination Form, which will need to have at least five valid signatures from ARRL members in the section. Other requirements apply. Submission deadline is 4:00 PM Eastern Time (1:00 PM Pacific), March 7, 2025. The elected managers will begin their terms on July 1, 2025.

* Benicia Ham Class

The Benicia ARC will host another one of its one-day ham classes on Saturday, February 1, 2025. It will be from 8:30 am to 5:00 pm with a one-hour lunch break, at the Benicia Senior Center, 1201 East 2nd Street. The class offers training for both the Technician and General Class licenses. The fee is \$35.00, which includes the exam fee. For details and to register, see (<https://beniciaarc.com/hamclass/>).

* MDARC Technician License Class

The Mt. Diablo club will hold its next Technician Class 8-session course each Tuesday evening, January 7-February 25, 2025 at 7:00 PM, both in person and on Zoom. There will be a test session the following Tuesday, March 4, and two optional (but highly recommended) Get-On-The-Air sessions on the two Tuesdays following the test session. For details and to register, go to (<https://www.mdarc.org/education-and-testing/class-details>). Scroll down to the section "January Course" and click the course title to register. Be sure to read the rest of the above web page to get needed information, such as the required manual. Send any questions to (info@mdarc.org).

* USS Hornet Ham Class

The Hornet ARC will be hosting a one-day Technician Class licensing session on board the USS Hornet on March 1st, 2025. The class will be taught by Rich Harrington KN6FW and Paul Shinn K6FRC. There is a \$15 fee for the exam and a \$35 licensing fee to the FCC. Applicants must first obtain an FRN from the FCC in order to attend the class and take the exam. You can register for an FRN at (<https://www.fcc.gov/wireless/support/knowledge-base/universal-licensing-system-uls-resources/getting-fcc-registration>). Study materials for the class can be downloaded at the rdf-sf Library page: (<https://qsl.net/s/sfthunt/rdf-sf/library/>). Click the "Tech Class 2024" link to download the study materials. Class will start at 8:00am in the ship's wardroom and it is recommended that all class attendees arrive by 7:30am. If further information is needed, or if you have further questions, you can contact Rich Harrington, KN6FW at (925) 462-1467. This information will also be made available on their website: (www.nb6gc.org).

[FRN = FCC Registration Number.] [Thankx to Gary, KE6QR, for the information.]

* Oakland Marathon

The Oakland club, ORCA, is looking for help with its biggest public service event of the year, the Oakland Marathon. To be held on Sunday, March 23, 2025, it consists of four courses of different lengths; a full marathon, half marathon, 10K (10,000 meters, or 6.2 miles), and 5K (5,000 meters or 3.1 miles). There will also be a Kid's Fun Run, with three distances (quarter mile, half mile & mile), depending on your youngster's age; and a health & wellness expo. There are numerous assignments and clearly a lot for the communicators to do, so ORCA needs your help. The event has plenty of documentation for hams and GMRS licensees. For details on the event itself, see the Oakland marathon website at (<https://oaklandmarathon.com/>). For questions and to volunteer for ham duty, see (<https://www.wv6or.com/oakland-marathon-signup>).

[ORCA = Oakland Radio Communication Association.] [Thankx to Mike, KB6MP, for the info.]

* QST Article on Pacificon

A very nice article on Pacificon is in the January, 2025 edition of QST, page 73. The short article described many of the activities and people that were at the convention and points out our emphasis on youth involvement. Make sure you see it in your copy of January's edition.

* Code Proficiency

Congratulations to Sherrick Slattery, KA6NZB, of Berkeley for achieving code proficiency of 10 words per minute. You can check your own Morse code ability through the ARRL Code Proficiency program. Get details at (<https://www.arrl.org/code-proficiency-certificate>).

* East Bay Section Position Openings

Our East Bay Section team works hard to represent you to the League and the League to you. However, we're hampered by a persistent shortage in our ranks. Several positions remain open, despite our efforts to find qualified people to fill them. Of particular need is a Section Traffic Manager and a Public Information Coordinator. Other positions are also open, such as local area Emergency Coordinators and Net Managers. For information on all the positions in a Section organization, see (<https://www.arrl.org/field-organization>). If you are, or know someone who may be, interested in any of these positions, please contact me. My information is at the bottom of all of these newsletters and on page 16 of every QST.

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ARRL News:

* Board of Directors Meeting

The ARRL Board of Directors meets in Connecticut on the third weekend each January. That will be January 17-18 this time. Typically, participants arrive on Wednesday, committee meetings are held on Thursday, and the Board meets on Friday and Saturday. At that meeting, ARRL officers and members of the Executive Committee will be elected and official business of the League will be conducted. The Executive Committee is authorized to act on behalf of the Board between board meetings. The President and other officers are chosen for two-year terms at the January meeting in even numbered years. The agenda is available at ([https://www.arrl.org/files/file/About%20ARRL/Board%20Meetings/Draft%20Agenda%202025%20\(SH\).pdf](https://www.arrl.org/files/file/About%20ARRL/Board%20Meetings/Draft%20Agenda%202025%20(SH).pdf)).

* Proposed Changes to ARRL By-Laws

Last month, I updated you on proposed changes to Bylaw nos. 42 and 46. Bylaw 42 establishes the Ethics and Elections Committee and describes its duties. Bylaw 46 is the Board's Conflict of Interest Policy. In short, an ad hoc committee prepared the proposed revisions, which were posted on the League website for your review. Since then, in response to comments from Board members, the Committee made several minor wording changes and two relatively major changes. Proposed By-Law 42, Section 1(e) now has a better description of a neutral independent third party. A proposal to modify Article 7 of the ARRL Articles of Association was added to better describe ineligibility.

In addition to the above proposed changes, new proposals to revise Bylaws 18 and 20 were prepared, both of which concern elections. The Bylaw 18 revisions would clarify election procedures and candidate qualification; and move important elements describing elections into the Bylaws from less formally controlled documents. The Bylaw 20 revision would remove the current requirement that a selected qualified and disinterested third party be in person to observe ballot processing. This requirement is now obsolete, as the process is automated and can't really be "observed" in person.

The link to all these proposals and revisions is (<https://www.arrl.org/by-laws-update>), with more detail. The existing Bylaws are available at (https://www.arrl.org/files/file/About%20ARRL/ByLaws%202024%20Jan%2001_20_24.pdf) [PDF, 17 pages.]

* ARRL Foundation Scholarship Reminder

The ARRL Foundation Scholarship Program is for eligible amateur radio operators pursuing higher education. The ARRL Foundation manages more than 100 scholarships established by generous donors ranging from \$500 to \$25,000. The 2025 scholarship cycle is open and has been extended to Monday, January 13, 11:59 PM EST (8:59 PM Pacific). All applicants must be an active, FCC-licensed amateur radio operator. Simply holding a license, without being active in some way, is unlikely to be successful in receiving a scholarship. All applicants must submit an application, along with additional documents that vary among the different scholarships. Requirements are detailed and must be followed exactly. All documents must be submitted with the application. Applications without accompanying required documents (if applicable) will not be considered. Get details on the program and the various scholarships, and the applications, at (<https://www.arrl.org/scholarship-program>).

* New Membership Initiative

ARRL is launching a new year-long sweepstakes program to encourage non-members to join and current members to renew. Participants "are automatically entered into the ARRL Sweepstakes and could win a dream station from Icom. The

Dream Station includes an Icom IC-7760 radio, an IC-PW2 1 KW linear amplifier, an SM-5- microphone and an Icom 60th anniversary limited edition Seiko watch. There are three ways to enter: join the ARRL or renew your membership; set up auto-renewal; or donate to the Diamond Club. For details and official rules, see (<https://www.arrl.org/arrl-sweepstakes>).

* Radiogram Portal Update

I reported in the March edition of this newsletter about the creation of a Radiogram Portal, a web-based application that allows hams and non-hams alike to use the National Traffic System to move messages from one point to another. The portal introduces the capabilities of the NTS and provides the ability to enter a message into the system. Messages converted into radiogram format by the software are then retrieved by authorized traffic handlers (“radiogrammers”) for entry into the NTS. These messages also provide third-party radiograms for practice in formal message handling and net operation. These “radiogrammers” would really benefit from more messages to generate and relay. Check out the website, <https://nts2.arrl.org/radiogram/>, and give it a try. Then let others know about it. Information can be presented to clubs, ARES groups, via newsletters, and of course, to families and friends. No, it doesn’t quite compete with email and text messaging for ease, speed and instant gratification, but it is unique and an introduction to preparedness for emergencies. [NTS = National Traffic System.]

* Kids Day

Kids Day is this Saturday, January 4. It’s 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. It will run from 1800 UTC through 2359 UTC (10:00 AM to 3:59 PM Pacific Time). Get details at (<http://www.arrl.org/kids-day>).

* ARRL School Club Roundup

The next biannual ARRL School Club Roundup begins next month on Monday, February 10 at 1300 UTC (5:00 AM Pacific), ending on Friday, February 14 at 2359 UTC (3:59 PM Pacific). There are categories for elementary, primary, middle/intermediate/junior high school, senior high school, college/university, non-school and individuals. Be sure to help out these youngsters by getting on the air and contacting them. Details and rules are at (<https://www.arrl.org/school-club-roundup>).

* QuartzFest

“QuartzFest is a week-long ham radio, camping, learning and living event.”, held near Quartzsite, Arizona. This year, it will be January 19-25, 2025, coinciding with the Quartzsite Arizona “RV Show”. Most attendees bring their RVs and camp onsite, but some stay in hotels in nearby Quartzsite. Get all the details at (<https://quartzfest.org/>).

* IT Systems Disruption-DXCC

I reported in the November newsletter that the DXCC system was back in service. The queue of submitted applications is very large, and has included nearly 6 months of applications for processing; while new applications are being submitted every day. ARRL Awards staff and additional staff and volunteers have been working extended hours and weekends to process applications. The League is currently processing paper applications received in November and December, and applications from LoTW submitted in November. They have resumed mailing orders for paper DXCC Certificates and endorsement stickers. Over 350 certificates were mailed on December 26. The easiest way to determine if your DXCC application has been processed is to review your LoTW account. From the Award Account Menu, select Account Status. The “Awarded” column will reflect those QSOs that have been awarded to you after your application(s) has been fully processed. See the full article on this and keep up to date on the IT disruption at (<https://www.arrl.org/news/arrl-systems-service-disruption>).

[LoTW = Logbook of the World. DXCC = DX Century Club (contacting 100 entities)]

* On the Air Live

The ARRL Education & Learning Department will soon launch an interactive livestreamed video podcast, “On the Air Live”. The monthly episodes will be aimed toward educating new and intermediate-level hams, inspiring them to explore the nearly endless aspects of amateur radio and develop their skills. ARRL Education Specialist Wayne Greene, KB4DSF, will host each episode. Listen to this podcast, as he shares more details, including upcoming topics and how to participate in real time. (<https://blubrry.com/arrlontheair/139659758/learn-even-more-with-on-the-air-live/>) [audio, 00:17:42] and (<https://www.youtube.com/watch?v=ZEQWSWDFXUo>) [YouTube, 00:17:40].

* QST Articles on Solar Maximum

Last month, I told you NASA announced that the sun has reached its solar maximum period. The sun has good timing, since there's some good articles in the January QST about it. The monthly column from our CEO, David Minster, NA2AA, has several ideas to help you maximize your advantage during this time. Page 38 has the article "Looking at the Sun" by John Keating, K7LY. The article digs into various types of data from this and other solar cycles in an attempt to determine how reliably peaks in the data predict good propagation. There's a review of foldable solar panels starting on page 45. Good stuff again this month.

* Vote for Your favorite QST Article

Members can vote for their favorite article in the most recent issue of QST magazine. The winner of this monthly poll receives the QST Cover Plaque Award. By voting, you're voicing your opinion about the kinds of articles you enjoy reading in QST and supporting the authors who contribute content. See (www.arrl.org/cover-plaque-poll) and vote today.

* Club Information

January is the month when a lot of clubs have new officers beginning their terms of office. It's important that every affiliated club update their information on the ARRL website each year. This includes listing some of the officers, such as the president and club contact, so that potential new members can contact you. This information may only be updated by a currently listed club officer. If the listing is out of date and no officer is available to update it, contact (clubs@arrl.org) and ask to have the club's contact updated. There's a link on each club listing page, called Club Update Help, which provides instructions on how to update the club information. There are a few reminders:

1. Only currently listed club officers or contacts may change the information.
2. You must be logged into the ARRL website as a member to make any updates.
3. Remember to hit the submit button at the bottom of the page.

Updates make it possible to keep listings for clubs up to date and help new members find your club.

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Government News

* Government Recommends Not Texting Between Android and iPhone Devices

Early last month, the FBI, NSA and CISA released new guidelines for protecting communications infrastructure in the United States, following an October cyberattack against U.S. telecommunications companies AT&T, Verizon and Lumen Technologies. In a news conference about the effects of the hack, an official mentioned that anyone with an iPhone or Android should stop sending text messages because they were not secure. This comment was either misstated or misunderstood by the media to mean we should stop all text messages. However, the FBI's advice recommends only that users do not send text messages from an iPhone to an Android or vice versa. Sending within one's network is reasonably secure. A press release about the new guidelines is at (<https://www.cisa.gov/news-events/news/cisa-nsa-fbi-and-international-partners-publish-guide-protecting-communications-infrastructure>), and include a link to the guidelines themselves.

[NSA = National Security Agency. CISA = Cybersecurity and Infrastructure Security Agency.]

* Results from NASA's Solar Eclipse Experiments

Recall that we enjoyed a major total solar eclipse across much of the U.S. back in April. NASA and other agencies supported a bunch of experiments during the eclipse and released some early results last month at the annual meeting of the American Geophysical Union. The below article about the results includes a few paragraphs on ham radio activity, including the following. "More than 6,350 amateur radio operators generated over 52 million data points to observe how the sudden loss of sunlight during totality affects their radio signals and the ionosphere... Radio communications inside and outside the path of totality improved at some frequencies (from 1-7 MHz), showing there was a reduction in ionospheric absorption. At higher frequencies (10 MHz and above), communications worsened. Results using another technique, which bounced high-frequency radio waves (3-30 MHz) off the ionosphere, suggests that the ionosphere ascended in altitude during the eclipse and then descended to its normal height afterward." See the full article at (<https://science.nasa.gov/science-research/heliophysics/scientists-share-early-results-from-nasas-solar-eclipse-experiments/>).

* NASA's New Deep Space Network Antenna Has Its Crowning Moment

A new antenna for NASA's Goldstone Deep Space Communications Complex near Barstow, California has been under construction for some 4 years. Last month, the 133-ton framework for the 112-foot-wide (34-meter-wide) parabolic reflector dish was installed onto the antenna's pedestal, some 65 feet above ground. When operational next year, the new

antenna “will receive transmissions from missions such as Perseverance, Psyche, Europa Clipper, Voyager 1, and a growing fleet of future human and robotic spacecraft in deep space”. Get the full story, along with a short one-minute video of the mounting, at (<https://www.jpl.nasa.gov/news/nasas-new-deep-space-network-antenna-has-its-crowning-moment/>). The website for the Goldstone Deep Space Communications Complex is at (<https://www.gdscc.nasa.gov/>).

* NATO’s Emergency Internet Plan

You may have seen recent news of a couple of incidents of undersea fiber optic cables being cut by ships dragging their anchors across the sea floor. One was in the North Atlantic, where a Chinese ship is suspected of doing so deliberately. The other was apparently accidental, when a missile from Yemen damaged a cargo ship in the Red Sea, which eventually sank. The crew’s efforts to control the ship included dropping the anchor. Those and the fear of more high scale deliberate attacks on undersea cables has led NATO to develop a backup plan. This IEEE Spectrum magazine article describes the problem and the plan, which consists of a hybrid space-submarine architecture. Read all about it at (<https://spectrum.ieee.org/undersea-internet-cables-nato>).

[NATO = North Atlantic Treaty Organization. IEEE = Institute of Electrical and Electronics Engineers.]

* The Oldest Satellite Still Transmitting

“Transit 5B-5 is a US Navy navigation satellite that was an early version of the GPS/GNSS system we enjoy today. It was launched in 1964 and has been transmitting continuously for roughly 60 years. Unlike many dead satellites that only emit a carrier tone, this one still broadcasts modulated telemetry on about 136.65 MHz, making it a fascinating target for amateur radio and SDR hobbyists.” So begins this story about our oldest working satellite and how we hams can receive its signal. See it all, including a video, at (<https://www.rtl-sdr.com/investigating-the-transit-5b-5-e-5-satellite-the-oldest-satellite-still-transmitting/>).

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Other News:

* Amateur Extra Course Available

The Amateur Radio Club of the National Electronics Museum in Maryland is hosting an Amateur Extra licensing course, beginning January 16, 2025, and running through March 27. The 11 3-hour sessions will be on Zoom, each on a Thursday beginning at 6:30 PM Eastern Time (3:30 PM Pacific). Those attending should hold (or be studying for) the General Class Amateur Radio License. Those wishing to sign up should email Rol Anders, K3RA, at (roland.anders@comcast.net). This announcement is also available on the club’s website at (<https://www.k3nem.org/?p=2588>).

[Thankx to Jim, K2YE, for the information.]

* Winter Field Day

A reminder that Winter Field Day will be on January 25-26, 2025, organized by the Winter Field Day Association. It’s not a contest but a practical field exercise; a perfect opportunity to practice portable emergency communications in winter environments that pose unique operational concerns. You may use frequencies on the HF, VHF, or UHF bands and are free to use any mode that can faithfully transmit the required exchange intact. Similar to the ARRL Field Day, bonus points are earned in several ways, including using non-commercial power sources, operating from remote locations, satellite contacts, and more.” Get details at (<https://winterfieldday.org/>).

* Contest University

Registration is now open for Contest University, to be held Thursday May 15, 2025, from 7:00 am to 5:00 pm, at the Hope Hotel in Dayton, Ohio. This event is held the day before the opening of the annual Hamvention and is popular enough to suggest early registration to be able to receive the day’s printed handouts. Materials from previous years are available on the Contest University website. Get details at (<http://contestuniversity.com/>).

* Ham Radio Telescope Receives Signals from Voyager 1

A radio telescope dish in the Netherlands, built in 1956, is now retired from its original duty. It’s a national monument, used by hams. It’s one of the very few radio telescopes in the world able to receive the signal from Voyager 1. And to do that, the hams needed to mount a new reflector dish on it, as the original one is designed for lower frequencies. At the 8.4 GHz telemetry transmitted by Voyager 1, “the mesh of the dish is less reflective, making it extra challenging to receive faint signals”. See the story at (<https://www.camras.nl/en/blog/2024/dwingeloo-telescope-receives-signals-from-voyager-1/>). [Thankx to Gregg, K6XSS, for the information.]

* Build a Radio on a Breadboard

The Make organization, organizers of Maker Faires around the country, also offers a number of materials and kits for sale on their website. One of them is a kit to build different kinds of functioning radios on a breadboard. It's called the "Make: Radio Companion Kit"; called that because it's designed to go with their book "Make: Radio". The book contains "a dozen innovative projects, enabling readers to build inexpensive radio circuits such as transmitters and receivers, remote controls, and a working metal detector. Radio concepts are also adapted for the Raspberry Pi Pico". You can get the kit at (<https://www.makershed.com/products/make-radio-kit>) and the book at (<https://www.makershed.com/products/make-radio-print>).

* What is "Altermagnetism"?

A article from the University of Nottingham talks about a "new third class of magnetism that could transform digital devices". The article says that "Altermagnetism is a distinct form of magnetic order where the tiny constituent magnetic building blocks align antiparallel to their neighbours but the structure hosting each one is rotated compared to its neighbours." Understand that? Neither do I. But they say that it can "lead to huge increases in speed and efficiency while having the potential to massively reduce our dependency on rare and toxic heavy elements needed for conventional ferromagnetic technology." See the full article on Nottingham's website at (<https://www.nottingham.ac.uk/news/researchers-discover-new-third-class-of-magnetism-that-could-transform-digital-devices>).

* BBC Radio Documentary Highlights Power Of CW

A BBC documentary released last month visits the International Morse Code championships in Tunisia, highlights the role Morse Code plays in helping a disabled woman communicate with her family and talks to a war veteran who still remembers her code skills after more than 80 years. Have a listen to the audio-only documentary at (<https://www.bbc.co.uk/programmes/p0k8y9kq>) [online audio, 00:26:29].
[Thankx to the Amateur Radio Newsline Report for Friday December 13th, 2024 for the info.]

* Ham Radio in the News- Part 2

Another story in the media about ham radio is on the ZD-Net website, "Ham radio is still a disaster lifeline, even in the iPhone era - here's why". It describes how we train & practice and help out "when all else fails". See the story at (<https://www.zdnet.com/home-and-office/networking/ham-radio-is-still-a-disaster-lifeline-even-in-the-iphone-era-heres-why/>).
[Thankx to Mike, KB6MP, for the information.]

* Ham Radio in the News- Part 3

And there's a story on the MIT Press website called "The Rich History of Ham Radio Culture", which is a chapter excerpted from a 2006 book by Kristen Haring called "Ham Radio's Technical Culture". Have a look at (<https://thereader.mitpress.mit.edu/the-rich-history-of-ham-radio-culture/>).
[Thankx to Gregg, K6XSS, for the information.]

* Quantum Communications Over a Fiber Optic Cable

Researchers from Northwestern University in Illinois and other locations have demonstrated the ability to teleport quantum information over a standard fiber optic cable while normal network traffic is also on the cable. This has major ramifications, as it not only shows that quantum communications may soon become practical, it removes the need to build a completely separate network for it, a feat previously though impossible. See this BBS Science Focus magazine article about it (<https://www.sciencefocus.com/news/impossible-quantum-teleportation>). The study paper itself is at (<https://opg.optica.org/optica/fulltext.cfm?uri=optica-11-12-1700&id=565936>).

* Top 10 Telecommunications Stories of 2024

IEEE Spectrum magazine closed out the year with an article having the above title. Some of them I've mentioned in this newsletter. Take a look at quick summaries of each story, with links to the full story if you want it all. And if you want to look back another year, at the bottom of the page is a link to "IEEE Spectrum's Top Telecom Stories of 2023". See it at (<https://spectrum.ieee.org/telecom-news-2024>).
[IEEE = Institute of Electrical and Electronics Engineers.]

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Hamfests And Special Events:

* 01/19-25/2025

Quartzfest. Quartzsite, AZ. Website: <http://quartzfest.org>.

01/25-27/2025

Discovery of Gold in California. 1700Z-0100Z, AG6AU. Coloma, CA. El Dorado County ARC. 7.248 14.248 21.348 28.348. QSL. El Dorado County ARC, PO Box 451, Placerville, CA 95667. (<http://edcarc.net/>)

* 04/11-13/2025

International DX Convention, 76th Annual. Visalia, CA. Sponsored by Southern California DX Club. Website: <http://www.dxconvention.org>.

05/30/2025- 06/01/2025

SEA-PAC, ARRL Northwestern Division Convention. Location: Seaside, OR. Sponsor: Oregon Tualatin Valley ARC and Clark County ARC. Website: (<http://www.seapac.org>)

10/10-12/2025

Pacificon 2025 Location: San Ramon, CA. Sponsor: Mount Diablo Amateur Radio Club. Website: (<http://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 – January

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

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|------------|---|
| 01/01/1909 | Charles Herrold opened the Herrold College of Wireless and Engineering in San Jose, along with a radio transmitter, becoming the precursor to the KCBS broadcasting station. |
| 01/01/1922 | R. A. Heising of AT&T contributed a paper to the Journal of the Franklin Institute vol. 193, no. 1, entitled "Printing Telegraph by Radio". It presented the results of AT&T experiments in 1919 transmitting between New York City and Cliffwood, New Jersey, a distance of 25 miles. This may mark the beginning of radio-teletype technology. |
| 01/01/1941 | As FCC authorization went into effect creating an FM broadcasting band operating on 42–50 MHz. Due to natural interference, the band was moved to 88-108 MHz in July. |
| 01/01/1950 | Federal radio station WWV added voice announcements of time to its frequency standard and telegraphic time announcements. |
| 01/01/1954 | The Tournament of Roses Parade became the first U.S. national color television broadcast. |
| 01/01/1963 | The American Institute of Electrical Engineers (AIEE) and the Institute of Radio Engineers (IRE) merged to form the Institute of Electrical and Electronics Engineers (IEEE). |
| 01/02/1909 | The first meeting of the Junior Wireless Club was held at the Ansonia Hotel in New York City. In 1911, the club was renamed the Radio Club of America. |
| 01/03/1962 | The world's first amateur radio satellite, OSCAR 1, fell back into the atmosphere after 22 days in orbit. It was also the first privately owned satellite and the first secondary payload. |
| 01/04/1643 | Isaac Newton was born in Woolsthorpe-by-Colsterworth, Lincolnshire, England. |
| 01/04/1958 | Sputnik 1, the first artificial Earth satellite, fell back into the Earth's atmosphere after three months in orbit. |
| 01/07/1927 | Transatlantic telephone calling became officially available commercially, with the first ""official"" transatlantic telephone call, using radio channels. W. S. Gifford, president of the American Telephone & Telegraph Company, called Sir Evelyn P. Murray, secretary of the General Post Office of Great Britain. A test call was made the day before between two unidentified workers. This follows the first two-way conversation across the ocean of any kind, on 03/07/1926." |
| 01/07/1943 | Nikola Tesla died in New York City, New York at age 86. |
| 01/09/1942 | All amateur radio operations were suspended, as the U.S. entered World War II. |
| 01/09/1947 | The Mt. Diablo Amateur Radio Club was founded. |

01/10/1946	The first radar signals were reflected off the Moon, marking the beginning of radar astronomy and space communications.
01/11/1838	The first telegram in the United States was sent by Samuel Morse, across two miles (3 km) of wire at Speedwell Ironworks near Morristown, New Jersey, some 6 years before his official "What Had God Wrought" message.
01/12/2018	A rocket launch from India's eastern coast carried a large Indian mapping satellite and dozens of secondary CubeSats from other countries, including 4 from a U.S. company called Swarm; becoming the first illegal satellite launch in history.
01/13/1928	The world's first television station began transmitting experimental signals as station W2XB in Schenectady, New York. It is now WRGB.
01/13/1946	The Dick Tracy comic strip introduced what became an immediate icon, the two-way wrist radio; possibly inspiring the invention of mobile phones and smartwatches.
01/16/1974	The San Leandro Radio Club became affiliated with the ARRL.
01/17/1706	Benjamin Franklin was born in Boston, Massachusetts Bay, British America. He was the first to discover the principle of conservation of charge, among innumerable other accomplishments.
01/18/1859	Alfred Vail, partner of Samuel Morse during the development of the Morse Code and telegraph system, died in Morristown, New Jersey at age 51.
01/18/1964	The Livermore Amateur Radio Klub became affiliated with the ARRL.
01/19/1736	James Watt was born in Greenock, Renfrewshire, Scotland.
01/19/1976	Hidetsugu Yagi, co-inventor of the Yagi-Uda antenna, died at age 89.
01/19/2000	Hedy Lamarr, major movie star and co-inventor of the spread spectrum frequency hopping technology, died in Casselberry, Florida at age 85.
01/20/1775	André-Marie Ampère was born in Lyon, Kingdom of France.
01/20/1949	The second inauguration of Harry S. Truman as president of the United States became the first televised U.S. presidential inauguration.
01/22/1947	Experimental station W6XYZ was relicensed as KTLA and became the first commercially licensed television station west of the Mississippi River. Bob Hope served as the emcee for KTLA's inaugural broadcast.
01/23/1909	The first radio rescue at sea took place when the White Line's Republic and the Lloyd Italian liner collided in dense fog off the coast near Nantucket. The U.S. Revenue Cutter Gresham picked up a radio message from a nearby station and steamed to the collision site in time to rescue all but two passengers.
01/25/1915	A telephone call, which for marketing purposes is claimed to be the first transcontinental telephone call, occurred between Alexander Graham Bell in New York and his former assistant Thomas Watson in San Francisco; timed to coincide with the Panama-Pacific International Exposition celebrations.
01/26/1926	Members of the Royal Institution of Great Britain in London witnessed the world's first public demonstration of live television.
01/28/1886	Hidetsugu Yagi, co-inventor of the Yagi-Uda antenna, was born in Osaka, Japan.
01/28/1878	The first commercial North American telephone exchange was opened in New Haven, Connecticut.
01/29/1907	Lee de Forest filed for a patent on what became known as the three-element "Audion" (triode) vacuum tube, the first practical amplification device.
01/31/1958	The U.S. launched its first artificial Earth satellite, Explorer I.
Jan., 1958	The forerunner of NASA's Deep Space Network was established when the Jet Propulsion Laboratory (JPL), deployed portable radio tracking stations in Nigeria, Singapore, and California to receive telemetry and plot the orbit of the Army-launched Explorer 1, the first successful U.S. satellite.
Jan., 1972	The first issue of "NCJ", the ARRL's National Contest Journal, was published.

New Hams:

July, 2024 Report

KO6EYY	Sheldon Norberg	Alameda
KO6EZW	Rhonda Roby	El Cerrito
KB6KEB	Eliezer Ballesteros	Antioch
KO6FCP	Robert Novich	Fremont
KO6FEQ	Zishi Xi	Fremont
KO6EYU	John Dobyms	Fremont

KO6FCX	Patrick Zhou	Fremont
KO6FDP	Skylar Qian	Fremont
KO6FAV	Mike Passaglia	Livermore
KO6FAE	Bill Eppler	Livermore
KO6EYV	David Hopkins	Livermore
KO6EWG	Robert Farnam	Livermore
KO6EZX	Ronald Tanikawa	Livermore
KO6EYE	George Rojas	Livermore
KO6FCO	Marshall Hill	Castro Valley
KO6FEV	Julian Rydel	Martinez
KO6EYK	Steven Hernandez	Fremont
K6AEZ	Brent Gage	Fremont (Extra)
KO6EWM	Reed Chamberlain	Napa
KO6FCK	Jack Sinclitico	Orinda
KO6EZU	Wei-Yang Lu	Pleasanton
KO6EZF	Lynn Martin	Pleasanton
KO6EYT	Eric Kong	Dublin
KO6EZG	Robert Veloira	San Leandro
KO6EZH	Sebastian Wild	San Ramon
KO6EYW	Jadine Moy	San Ramon
KO6EZA	Arvine Reyes	Union City
KO6FCZ	Gary Gomes	Union City
KO6EZM	Alok Saraf	Pleasanton
N6INK	Sriraaman Sridharan	Pleasanton (Extra)
KO6EYX	Medha Nadathur	Pleasanton
KO6EXS	Alexander Pummer	Pleasanton (General)
KO6FAD	David Stanwick	Vallejo
KO6EZD	Meagan Jones	Walnut Creek
KO6FAH	Brian Walsh	Oakland
KO6EYG	Victor Ciccone	Oakland (General)
KO6FDO	Juliet Hadid	Berkeley
KO6FCY	John Evans	San Pablo (General)

August, 2024 Report

KO6FJV	Janette Buntten	Concord
KO6FJW	Ashton Buntten Cheung	Concord
AA6BY	Thomas Fattaruso	El Cerrito (Extra)
KO6FHK	Carlos Cortes	Fairfield
KO6FGO	Jose Sanchez	Fremont
W4ERH	Edward Helder	Fremont (General)
KT8HAM	Katherine Scott	Martinez
AK6HW	Zikai Lian	Fremont (Extra)
KO6FGS	Nadeem Ali	Newark
KO6FIA	Manuel Lee	Pinole

September, 2024 Report

KO6FQO	Philip James	Alameda
KO6FLX	Eoanna Goodwin	Alameda
KD6ZMQ	Robert Lockett	Alamo
KO6FTE	Kaelyn Farmer	Benicia
KO6FUY	William Lee	Concord
KO6FOQ	Andrew Eberly	Pleasant Hill
KD6ISO	Louise Leck	Fremont
K3SEV	Eric Severance	Fremont
KO6FSF	Charles Yarbrough	Fremont

KO6FPG	Brent Valle	Livermore (General)
KA6FTW	Ryan Tolentino	Livermore
KO6FOK	Robert Neal Joslin	Livermore
KO6FRO	Chad Mahalich	Martinez
KO6FPX	Anna Clare	Martinez
KO6FVW	Divya Rani Bellamkonda	Fremont
KO6FWE	Aadwin Balla	Fremont
KO6FPV	Elliott Paddock	Napa
KO6FOL	Lydia Pochueva	Orinda
KO6FOM	William Tapley	San Lorenzo
KO6FMR	Eshwar Chandrasekhar	San Ramon
KO6FVJ	Joshua Beltran	Union City
KO6FUS	Sandeep Mehta	Pleasanton
KO6FPY	Phillip Cazella	Pleasanton (General)
KO6FLZ	Pablo Salazar	Oakland (General)
KO6FTL	Alexander Papazoglou	Kensington (General)
AK6IQ	Jiajun Yan	Berkeley (Extra)
AK6IG	Sanjay Chintapally	Berkeley (Extra)
KO6FNU	Alex Pimentel	Richmond
KO6FUO	Andrew Coleman	Vacaville
KO6FTX	Steven Hobbs	Vacaville
KO6FTM	Kelsey Hobbs	Vacaville

October, 2024 Report

KO6FYF	Luis Mesas Garcia	Brentwood
K0RGA	Luis Mesas Garcia	Brentwood
KO6GAN	Michael Emry	Clayton
KO6FYS	Jeffrey Wright	Concord
KO6FXQ	Rodney Webster	Concord
KO6GDL	Kirk Martinez	Danville (General)
KO6GBA	Bernardo Rios	Fairfield
KO6GDR	Alex Burlyga	Fremont
K6RIC	Ricky Fong	Fremont
KO6FXO	Aman Sirigineedi	Fremont
KO6GDH	Xinyue Wang	Fremont
KO6FZA	Ernabelle Miclat	Livermore
KO6GDK	Bishoy Mikhael	Newark (General)
KO6GCG	Samuel Wang	Pleasanton
KO6GBY	Alan Girard	Union City
N4CAZ	Phillip Cazella	Pleasanton (Extra)
KO6FZU	Laron King	Vallejo
KO6GBC	Princito Jularbal	Vallejo
KO6FZV	Joseph Perez	Vallejo
KO6GCR	Austin Dunkelberger	Vacaville
KO6FXS	Joseph Dane	Vacaville

November, 2024 Report

KO6GGN	Pamela Simon	Alameda
KO6GKO	Sandro Reis	Danville (General)
KO6GHD	Stephen Pence	Danville
KO6GFU	Daniel Purdy	Benicia
KO6GFQ	Timothy Kress	Benicia
K6TJK	Timothy Kress	Benicia
KO6GGO	Brigit Versace	Benicia
KO6GLN	Caitlyn Francis	Brentwood

KO6GFD	James Benjamin	Calistoga
KO6GKU	Kent Williams	Pleasant Hill
KO6GFJ	Bennet Donato	Crockett
KO6GOF	Douglas Wheeler Nicholson	El Cerrito
KO6GLI	Thomas Cranmer	Antioch
KO6GFL	Marlo Reyes	Fairfield
KO6GJY	Thomas Prossima	Fremont
KO6GHU	Simon Gordon	Fremont (General)
KO6GKL	Lyndon Baranda	Hayward
KO6GLU	Tim Busco	Hayward
KO6GEG	James Moore	Castro Valley
KO6GHB	Robert Fellows	Lafayette
KO6GLZ	William Spencer	Livermore
KO6GKH	Thadya Zoraster	Livermore
KO6GMG	Ace Mah	Martinez
KO6GKK	Vanjikumaran Sivajothy	Fremont
KO6GON	Guangzhe Zhong	Fremont
KO6GKZ	Marc Maier	Newark
KO6GGK	Greg Almand	Pittsburg
KO6GKN	Chandrakant Nalage	Pleasanton
KO6GMY	Joshua Frendberg	Dublin
KO6GEQ	Sandra Scott	Saint Helena (Extra)
W5VZC	Ralph Mays	San Leandro
KO6GLJ	Daniel Obrien	San Lorenzo
KO6GLH	Maximiano Gonzalez	San Ramon
K2SCE	Scott Estes	San Ramon
KO6GOX	Serafina Alfonso	Pleasanton
KO6GLM	Roy Smith	Pleasanton
KO6GFC	Harold Brondum	Vallejo (General)
KO6GHF	Ryan Huiner	Vallejo
KO6GGB	Eric Kincl	Vallejo
KO6GFM	Jessica Ross	Walnut Creek
KO6GES	Mark Rhoades	Walnut Creek
KO6GJE	Daniel Tennery-Spalding	Oakland (General)
KO6GLG	Alvin Chen	Oakland
KO6GLV	John Chen	Oakland
KO6GLK	Kayley Chen	Oakland
KO6GLA	Julie Treichler	Piedmont
KO6GHW	Emmanuel Calimlim	Oakland
KO6GOE	Douglas Weigel	Oakland
KO6GHT	Priya Ford	Berkeley
KO6GFK	Alexandra Eisler	Kensington
KO6GOJ	John Macfarlane	Berkeley (General)
KO6GOI	Rajeev Singh	Berkeley
W0TLB	Terence Brownridge	Vacaville
KO6GGM	Dennis Chapman	Vacaville
KO6GID	James Ruther	Vacaville

December, 2024 Report

KO6GSR	Fernando Solis	American Canyon
KO6GVO	James Iry	Alamo
KO6GTI	Curtis Stofer	Concord
KO6GYQ	Michael Meschi	Concord
KO6GTH	Dominic Powell	Pleasant Hill
KO6GXW	William Hogan	Fairfield
K6LDY	Thadya Zoraster	Livermore

KO6GSL	Travis House	Martinez
KO6GZE	John Mason	Dublin
KO6GZL	Paul Spector	San Leandro
KO6GQC	Gary Mui	San Ramon
KO6GWM	Helena Young	Walnut Creek
KO6GUI	Matthew Farmer	Oakland
KO6GTY	Richard Randall	Berkeley
KO6GZG	Christina Redse	Albany
KO6GUC	Abigail Montejo	Richmond
KO6GTS	Eric Armstrong	Richmond
KO6GTV	Soheila Bana	Richmond
KO6GUM	Thomas Villavlcek	Richmond
KO6GTU	Diane Dulmage	Richmond
KO6GVU	Jim Espinas	Richmond
KO6GTZ	Meredith Staples	Richmond
KO6GXB	Gary Harris	Richmond
KO6GUL	Sophie Van Ronsele	Richmond
KO6GUN	Clay Mitchell	Richmond
W6WOF	James Ruther	Vacaville (General)

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New Upgrades:

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

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Question & Answer:

How does a higher sunspot number affect HF propagation?

A. Higher sunspot numbers generally indicate a greater probability of good propagation at higher frequencies

[General Class question pool (2023-2027) no. G3A01 (<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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