

Section Manager
East Bay Section Newsletter
March, 2024

ARRL East Bay Family,

Happy Pi Day.

Last month, I asked about East Bay hams that have been licensed for 70 years or more. I promptly got a note from Gary, NA6O, that, “Ken, N6RO, was first licensed in late 1953. He just got a certificate from ARRL for 50 years of membership. He also has participated in every Sweepstakes since 1953 (his first QSO there was with the famous Vic, W4KFC).” In addition, “he’s a CQ contest hall of fame member and owner of the biggest contest station on the west coast!” Congratulations, Ken!

Congratulations to the Benicia Amateur Radio Club, which held its first open meeting on March 7, 1979, inducting 11 new members. A brief 45 years of supporting hams in the East Bay. And, they became affiliated with the ARRL only two years later, on March 10, 1981. Thank you, Benicia.

Congratulations and thank you to the Martinez Amateur Radio Club for becoming affiliated with the ARRL on March 13, 2010.

Some very sad news to report. Bob Heil, K9EID is now an SK. Bob founded the company Heil Ham Radio and became famous in the ham community for his tireless promotion of our craft, speaking at countless conventions and club meetings. He was a regular at Pacificon for many years, and also loaned several of his high performing headsets to our Special Events station. Not only was Bob a star in the ham world, but he manufactured sound systems for music performances of such ground-breaking quality that he’s the only equipment manufacturer in the Rock and Roll Music Hall of Fame. He was also a respected organ player. The official announcement of his passing is on Heil Ham Radio’s Facebook page at (<https://www.facebook.com/HeilHamRadio>).

* Question:

When may amateur stations transmit information in support of broadcasting, program production, or news gathering, assuming no other means is available?

- A. When such communications are directly related to the immediate safety of human life or protection of property
- B. When broadcasting communications to or from the space shuttle
- C. Where noncommercial programming is gathered and supplied exclusively to the National Public Radio network
- D. Never

(See the last page for the answer.)

=====
Section & Division News:

* Pacific Section Election Results

In the ARRL Pacific Section, Alan Maenchen, AD6E, was re-elected in a close race by receiving 113 votes. Kevin Bogan, AH6QO, of Honolulu, received 100 votes. Maenchen, of Wailuku, Hawaii, was appointed as Section Manager of the Pacific Section on November 1, 2023, to fulfill the term of office after Joe Speroni, AH0A, stepped down. Congratulations, Alan.

* Benicia One Day Class Results

The Benicia ARC held its first one-day class of the year last month, and it was a great success. They had 25 in the

Technician course and 5 in the General course; plus 5 others that came in only to test. 23 of the Technician students passed (92%) and 4 of the General students passed (80%), for an overall course participant pass rate of 88%. Participants came from all over the Bay Area, as far south as Santa Clara County and as far north as Yolo County; east to Stanislaus County and west to Marin & Alameda. Well done, Benicia, and thanks.

* Makerspace STEAM Discovery Festival

Benicia Makerspace is hosting its annual STEAM Discovery Festival on Saturday, April 20th, from 10:00 am to 4:00 pm at the Solano Community College, 4000 Suisun Valley Road, Fairfield, CA 94534. Per their website, "The STEAM Discovery Festival is a one-day event that celebrates the joys of innovation and hands-on learning. STEAM stands for Science, Technology, Engineering, Art, and Math. This annual event brings together makers from around the Bay Area to show off their projects large and small. You can see anything from electronics to embroidery and woodworking to 3D printing. Come get some inspiration and participate in the many hands-on activities for all ages." This year they will be hosting a RoboRave robotics competition simultaneously with the festival. Get the details at (<https://www.steamdiscoveryfestival.com/>).

=====
ARRL News:

* January Board Meeting Minutes

The Board met on Jan. 19-20 with a very busy agenda. I discussed some of the highlights in last month's newsletter. The minutes themselves are at (<https://www.arrl.org/files/file/About%20ARRL/Board%20Meetings/Annual%20Board%20Meeting%20of%20Directors%20January%202024%20Minutes.pdf>) [PDF, 26 pages]. Several Committee reports are referenced in the minutes but not repeated there. They are available at (<https://www.arrl.org/committee-reports>).

* "Radiogrammers" Needed

Over the last year or so, the League has had a number of working groups going in an effort to improve the National Traffic System (NTS). They've completed or nearly completed several efforts, but others are still being worked on. For example, we now have an NTS 2.0 website (<https://nts2.arrl.org/>); the NTS newsletter available for subscription; a directory of nets of all types, including traffic nets is almost ready; and several other things. One of the things still in progress is a web-based radiogram portal that will introduce radiograms to the public and provide an easy way for the public to submit messages that can be originated as formal traffic. It's almost ready to go live, but now they need traffic handlers to volunteer to check this portal on a regular basis, similar to checking into a traffic net. If you would like to be able to generate more traffic while performing a public service, send an email to (ntsletter@arrl.org).

* Annual Club Record Updates

Please remember to have someone in your club to update information at ARRL about your local club. This will allow visitors to learn about your club and will allow prospective members to learn about your club and its goals. Information on how to update your club information can be found at (<https://www.arrl.org/clubs>).

* Library Book Set Donations

ARRL Affiliated Clubs and members may gift or donate books to a local library, school, or classroom easily. For a special price of \$250 (including US ground shipping), the set includes the most popular ARRL publications, such as ARRL license manuals, the ARRL Handbook, and the ARRL Antenna Book for Radio Communications, among others. These publications and resources will encourage potential new amateur radio operators from among students, youth, and the wider community, while also providing support to current licensees who are library users. A complete description of the program, including the books and details for ordering, is available at (<https://www.arrl.org/library-book-set>).

* New EmComm Courses

Two new EmComm courses will be released April 1. Basic EmComm and Intermediate EmComm will be live in the ARRL Learning Center and the legacy courses will be removed on that date. Anyone who is currently enrolled in EC-001 or EC-016 will need to complete these courses by April 1 to receive credit for them. We hope to have Advanced EmComm and ARES Leadership courses complete by early summer.

* Local ARES Group Recruiting Assistance

The League is going to be launching advertising in ARRL publications and other national publications to recruit new members to ARES. This campaign will lead them to a webpage where they can enter their location and it will provide the

contact information for a local ARES team. We want this to provide a much quicker and easier process for them to get plugged in locally. To make this work we need your help. We're now collecting ARES group registrations on our website. This is a one-page form to be filled out by the EC or ARES team leader in each local community or club. This is very similar to the Club Registration we've been using for some time and will work very similarly to the club look up function we currently have but will be for ARES EmComm groups. The link to the page is: (<http://www.arrl.org/ares-group-registration>).

Government News

* New Bill to Eliminate Private Land Use Restrictions on Amateur Radio

On January 30, 2024, Senate bill S.3690 was introduced, the Senate companion bill to H.R.4006, introduced last June. Both bills reflect the Congressional campaign efforts by the ARRL to eliminate homeowner association land use restrictions that prohibit, restrict, or impair the ability of an amateur radio operator to install and operate amateur station antennas on residential properties they own. The text of bill S.3690 can be found at (<https://www.congress.gov/bill/118th-congress/senate-bill/3690/text>). See the full ARRL announcement at (<http://www.arrl.org/news/senators-roger-wicker-and-richard-blumenthal-introduce-s-3690-to-eliminate-private-land-use-restrict>).

* National Spectrum Strategy

ARRL and Amateur Radio Digital Communications (ARDC) represented Amateur Radio at a symposium in Washington on February 1 at which the top domestic spectrum policymakers from across the federal government considered implementation of the National Spectrum Strategy (NSS). ARRL ensures that Amateur Radio is represented at sessions such as this so that decisionmakers understand amateur radio's roles when spectrum decisions are made, including its substantial contributions to student interest and education in STEM subjects at schools throughout the country and its role during emergencies and natural disasters. The NSS identified some 2,790 megahertz of spectrum to be considered for future commercial needs. No new amateur spectrum was included, with only the ongoing reallocation studies related to 3.1 - 3.45 GHz being addressed. Get a copy of the NSS at (https://www.ntia.doc.gov/sites/default/files/publications/national_spectrum_strategy_final.pdf) [PDF, 26 pages]. See the full ARRL announcement at (<http://www.arrl.org/arrlletter?&issue=2024-02-15#toc02>).

* FCC Batch Filing System Dies – Yet Again

The FCC Batch Filing System failed for several days last year; twice. Well, on February 13 this year, it happened yet again, and was down for a week this time. As you likely understand, the ARRL and presumably many other organizations, can't file license applications unless the batch filing system is operational. Another occasional(?) consequence of these failures is that, even when the system comes back up, some applicants are reporting that they aren't receiving the FCC payment email. As a reminder, applicants don't have to wait for the FCC email to pay the fee. As soon as the application is in the FCC system, the applicant can log into the FCC's CORES system (<https://apps.fcc.gov/core/userLogin.do>) and pay the fee. CORES payment system information can be found at (<https://www.fcc.gov/licensing-databases/fees/core-payment-system>). Additional information and instructions are located on the ARRL VEC's FCC Application Fee web page at (<http://www.arrl.org/fcc-application-fee>). Other applicants are reporting that they aren't receiving the automated email with the link to their new, upgraded, renewed, or modified license. The FCC instructions for obtaining the official authorization (official license) is located at (<https://www.fcc.gov/wireless/support/knowledge-base/universal-licensing-system-uls-resources/how-obtain-official>).

* Great Shakeout Multi-Agency Exercise After Action Report

The 2023 Great ShakeOut Multi-Agency Exercise After-Action Report is now available. Since 2020, Winlink has supported and participated with the US Geological Survey (USGS) in the world's largest earthquake exercise. Past participation had been primarily concentrated within California. The 2023 Great ShakeOut exercise Winlink participation included an expanded effort by FEMA and their stakeholders, designed to highlight the utility of the Winlink system for emergency management. In 2023, there were approximately 1690 participants from 17 countries. However, most of the effort was concentrated within the United States with 47 participating states. Get the full After-Action Report at (https://winlink.org/sites/default/files/aar-2023_great_shakeout.pdf) [PDF, 17 pages].

* NASA Spinoff 2024

NASA has released its annual Spinoff publication, highlighting NASA technologies that benefit life on Earth in the form of commercial products. It features many commercialized technologies that use NASA research and development expertise to impact everyday lives. From "squishy" robots that can be sent into dangerous situations before first

responders, to aircraft-routing technology that enables increased fuel efficiency and smoother flights, to medical technologies for diagnosing illnesses like the coronavirus, hepatitis, and cancer. Another one of special interest to us is computer software to help businesses and communities cope with and recover from natural disasters like wildfires. Also of interest to us communications geeks is a spinoff for satellite-to-satellite radio links, which can help the growing number of small satellites, that can't carry powerful transponders, to link to larger constellations to send their data to Earth. Learn more at (<https://spinoff.nasa.gov/>).

* Want To Go To Mars (Virtually)?

NASA is looking for four volunteers to spend a year living on Mars – or at least a 3D-printed replica of the red planet. The venture is designed to help develop and evaluate the systems that will be used by the first generation of astronauts to visit Mars, on missions ambitiously slated for the 2030s. The “lucky” four will be living in a 1,700 sq ft habitat which will simulate the challenges of a Mars mission, “including resource limitations, equipment failures, communication delays, and other environmental stressors”. See the full story on The Guardian’s website at (<https://www.theguardian.com/science/2024/feb/20/year-mars-simulation-volunteers-nasa>).

* Weights and Measures Week

As the below web site says, “Weights and Measures Week is celebrated every year from March 1 to 7 to commemorate President John Adams signing the first U.S. weights and measures legislation into law on March 2, 1799”. Weights and Measures has become one of those things that we can sometimes compare to air; it’s so ubiquitous that we don’t think about it much, but it’s absolutely essential to our modern life. The website below has a link to a PDF on the history of weights and measures in the U.S., along with many others, including resources for activities in a classroom or outreach event. Read all about it at (<https://www.nist.gov/pml/owm/weights-and-measures-week>).

=====
Other News:

* Young Ladies Relay League

Are you a lady ham? Do you know one? All female hams should consider joining the nationwide Young Ladies Relay League. Vicki Zumwalt, N6KLS; past president of the Mt. Diablo club and Contra Costa Repeater Association, and now president of the YLRL, sends the following message: “As the President of the Young Ladies Relay League, I invite you, and all other women to join us in supporting other women in our service/hobby. It is a wonderful opportunity to be with other women of like minds. \$15.00 a year is a small amount and goes towards our YLHarmonics sent electronically and our scholarship programs. I hope to see YL’s at the Zion Hamcon in St. George, Utah, where the YLRL is celebrating 85 years! Check us out at (<https://ylrl.net/>) for more information.” Also remember that the YLRL meets in person at the Pacificon convention each October in San Ramon.

* Extra Class Question Pool Revisions

The National Conference of Volunteer Examiner Coordinators (NCVEC) Question Pool Committee (QPC) has released errata for the new 2024-2028 Element 4 Extra Class Question Pool, which goes into effect on July 1. The errata includes minor question changes, the removal of one question, and one modified graphic. These updates are reflected in the new downloadable files, dated January 31, 2024. Get the revised question pool at (<https://www.ncvec.org/index.php/2024-2028-extra-class-question-pool-release>).

* HAARP Players Needed

Amateur radio operators and radio astronomers are being asked to help monitor a new research project by the High-frequency Active Auroral Research Program (HAARP). The project began on Feb. 28 and will run into early March. Hams are especially asked to submit reception reports on HAARP signals between 2.8 and 10 MHz. Actual transmit days and times are highly variable based on real-time ionospheric and/or geomagnetic conditions. See the full ARRL item at (<http://www.arrl.org/arrlletter?&issue=2024-02-29#toc01>). The HAARP website is at (<https://haarp.gi.alaska.edu/>).

* Echolink Web Interface

Echolink now has a web interface; a welcome addition for users. It runs entirely within a web browser. It runs on various browsers and OS platforms and doesn't require any app to be installed. Get details on the FAQ page at (https://www.echolink.org/faq_webapp.htm).

* World Amateur Radio Day (WARD)

The International Amateur Radio Union (IARU) was formed in Paris on April 18, 1925 to promote innovation in amateur

radio and to encourage the growth of the Service in communities throughout the world. It represents amateur services at international and regional regulatory bodies by relying on volunteers from many countries and communities. To commemorate its founding, the IARU hosts World Amateur Radio Day on April 18 each year. This year the IARU has chosen the theme, "A Century of Connections: Celebrating 100 years of Amateur Radio Innovation, Community and Advocacy." WARD is the day when IARU member-societies show their capabilities to the public and enjoy global friendship with other amateurs worldwide. Get details on WARD at (<https://www.iaru.org/on-the-air/world-amateur-radio-day/>). For more information on the IARU, see (<https://www.iaru.org/>).

* QSO Today Expo is Now QSO Today Academy

When I checked to see when the next QSO Today Virtual Ham Expo would be held, I found that the organizers have changed the format. It's now the QSO Today Academy. They held their first Academy event last September. The Expo was launched during the COVID period to help fill in for the amateur radio conventions that had to be canceled (including one Pacificon). Now that in-person conventions are again being held, a change was needed. They explain that, after 6 expos, "Our Expo presentations were top-notch...but the need for vendor exhibitor space faded as most ham radio vendors leaned more towards traditional "brick and mortar" styles". For more information, see (<https://www.qsotodayhamexpo.com/>).

* HamSCI 2024 Workshop Reminder

A reminder from last month's newsletter that the Ham Radio Science Citizen Investigation (HamSCI) will hold its sixth annual workshop on March 22-23, 2024, at Case Western Reserve University in Cleveland, Ohio. The 2024 workshop's theme will be "Alignments" - specifically those between the Sun, Moon, and Earth; collegiate amateur radio recreation and science, technology, engineering, and math (STEM) curricula; data collection and analysis, and professional and citizen science. Continued development of the HamSCI Personal Space Weather Station (<https://hamsci.org/basic-project/personal-space-weather-station>) and discussion about integrating amateur radio into the collegiate curriculum will also take place during the workshop. Both in-person and virtual participation is available. For registration and additional information about the event, see (<https://hamsci.org/hamsci2024>).

* America's Last Morse-Code Station

According to an article in the April, 2024 edition of The Atlantic magazine, the former commercial CW station at Point Reyes, KPH, is the only remaining operational Morse code station in the U.S.; and it's now run entirely by volunteers. You can read the first several paragraphs at the link below, but unfortunately need to start a free trial to get the rest of the story. (<https://www.theatlantic.com/magazine/archive/2024/04/ann-hermes-morse-code/677468/>). They're on the air every Saturday. See their listing at (<https://www.qrz.com/db/K6KPH>) or on the US Maritime Radio Museum website at (<https://www.radiomarine.org/>).

[Thankx to Gregg, K6XSS, for the link to the article.]

* Forgotten Engineer Paved the Way for Radar Technology

Sallie Pero Mead started work at AT&T in 1915. Over the next 18 years she and her coworkers developed a new way that hyper-frequency waves could propagate down tubes, now called waveguides, making radar technology possible—just in time for use in World War II. This is one entry in the Lost Women in Science series. Get her full story on this Scientific American web page; (<https://www.scientificamerican.com/article/forgotten-electrical-engineers-work-paved-the-way-for-radar-technology/>). Scroll to near the bottom of the page for a link to more stories in the series.

* Transmitting Photos by Wire – in 1937

I had no idea the transmission of photos electronically was possible years before the second World War. Here's an article and a short video demonstrating how it was done; essentially the same concept as how it's done now. See (<https://thekidshouldseethis.com/post/wired-photo-transmission-news-1937>) [Video is YouTube, 00:09:15]

* What Is an Electronic Sackbut?

I saw that headline and couldn't pass it up. The image that jumped into my head was of a heavily addicted ham contester with his b*** firmly installed in the soft "sack" of the chair's cushion. Turns out there is (or was) a real thing called a sackbut. It's a musical instrument dating back to the 15th century that's essentially a predecessor to the trombone. An electronic version was invented in 1945, beating the music synthesizer fad of the 1970s by a quarter century. The inventor was Hugh Le Caine, a physicist working on microwave transmission of messages at Canada's National Research Council. He was intrigued by the fact that the three auditory sensations of music; pitch, loudness and timbre; had counterparts in electronics; frequency, amplitude and harmonic spectrum. See the full fun and interesting article from the IEEE* Spectrum magazine, complete with photos and a couple of short YouTube videos, including one of a tune played by the

sackbut, at (<https://spectrum.ieee.org/electronic-music>).
[* IEEE = The Institute of Electrical and Electronics Engineers]

=====

Hamfests And Special Events:

* 03/09-10/2024

120th Anniversary of the Adoption of the Current Maryland Flag. 1800Z-0300Z, N3APS, Orinda, CA. Expatriate Marylanders Radio Club. 28.440 21.440 14.320. QSL. M.G. Vurek, P.O. Box 617, Orinda, CA 94563.
(<https://www.qrz.com/db/N3APS>)

* 03/09/2024

Commemorating launching of USS Midway on 20MAR45. 1700Z-2359Z, NI6IW, San Diego, CA. USS Midway Museum. 7.250 14.320 14.070 PSK31 DSTAR on PAPA system repeaters. QSL. USS Midway Museum CONEDTRA, 910 N Harbor Drive, San Diego, CA 92101. (www.qrz.com/db/ni6iw)

* 03/16/2024

Loomis Hamfest. Loomis, CA. Sponsored by Sierra Foothills Amateur Radio Club. Website: (<https://hamfest.w6ek.org/>)

* 03/23-24/2024

Baker to Vegas Relay Race for Law Enforcement. 1600Z-0000Z, N6A, Valley Center, CA. Ham Radio Outlet Anaheim. 7.225 14.225. QSL. Glenn Arrant, 14723 Puma Trail, Valley Center, CA 92082.

* 04/12-14/2024

International DX Convention, 75th Annual. Visalia, CA. Sponsored by Southern California DX Club. Website: (<http://www.dxconvention.org>).

* 04/27/2024

Valley of the Moon ARC Annual Hamfest. Sonoma, CA. Sponsored by Valley of the Moon ARC. Website: (<http://VOMARC.ORG>).

*05/11/2024

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

* 05/11/2024

Commemorating Armed Forces Day. 1600Z-2300Z, NI6IW, San Diego, CA. USS Midway Museum Ship. 7.250 14.320 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)

* 05/31 - 06/02/2024

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

* 06/01/2024

N7RCA Northern Nevada HamFest. Minden, NV. Sponsor: N7RCA. Website: (<http://n7rca.com>)

* 06/01/2024

Museum Ships Weekend Event. 0001Z-2359Z, NI6IW, San Diego, CA. USS Midway Museum Ship. 7.250 14.320 14.070 PSK31 DSTAR. QSL. USS Midway Museum Ship COMEDTRA, 910 N Harbor Drive, San Diego, CA 92101.
(www.qrz.com/db/ni6iw)

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>)

=====

Significant Events in Telecomm History – March

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

- 03/01/1893 Nikola Tesla gave the first public demonstration of radio to the National Electric Light Association in St. Louis, although he had presented his work prior to this behind closed doors.
- 03/01/1938 Claude Shannon submitted his MIT Master's thesis for publication in the Transactions of the American Institute of Electrical Engineers, forming the basis of modern digital circuit design.
- 03/02/1799 President John Adams signed into law the first U.S. weights and measures legislation.
- 03/03/1847 Alexander Graham Bell was born in Edinburgh, Scotland.
- 03/03/1885 The American Telephone & Telegraph Company (AT&T) was incorporated as the long-distance division of American Bell Telephone Company. It became the head of the Bell System on the last day of 1899.
- 03/03/1901 The National Bureau of Standards (now the National Institute of Standards and Technology, or NIST) was created via a law passed by Congress.
- 03/03/1969 AMSAT, the Radio Amateur Satellite Corporation, was formally chartered as a 501(c)(3) educational corporation.
- 03/05/1827 Alessandro Volta died in Como, Lombardy-Venetia, Austrian Empire at age 82.
- 03/07/1876 Alexander Graham Bell received U.S. Patent, No. 174,465 for the telephone.
- 03/07/1979 The first open meeting of the Benicia Amateur Radio Club was held at the Youth Activity Center, inducting 11 new members.
- 03/09/1851 Hans Christian Ørsted, discoverer of the relationship between electrical current and magnetism, died in Copenhagen, Denmark at age 73.
- 03/10/1876 Alexander Graham Bell called out to his assistant Thomas Watson, "Mr. Watson, come here! I want to see you", becoming the first transmission of intelligible speech over electrical wires.
- 03/10/1891 Almon Strowger received a patent for the Strowger switch, the first automatic telephone exchange.
- 03/10/1981 The Benicia Amateur Radio Club became affiliated with the ARRL.
- 03/11/1922 Radio station KRE began broadcasting, from the Claremont Hotel in Berkeley.
- 03/12/1933 President Franklin Roosevelt made his first of many "Fireside Chats", over radio, 8 days after his inauguration.
- 03/13/2010 The Martinez Amateur Radio Club became affiliated with the ARRL.
- 03/14/1879 Albert Einstein was born in Ulm, Kingdom of Württemberg, German Empire.
- 03/16/1789 Georg Simon Ohm was born in Erlangen, Brandenburg-Bayreuth in the Holy Roman Empire (present-day Germany).
- 03/20/1800 Alessandro Volta wrote to the London Royal Society to describe the technique for producing electric current using what became known as the "voltaic pile", the first electrical battery.
- 03/22/1952 The first Hamvention took place, at the Biltmore Hotel in Dayton, Ohio.
- 03/29/1941 Joseph Hooton Taylor Jr., K1JT, Nobel Laureate and creator of the weak signal programs WSPR and WSJT, was born in Philadelphia, Pennsylvania.
- 03/30/1978 The most comprehensive overhaul of the amateur radio callsign structure since World War II went into effect, creating the fundamental structure in place today.
- 03/31/1727 Isaac Newton died in Kensington, Middlesex, Great Britain at age 84.
- 03/31/1970 The U.S.'s first artificial Earth satellite, Explorer I, fell back into the Earth's atmosphere after 105 days of operation and over 12 years in orbit.
- 03/31/2006 Amateur radio operators from AMSAT in Germany tracked and received radio waves from Voyager 1 using the 20-meter (66 ft) dish at Bochum. Retrieved data was checked and verified against data from the Deep Space Network station at Madrid, Spain. This seems to be the first such amateur tracking of Voyager 1.
- Mar. 1-7 NIST Weights and Measures Week (<https://www.nist.gov/pml/owm/weights-and-measures-week>)

=====

New Hams:

KO6CZE	Dale Sandquist	Alameda
KO6CQW	Olaf Maass	Alameda
KO6CUH	Devin Cooper	Antioch
KO6CSM	Mark Fitzgerald	Fairfield (Extra)

KO6CTW	Walter Fields	Fremont
KO6CRH	Alex Yu	Castro Valley
KO6DAX	Rick Guthrie	Livermore
KO6CSG	Brenton Simon	Livermore (Extra)
KO6CWD	Brent Mills	Livermore
KO6CYV	John Rio	Oakley
KO6CTJ	John Tran	Union City (General)
KO6CZV	David Hauge	Walnut Creek
KO6CZI	Paul Giuliano	Oakland
KO6CQL	Kara Gaiser	Berkeley
KO6CWT	George Attia	Albany
KO6CXN	Kelanu Ranganath	Richmond
KO6CVB	Sarah Covello	Richmond
KO6CZQ	Tom Riley	Vacaville
KO6CYX	William Smith	Vacaville (General)

=====

New Upgrades:

KO6CSM	Mark Fitzgerald	Fairfield (Extra)
KO6CSG	Brenton Simon	Livermore (Extra)
K6ZTF	John Hargraves	San Lorenzo (Extra)
KO6CTJ	John Tran	Union City (General)
N3NRD	Ross Levine	Vallejo (General)
KM6SGB	Joselito Tiongco	Vallejo (Extra)
KO6CHK	Erik Lyngen	Oakland (General)
KO6CPV	Stuart Ambler	Berkeley (Extra)
KO6CCU	Robert Lauderville	Vacaville (General)

=====

Question & Answer:

When may amateur stations transmit information in support of broadcasting, program production, or news gathering, assuming no other means is available?

A. When such communications are directly related to the immediate safety of human life or protection of property

[Technician Class question pool (2022-2026) no. T1D09 (<https://www.ncvec.org/index.php/2022-2026-technician-question-pool-release>)]

=====

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.

Mike Patterson, N6JGA
ARRL East Bay Section Manager

Email: N6JGA@ARRL.org
 Website: <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>

=====