



Section Manager <u>East Bay Section Newsletter</u> <u>April, 2023</u>

ARRL East Bay Family,

Here's hoping those of you in the San Leandro area came through this morning's 3.2 earthquake without damage.

Two big birthdays this month:

- * Happy Birthday, ARRL! The ARRL was founded on April 6, 1914 by Hiram Percy Maxim and Clarence D. Tuska. 109 years young.
- * And Happy Birthday, IARU. The International Amateur Radio Union (IARU) was formed on April 18, 1925 in Paris. It's also World Amateur Radio Day to mark the big anniversary. Get on the air and celebrate the event. See the following for details: (https://www.arrl.org/world-amateur-radio-day) and (https://www.iaru.org/on-the-air/world-amateur-radio-day).

Don't forget to celebrate the most important day in human history - First Contact Day! This April 5th is its 40th (negative) anniversary. See the Significant Events section for details.

* Ouestion:

What is the maximum PEP output allowed for spread spectrum transmissions?

A. 100 milliwatts

B. 10 watts

C. 100 watts

D. 1500 watts

(See the last page for the answer.)

Section & Division News:

* Pacificon Needs Volunteers

The Pacificon Committee has kicked into high gear, planning for this year's Pacific Division Convention. We'll be back at the Marriott in San Ramon on Oct. 20-22. The 2023 website and registration are targeted to launch in mid-April. It takes a LOT of work to put on an annual convention, especially one as great as Pacificon. That means the committee needs a lot of people; for the planning beforehand and the execution during the weekend.

To quote the Committee Chair, Julie Mah, WJ8MAH; "We are in urgent need of a Forums Coordinator. The Forums Coordinator makes contact with various persons who speak or teach throughout the convention and then coordinates with the team, plans the various times and placements of speakers. We have a historical list of good previous speakers, some of whom very likely would be willing to do their presentations, or modified versions, again if contacted about it. You don't need to be a licensed Ham OR a member of MDARC to participate as a volunteer."

The Committee has roughly 24 sub-committees and coordinators tasked with getting everything done that needs to be done. Most of them need help from other volunteers; some before the weekend, most during the weekend. If you can help with Forums Coordination, or just have questions, please contact Julie at (chair[at]Pacificon[dot]org). If you can give the convention a few hours in one or more of the many other jobs, go to the Volunteer registration page, once the 2023 website launches in a couple of weeks. It's at (https://www.pacificon.org/registration/volunteers).

* Section Manager Elections

Nominations for the Sacramento Valley and San Francisco Section Managers are open. If you know someone in one of those sections that may be interested in being the Section Manager, have them 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), June 9, 2023. The elected managers for both sections will begin their terms on October 1, 2023. The current section managers are Carol Milazzo, KP4MD in Sacramento Valley; and Bill Hillendahl, KH6GJV in San Francisco.

* Field Day

If your group hasn't started planning your Field Day activities yet, it's time to get going. This year, Field Day is June 24-25. See the item in the ARRL News section below for a link to the updated rules. General information about the weekend is at (http://www.arrl.org/field-day). That page includes a link to a one-page flyer for those new to ham radio, "What is Field Day". To see the sites listed on the Locator map, go to (https://www.arrl.org/field-day-locator). Most importantly, be sure to add your Field Day site to the ARRL Locator by logging in to your account on the ARRL website, then going to (https://www.arrl.org/field_days/add). As before, I will use the entries on the Locator map for planning my visits to the locations. As of this writing, only one East Bay site is listed, so I may have a relaxing day...

* Golden Eagle Exercise

Golden Eagle is an annual exercise hosted by the Bay Area Urban Areas Security Initiative (UASI). Its purpose is to plan and practice a coordinated emergency response across the Bay Area following a major emergency. From our Section Emergency Coordinator, Dan Goldstein, KJ6KEU: "The Golden Eagle 2023 exercise May 18 includes a special track for amateur radio, whether or not the county itself participates in the exercise. For the 12 counties represented in Bay Area UASI, emergency communications teams are planning a more extensive exercise building on lessons learned in past years. The exercise scenario begins about 70 days into a pandemic of the highly contagious Monkeypox virus, and includes spontaneous critical incidents such as fires. Teams are evaluated on several key metrics designed to measure readiness to respond to such disasters. By participating, teams demonstrate value to their served agencies, while gaining new lessons learned to be shared with the EmComm community. To participate, contact your county's radio team now." For more on UASI, see (http://www.bayareauasi.org/).

* Electronics Flea Market is Back

The Electronics Flea Market will be held on the second Sunday of each month and focuses on electronics and amateur radio gear. This month, the market will be postponed one week, to April 16, as the second Sunday is Easter. The hours are from 6:00AM until 12:00 Noon. The location is parking lot 3 at West Valley College in Saratoga. Buyers can come to the market for free, but parking on campus is \$3 for the day. Get details at (https://www.electronicsfleamarket.com/).

* Robot Block Party

The Robot Block Party is an event in Oakland to celebrate National Robotics Week. It will be on Saturday April 8 2023 at Circuit Launch, near the airport. According to the website, planned are robot demos, robotics tech talks, a pot load of exhibits, Brazilian BBQ, and more. Members of the Oakland Radio Communication Association (ORCA) are discussing having a booth there to promote ham radio. The event has also requested radio communications to co-ordinate the parking and outdoor area. For details on the event and to register (general admission is free), go to (https://svrobo.org/robot-block-party/). If you'd like to help with the booth or the radio communications, contact Beau Ambur, K6EAU, at (beau[at]nubcore[dot]com).

[Thankx to Mike, KB6MP, for the information.]

* Winlink In the Division

Winlink capabilities continue to grow, both in the Division and nationwide, thanks to the enthusiastic efforts of our Section Technical Specialist, John Trinterud, K9ONR. He's given numerous presentations in the Section and at Pacificon; and has recently given them to groups in San Jose, Hawaii and Washington State. More are being planned, including a proposed seminar at the National CERT Conference this June in Burlingame. It will be on a CERT-specific internet-free Winlink and mapping interface that's compatible with graphical information mapping software such as QGIS. John has also designed two new forms for Winlink specific to CERT operations. One is a windshield survey form that's GPS-enabled. Messages using this form can be consolidated and automatically displayed on a map at the Emergency Operations Center (EOC) without using the internet, as well as being passed into QGIS or similar mapping software for post-processing and for plotting incidents and comments at specific street addresses. The second form is an EOC Status Report, allowing local area command posts to periodically report their status to the EOC. The Winlink development team has put them on their website for anyone to download and use. They're available at (https://winlink.org/content/CERT). For questions about these forms or Winlink in general, contact John at (trint[at]att[dot]net).

* Pacific Division Hams in the News

In mid-March, Sacramento's KCRA TV station had a short report about storm damage and flooding in Tuolumne County, including a tornado. The report had a very brief mention of ham radio use during the response, near the end of the report. See it at (https://www.kcra.com/article/tuolumne-county-severe-storm-causes-flooding-wind-damage/43285264) [video, 00:01:32]

[Thankx to Bob, W6RBF, for the information.]

ARRL News:

* Field Day Rules-2023

The rules packet for this year's Field Day has been released and there have been some changes. Snag it at (https://contests.arrl.org/ContestRules/Field-Day-Rules.pdf) [PDF, 7 pages].

* Frequency Measuring Test

The League hosts two frequency measuring tests each year, in April and November. It's a good opportunity to check your equipment and your frequency measuring skills. This month, the test will be on Thursday, April 20, beginning at 8:00 PM Pacific Time (officially, 0300 April 21 UTC). The test will be on 40 and 80 meters from two transmitting stations, one each in Oklahoma and Ohio. You don't have to use special lab equipment to enter the FMT. Modern HF transceivers can make frequency measurements quite accurately. SDR transceivers and PC software can make precise measurements of signal frequency. See (http://fmt.arrl.org/) for details and to enter your results. Also, click the link there for the QST announcement. And, you can get information on how to measure frequency at (http://www.k5cm.com/).

* Club Development Program

The League recognizes that the many dedicated volunteers who work to make and keep clubs successful often must take on rolls that may or may not line up with their personal experience. To support these people, it has begun a program of recorded webinars discussing the roles of the various leadership positions. You can attend the live presentation of each webinar or watch the recording later, which will be in the League's Learning Center at (https://learn.arrl.org/). The first seminar was last Thursday, March 30, and was on the topic of the Secretary position. The next one will be Thursday, April 27 at 4:00 PM Pacific Time; and will be on the Treasurer position. Register for it at (https://us06web.zoom.us/webinar/register/WN_TVwPqBBSS4KbXUTHV83xcA#/registration). Future seminars will look at the roles of Newsletter Editors, Public Information Officers, Webmasters, and others.

* Club Commission Program

I've talked in these newsletters before about how one benefit of being an Affiliated Club is that you can participate in the Club Commission Program. This program allows clubs to earn a commission for enrolling new and renewing ARRL members. We suggest you remind your members that they can renew at any time and the renewal will be added to the end of their current membership, so they won't lose time. Go to the following link and click on "Club Commission Program"; (https://www.arrl.org/affiliated-club-benefits).

Also, to quote ARRL Field Services Manager, Mike Walters, W8ZY, "In the spirit of 2023 and ARRL's Year Of the Volunteers, we are offering the following promotion to clubs using the Club Commission Program: For every five new members signed through the Club Commission Program through the end of 2023, ARRL will give the club a copy of "The ARRL Handbook", which can be used as a promotion, a door prize, be auctioned off at hamfests, or used however you choose."

Government News

* RF Exposure Evaluation Deadline is Here

You may recall that the FCC issued changes to amateur radio RF exposure rules that went into effect on May 3, 2021. The change does not alter the exposure limits; it mainly removes ham radio's exemption from evaluating their stations for compliance. For new stations established on or after May 3, 2021, the licensee must immediately evaluate their station and take steps to come into compliance if the evaluation shows that's needed. For stations that existed before May 3, 2021, the deadline was pushed back two years, but is now upon us. Our deadline for evaluation is just a month away, May 3, 2023. Details on the rule change are available at (http://www.arrl.org/news/updated-radio-frequency-exposure-rules-become-

effective-on-may-3). A PDF of FAQs is available at

(http://www.arrl.org/files/file/Technology/RFsafetyCommittee/RFXFAQ4.pdf). [PDF, 7 pages.] One method to perform your evaluation is to use the ARRL RF Exposure Calculator at (http://www.arrl.org/rf-exposure-calculator).

* "Explore JPL" is Back

Before the pandemic, the Jet Propulsion Laboratory (JPL) in Pasadena opened its campus to the public for one weekend to go "behind the scenes" and see the latest technologies and space missions studying Earth, our solar system, and beyond. After a 4-year break, it's back and will be held on April 29-30 this year. Tickets are free but very limited and go fast. They will be available at 9 a.m. PDT Sunday, April 2. Be sure to refresh the page after 9 a.m. to check for availability. For tickets, go to (explore.jpl.nasa.gov). For more details, see (https://www.jpl.nasa.gov/news/free-tickets-to-explore-jpl-available-online-soon).

* NASA Needs Ham Help

Amateur Radio Science Citizen Investigation (HamSCI) is an officially recognized NASA citizen science project. HamSCI will be making radio contacts during the 2023 and 2024 North American eclipses, probing the Earth's ionosphere. It will be a fun, friendly event with a competitive element—and they want hams to participate by transmitting, receiving, and recording signals across the radio spectrum during the eclipses, which will create valuable data to test computer models of the ionosphere. For details, see (https://science.nasa.gov/science-news/citizenscience/ham-radio-operators-we-need-your-help-during-solar-eclipses).

[Thankx to Art, AA6AM, for the tip.]

* National Public Safety Telecommunicators Week - With a Local Link

The second week of April (April 9-15 this year) the telecommunications personnel in the public safety community are honored. It's a time to celebrate and thank those who dedicate their lives to serving the public. You can learn about it at (https://www.npstw.org/about-npstw/).

But wait, there's more! I recently learned that the celebration originated right here in the East Bay Section. The weeklong event was initially set up in 1981 by Patricia Anderson of the Contra Costa County Sheriff's Office. See the interesting (and in hindsight, a bit amusing) story about how this special week got started at (https://www.npstw.org/npstw-the-backstory/).

* NASA On The Air

NASA locations host a dozen or so amateur radio clubs around the nation and they join forces to commemorate NASA milestones and various special anniversaries. One of those clubs is at the Ames Research Center on Moffett Federal Airfield over on the peninsula; call sign NA6MF. NASA On The Air is a year-long special event for all those clubs that highlights a particular milestone each month. Get details, rules, scoring, how to get a certificate and other information at: (https://nasaontheair.wordpress.com); and check your score at: (https://nota.ka0s.net/).

Other News:

* Getting Started with SDR

Make Magazine, the lead publication of the Maker movement, has a very good article on software defined radio (SDR). It gives a brief history of how SDR was developed, how the technology works, and what you can do with it. It then discusses practical aspects such as equipment, accessories and antennas; then provides an "SDR Fast Start" tutorial. Another section of the article describes online SDR; that is, connecting to an SDR that's somewhere else in the world via the internet. As the article suggests, you can get the basic equipment needed for about \$30. I have one of the more popular brands, but haven't been able to spend nearly as much time with it as I'd like. See the Make article at (https://makezine.com/article/electronics/getting-started-with-software-defined-radio-sdr/).

* Scouting's Radio Merit Badge Makes a Jump

There are over 135 merit badges in the U.S. Scouting program. According to a "Scouting" magazine study of Merit Badges earned in 2022, Radio had the biggest jump. It's now the 81st most popular Merit Badge, up from being 98th in 2021. Trailing just behind it on the biggest gains list is the Electronics Merit Badge, which jumped 15 spots, from 80th to 65th. To earn the rank of Eagle Scout, members must earn 21 badges, 14 of which are standard. The Scout gets to choose the remaining badges based on personal interests.

Pacificon is the same weekend each year as Scouting's Jamboree on the Air (JOTA), the world's largest event in Scouting. A sizable number of Scouts each year spend a day at Pacificon studying and earning their Radio and/or Electronics merit badges. Kevin Walsh, KK6FRK, of the San Diego Section, recently gave a presentation on JOTA. See it at (https://www.youtube.com/watch?v=Vzh6iWHIUSI) [YouTube; 59.22] [Note: the presentation lasts 00:43:01. The rest is Q&A.] A PDF of the slide deck is at

(https://www.dropbox.com/sh/dlt03i075e6078r/AABvrZFpGfNl06u6SHMdSXXsa?dl=0) [PDF; 27 pages]

* Amateur Radio Halls of Fame

The CQ Halls of Fame, the "CQ DX Hall of Fame" (started in 1967) and the "CQ Contest Hall of Fame" (started in 1986) were established to recognize those amateurs who have made major contributions to DXing and contesting, respectively. The CQ Amateur Radio Hall of Fame, started in 2001, recognizes those who have made major contributions to amateur radio as a whole, and radio amateurs who have made major contributions to society at large. The activities and accomplishments that qualify one for membership in these elite groups involve considerable personal sacrifice and can usually be described by the phrase "above and beyond the call of duty." See them at (https://cq-amateur-radio.com/cq awards/cq hall of fame awards/cq hall of fame awards.html).

* Museum Ships On The Air

Museum Ships Weekend, is an annual event hosted by the Battleship New Jersey Amateur Radio Station. This year, it will be the weekend of June 3-4. As of this writing, 66 ships from around the world have signed on to participate this year, including our own USS Hornet in Alameda, the SS Jeremiah O'Brien in San Francisco, the Red Oak Victory in Richmond, and the USS Pampanito in San Francisco. Hopefully, the USS Potomac in Oakland and the USS Lucid in Stockton will join the list soon. Get details at: (https://www.nj2bb.org/museum/). A full list of all the world's museum ships is available from that oracle of oracles, Wikipedia, at: (https://en.wikipedia.org/wiki/List_of_museum_ships).

Hamfests And Special Events:

* 04/21-23/2023

International DX Convention. Visalia, CA. Sponsored by the Northern California DX Club. http://www.dxconvention.com/

* 04/22/2023

Valley of the Moon ARC Hamfest, Sonoma, CA. Sponsored by the Valley of the Moon ARC. (http://vomarc.org/)

* 05/13/2023

Reno Ham Swap. Cabelas, 8650 Boomtown Garson Rd. Verdi, NV (Reno). Sponsored by the Sierra Nevada Amateur Radio Society (SNARS). (http://renohamswap.com/)

* 05/20-22/2023

W6SFM On-Air Bug Roundup. Sacramento, CA. Samuel F. Morse Amateur Radio Club. 3.533 7.033 14.033 21.033 MHz.

* 06/02-04/2023

SEA-PAC in Seaside, OR. The ARRL Northwestern Division Convention. (https://seapac.org/)

06/03-04/2023

Museum Ships Weekend. NI6IW, San Diego, CA. USS Midway Museum Ship. 14.320 8.250 14.070 PSK31 DSTAR on Papa system repeaters.

07/15/2023

Crater Lake National Park Birthday. W7OTV, Beaverton, OR. Oregon Tualatin Valley Amateur Radio Club. 14, 15, 30 and 10 meters; 14.280 14.320 28.440 21.125. OSL.

* 10/20-22/2023

Pacificon in San Ramon, CA. The ARRL Pacific Division Convention. Sponsored by the Mt. Diablo ARC. Registration and website targeted to launch mid-April, 2023. (https://www.pacificon.org/)

Search for all hamfests at (https://www.arrl.org/hamfests-and-conventions-calendar)
Search for all Special Event Stations at (https://www.arrl.org/special-event-stations)

Significant Events in Telecomm History – April

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

- 04/02/1872 Samuel Finley Breese Morse, co-inventor of the original Morse Code, died in New York City, New York at age 80.
- 04/03/1912 Congress ratified the treaty from the 1906 International Radiotelegraph Convention in Berlin; leading to the Radio Act of 1912.
- 04/03/1973 Dr. Martin Cooper of Motorola made the first handheld cellular phone call in public by calling his chief competitor, Dr. Joel S. Engel at AT&T.
- 04/05/2063 First Contact Day. In Star Trek lore, Earth's first warp-drive capable starship, the Phoenix, had its first test flight; leading to the pivotal first interaction between humans and a non-Earth species, the Vulcans.
- 04/07/1928 The Detroit Police Department commenced regular one-way radio communication with its patrol cars.
- 04/08/1856 The Western Union Telegraph Company was formed by the merger of the New York and Mississippi Valley Printing Telegraph Company and the Erie and Michigan Telegraph Company.
- 04/15/1912 The RMS Titanic sank. SOS signals via radio saved many lives, raising public awareness of the value of radio.
- 04/06/1914 The ARRL was founded by Hiram Percy Maxim and Clarence D. Tuska.
- 04/06/1917 Congress declared war on Germany, bringing the U.S. into World War I. All civilian radio equipment, both transmitters and receivers, was prohibited.
- 04/08/1911 Professor Heike Kamerlingh Onnes and his collaborators discovered superconductivity in Leiden, The Netherlands, observing that the resistance of mercury approached "practically zero" as its temperature was lowered to 3 kelvins.
- 04/08/1999 The Oakland Radio Communication Association (ORCA) became affiliated with the ARRL.
- 04/12/1961 The age of humans in space began as Yuri Alekseyevich Gagarin, a Soviet pilot and cosmonaut, was launched into outer space, orbiting the Earth for 108 minutes before his safe return.
- 04/12/1981 NASA launched the Columbia space craft on STS-1, the first space shuttle mission, returning 2 days later.
- 04/17/1790 Benjamin Franklin died in Philadelphia, Pennsylvania at age 84. He was the first to discover the principle of conservation of charge, among innumerable other accomplishments.
- 04/18/1925 The International Amateur Radio Union (IARU) was formed in Paris.
- 04/18/1955 Albert Einstein died in Princeton, New Jersey at age 76.
- 04/18/xxxx World Amateur Radio Day
- 04/20/1939 Franklin D. Roosevelt became the first president to appear on television when the National Broadcasting Company (NBC) broadcast the opening ceremony of the New York World's Fair.
- 04/20/1961 The FCC authorized a standard FM stereo broadcasting method.
- 04/25/1874 Guglielmo Marconi was born in Bologna, Kingdom of Italy.
- 04/27/1791 Samuel Finley Breese Morse, co-inventor of the original Morse Code, was born in Charlestown, Massachusetts.
- 04/27/1933 Karl Guthe Jansky presented a paper to a small audience in Washington., DC on his research into radio signals of previously unknown origin entitled "Electrical Disturbances of Extraterrestrial Origin". The paper is viewed as the beginning of radioastronomy.
- 04/29/1948 The East Bay Amateur Radio Club (EBARC) became affiliated with the ARRL.
- 04/30/1897 Physicist J.J. Thomson, gave a lecture at the Royal Institution in London saying, "The atoms of the ordinary elements are made up of corpuscles and holes, the holes being predominant,". This lecture is considered by many to be an announcement of the discovery of the electron, what Thompson called "corpuscles".
- 04/30/1916 Claude Shannon, "the father of information theory", was born in Petoskey, Michigan.
- 04/30/2013 The USS Hornet Amateur Radio Club became affiliated with the ARRL.

New Hams:

Joshua Miller **KN6YLO** Alameda Ushesh Desai KN6YPA Concord (General) KN6YOJ Thomas Braine Dublin (General) San Ramon (General) **KN6YPY** Mark Lemmo **KN6YME** Michael Williams Walnut Creek Walnut Creek KN6YPN David Hicks Charles Nelson Walnut Creek **KN6YOH** KN6YOZ Zachary Heineman Oakland Malaika Thorne KN6YKT Oakland KN6YQE Curtis Steckel Berkeley Vacaville (General) KN6YPL Lee Horton

New Upgrades:

WB6SAI Stephen Donovan Pleasant Hill (Extra) Aaron Anderer N6ACA Livermore (Extra) **KN6WSH** Walter Carr Livermore (General) KN6YPY Mark Lemmo San Ramon (General) W6SLA Patrick Riggs Walnut Creek (Extra) Terrence Satterfield Oakland (General) KN6NEI Kevin Mullally Richmond (General) KN6IFL Campbell (General) KG6EZF Vladimir Risko KN6YPL Lee Horton Vacaville (General)

Question & Answer:

What is the maximum PEP output allowed for spread spectrum transmissions? B. 10 watts

[General question pool no. G1E08 (http://www.ncvec.org/page.php?id=364). 47CFR97.313(j).]

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 HO Help Desk: 888-277-5289 or hq@arrl.org

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