

Vol. 51, No. 10

OCTOBER 2019

WWW.COASTSIDEARC.ORG

PRESIDENT'S COLUMN

Greetings,

It's that time of year again where we nominate members for Club Officers for 2020. We need candidates to elect at our November Dinner Meeting. Feel free to throw you hat into the ring and run for a Club Officer Position.

We have two additional discussion items.

The first is a request to donate to C.A.R.L.A. Repeater System to help replace equipment damaged in recent wildfires.

The second item is an email that was already shared with the Club from Cal Fire and address repeaters on State/Cal Fire property. They are now asking for rent with the justification that Amateur Radio is no longer needed. Which I find disturbing.

I hope to see you at the meeting on October 9th.

73, Walt, KG6EDY Club President

∢►

SEPTEMBER MINUTES

CALL TO ORDER

The September 11, 2019 meeting was called to order at 7:30pm by: President Walt Long-KG6EDY, at the Linda Mar Fire House in Pacifica.

Self-introductions by members in attendance.

TREASURER'S REPORT

Financial report: General Fund: \$3,884.56, Repeater Fund: \$866.82, APRS/Digipeater Fund: \$1,250.84, EOC/Public Service Fund: \$13,530.11. Grand Total: \$19,532.33.

MEMBERSHIP 61 Members, 70% ARRL

Bills needing approval None

Correspondence None MEMBERSHIP Membership renewals to date: 42 Members, 81% ARRL

BILLS NEEDING APROVALS None

CORRESPONDENCE

None

COMMITTEE REPORTS CURRENT REPEATER 1. Update on status of WA6TOW repeater from Dave Rinck-K6DMR: Nothing new

- 2. APRS No Report
- 3. Emergency Services No Report

Replacement Repeater

1. Update on Repeater Replacement Committee progress from Roy Brixen-KE6MNJ: Relays have been ordered 2. Potential motion for funds

Fog Fest – September 28-29, 2019 – Still need volunteers Election Dinner – November 16th at Sharp Park Golf Club Field Day - June 27-28, 2020 Newsletter - Published Website – Up & running

UNFINISHED BUSINESS

Un named SMC Health Department Event at the San Mateo County Event Center – November. The exercise is a simulation of a levee break in Foster City. The Nation Guard is going to do a demo setup a 300-bed mobile hospital.

Donation of Funds (Do we want to table until after the Treasurer returns?) Tabled

NEW BUSINESS

Club Officers for 2020 – President Walt Long-KG6EDY stated that he has reached term limit and asked for volunteers for the position. Dave Lawrence-KF6TWW volunteered. Bill Lillie was not at meeting to verify he will continue as Vice-President. Walt asked Tom Oliver-KJ6OGL if he will continue as Secretary, Tom agreed. Frank Erbacher-N6FG was not available for confirmation of Treasurer.

ADJOURNMENT

Motion made by Gary Barnes-KI6HIG and seconded by Dave Rinck-K6DMR to adjourn the meeting at: 7:51p.m. Meeting adjourned

PRESENT AT THE MEETING

The following Life Member has become a Silent Key Roger Spindler-WA6AFT

Officers: President: Walt Long-KG6EDY, Secretary: Tom Oliver-KJ6OGL, Treasurer: Frank Erbacher-N6FG

Members: Dave Lawrence-KF6TWW, Ralph Kugler-KC6YDH, David Rinck-K6DMR, Paul Atkins-AI6BBGuest: Victor Manuel Munoz-KB6LQZ

Submitted by: Tom Oliver-KJ6OGL, Secretary

<

NEWS

PACIFIC COAST FOG FEST-SAT. AND SUN, SEPT. 28TH AND 29TH, 2019

The weather was cold and windy Saturday with some sellers booths having problems during and after hours. Sunday was nice, sunny and calmer. Even with Saturdays weather I overheard that financial proceeds might be OK.

Fog Fest Organizer was again pleased with the CARC efforts and on Sunday said "See you next year". I said yes.

Our CARC volunteers showed up on time or early.

By Saturday, Casey and Joshua,-N6TZE and N6TZF, prepared the numbered labels with listing of each channel use and were there placing them on radios.

Joshua handed out most of the 50+ radios. Dispatchers continued checking radios in and out though out both days, installing recharged batteries, answering question or helping find answers and logging items in/out of "Lost and Found" when necessary.

Our crew were Casey-N6TZE, Joshua- N6TZF(2 dys), Walt- KG6EDY(2 days), Ralph- KC6YDH(2 days), Tom- KJ6OGL, Scott-KM6SCD, Dave- KF6TWW, Quente- KF6OLC, Ken- N6KAR(2 days) and myself N6FG

(2 days). Barbara- K6IIP was on phone standby both days but not needed. Thank you ALL! CARC FF Chairman- Frank N6FG

<

ARRL UPDATE

Bidding in ARRL Online Auction Begins on October 17

More than 230 items will go on the block as bidding begins on Thursday, October 17, at 10 AM EST (1400 UTC) for the 14th Annual ARRL Online Auction. The auction will continue through Thursday, October 24,

closing at 10 PM EST. An auction preview opens on Monday, October 14.

The 2019 auction includes lab-tested QST "Product Review" gear, vintage books, used equipment, and oneof-a-kind items, plus the ARRL Lab team has contributed four of its very popular "Mystery Junque Boxes."

Some premier "Product Review" items up for bid include the Elecraft KPA 1500 legal-limit HF and 6-meter linear amplifier, the Icom IC-7610 HF and 6-meter transceiver, the Palstar LA-1K 160 - 6 meter amplifier, the FlexRadio Systems FLEX-6400M HF and 6-meter SDR transceiver, the Kenwood TS-890S HF and 6-meter transceiver, and many more.

The auction will also offer items donated from the popular television series Last Man Standing, starring Tim Allen, an actual radio amateur who portrays the fictional Mike Baxter, KA0XTT, in the show, which has featured ham radio in some episodes.

Among book offerings in the auction are the sold out 2019 Handbook Boxed Set, a special defense edition of The Radio Amateur's Handbook from 1942, and a 1949 ARRL Antenna Book.

Proceeds from the annual Online Auction benefit ARRL education programs. These include activities to license new hams, strengthen Amateur Radio Emergency Service (ARES®) training, offer continuing technical and operating education, and create instructional materials.

All bidders must register (your arrl.org user ID and password will not work on the auction site). If you have registered for a previous ARRL Online Auction, you may use the same login information. If you have forgotten your user ID or password, click the "Help" tab for instructions on how to retrieve these credentials. Make sure your correct address and other information are up to date. The auction site only accepts Visa and MasterCard.

IARU Administrative Council Steps Up Efforts to Combat Radio Spectrum Pollution

The International Amateur Radio Union (IARU) Administrative Council (AC) met on September 28 and 29 in Lima, Peru, to conduct a final review of IARU preparations for the International Telecommunication Union (ITU) World Radiocommunication Conference 2019 (WRC-19). The Council's annual meeting took place just ahead of the triennial IARU Region 2 (IARU R2) General Assembly. Responsible for IARU policy and management, the Council consists of the three IARU international officers and two representatives from each of the three IARU regional organizations.

WRC-19's lengthy agenda includes items of direct interest to the Amateur Service, including consideration of improvements to the 50 MHz amateur allocation in Region 1, protection of existing amateur allocations, and development of the agenda for the next WRC in 2023. IARU volunteers and member-societies have been working for the past 4 years -- since WRC-15 -- to influence proposals from national telecommunications administrations and regional telecommunications organizations (RTOs) that will be considered at WRC-19, which gets under way late this month in Sharm El-Sheikh, Egypt.

"IARU efforts have reduced the number of potentially damaging proposals that otherwise might have been offered for consideration, but several challenges remain," IARU said in a news release. "A small team of IARU observers will attend WRC-19 and will work with amateurs and friends on national delegations to reach the best possible outcomes."

Front: Reinaldo Leandro, YV5AM; IARU Vice President Ole Garpestad, LA2RR; Don Beattie, G3BJ; Ken Yamamoto, JA1CJP; Wisnu Widjaja, YB0AZ. Rear: Hans Blondeel Timmerman, PB2T; IARU President Tim Ellam, VE6SH/G4HUA; David Sumner, K1ZZ; Ramón Santoyo, XE1KK, and George Gorsline, VE3YV.

Looking beyond WRC-19, the AC plans to increase its commitment to influencing the work of standards organizations, particularly the International Special Committee on Radio Interference (CISPR) and its participating national committees. IARU cited "the rising level of radio spectrum pollution caused by unnecessary and unwanted emissions from electronic devices, such as wireless power transfer for the recharging of electric vehicles (WPT-EV), is a serious threat to radio communication services including the Amateur Service."

Council participants engaged in an extensive discussion to identify the principal challenges facing Amateur

Radio and how the IARU and its member-societies might better address them. Upgrading of the current websites of the IARU and its three regional organizations is under way and should be completed in the coming months. The AC also adopted a Brand Guide to ensure a common identity across the IARU organization.

The Council's next in-person meeting will take place in October 2020, just prior to the IARU Region 1 Conference in Novi Sad, Serbia. Virtual AC meetings are also planned beginning in December 2019 and January 2020. Read more. -- Thanks to IARU Secretary David Sumner, K1ZZ

<

AMATEUR RADIO HISTORY THE WAYBACK MACHINE BY BILL CONTINELLI - W2XOY

Backlogged, paralyzed, swamped, and overwhelmed. These are the words that described the FCC in January, 1977. The reason? Citizens Band Radio applications. The "CB craze" had started in 1974 with the first gas crisis. Fueled by top ten songs, TV shows, and movies, CB radio became an incredibly popular fad among the public in the days before computers, the internet, cable tv, or cellular phones. Prior to the gas crisis, the licensed CB population had stabilized at 800,000. Now, over 500,000 applications per month poured into the FCC Gettysburg Office. The peak was reached in January, when one million applications came in. By the end of 1977, over 10 million CB licenses were issued.

The explosive growth in 11 meter activity, coupled with the unresolved "Class E CB" issue, caused increased friction between CB'ers and hams. The ARRL was still fighting the proposed reallocation of 2 Mhz in our 220 band to Class E. Instead, the League suggested a new CB band at 900 Mhz. Then, on April 4, 1977, the Class E fight was thrust into the public spotlight. Jack Anderson, in his nationally syndicated column, charged that the FCC was staffed by "Ham Henchmen", who conspired with the 300,000 amateurs to keep 9 million CB'ers from getting expanded frequencies. The ARRL, along with dozens of hams, sent rebuttals to the media. The friction gradually subsided when the FCC announced the 27 Mhz CB band would be expanded from 23 to 40 channels. The Class E question was settled on October 13, 1977, when the FCC dropped the idea. Our 220 band was safe--for now.

Ironically, the United States lost \$200,000,000 on the CB boom. How? Well, late in 1976, a Federal Court overturned the FCC's license fee structure. Rather than appeal the decision and/or overhaul their fee assessment

procedure, the FCC suspended collection of all license fees, effective January 1, 1977. A Class D CB license cost \$20; you can do the math. Incidentally, amateurs benefited from the license fee suspension. A new or renewed license, except for Novice, used to cost \$9; now it was free.

Amateur radio was growing in 1977. At the beginning of the year, there were 293,655 hams. By midvear, the number was 313,000 and on December 31 it was 327,000. This was a healthy 11% growth in 1 year, and a 25% increase over the 1974 census. The biggest single reason was probably 2 meter FM. Hundreds of repeaters, with the distinctive "WR" prefix, covered the country coast to coast. The pages of QST were filled with ads for crystal controlled 2 meter FM rigs such as the Midland 13-500 and 13-505, the Wilson 1402 and 1405, the Regency HR-2B and HR-312, the Genave GTX-1 and GTX-10, and the Heathkit HW-202. With crystals for 12 channel operation, these units cost about \$250. Counting inflation, that's about \$600 today. For the 1977 operator who wanted the latest in synthesized technology, Clegg had the FM-DX for \$599 (\$1400 today), and Heathkit introduced the HW-2036, which covered the 146-148 Mhz FM segment of the 2 meter band.

For those on a tight budget, VHF Engineering had a 1 watt 2 meter transmitter kit for \$29.95, a 2 meter receiver kit for \$69.95, and a 2 watt, 4 channel, 2 meter HT kit for \$129.95.

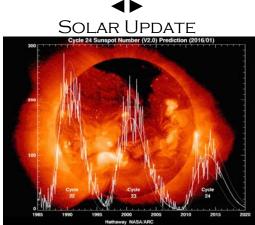
Technicians now had Novice privileges, but were still banned from 50.0--50.1 and 144-145 Mhz. However, the 2 meter repeater segment at 146-148 Mhz was becoming crowded. In response to several petitions, on November 4, 1977, the FCC opened a new repeater subband from 144.5--145.5 Mhz. In addition, they deleted the separate station license requirements for repeaters. Any amateur, except for Novice, could now put up a repeater without prior FCC approval. Logging requirements for repeaters were simplified. Finally, Technicians were given full access to the new repeater subband, although the 144.0-144.5 segment was still out of bounds.

In other FCC news for 1977, on March 1 "instant upgrading" appeared. Licensed amateurs could immediately use new privileges upon passing the test for a higher class license, rather than waiting 6-8 weeks for the overloaded FCC to send the new license. On July 1, any Extra Class amateur could apply for a 1 x 2 call. Due to a 500% increase in amateur exams, as well as a massive workload, the FCC announced on August 18 that the cw sending test would be eliminated for all licenses above Novice. However, the FCC had one proposal that brought forth the wrath of the amateur community. Citing illegal CB operation on the "10 1/2" meter band (i.e. the frequencies between 27.405 and 28 Mhz), the FCC wanted to ban commercial amplifiers capable of operation between 24 and 35 Mhz, and to require Type Acceptance on any amplifier that operated below 144 Mhz. Except for Novice VXOs in the early

70's, the FCC had never required Type Acceptance on any amateur transmitter. The amateur community strongly opposed this proposal. Hams were being punished for the crimes of others. The FCC promised an answer by 1978.

In summary, 1977 was a good year for amateurs, but there was still some unfinished business. Would Technicians get the full 2 meter band and, along with the Generals, regain the 50.0--50.1 Mhz segment they lost under Incentive Licensing? Would CB radio continue its massive growth and make more demands on amateur frequencies? Finally, would the FCC ban 10 meter amplifiers? The answers lie in 1978.

Re-printed with permission. Wayback Machine #32 Copyright 1996, 2001 by William Continelli, W2XOY All rights reserved. These columns were originally written for the Schenectady radio club



10/04/2019

A new sunspot from old Cycle 24 appeared on Tuesday and Wednesday of this week, then by Thursday was gone.

The sunspot number was 11 on both days, the minimum non-zero sunspot number.

Average daily solar flux rose only slightly from 67.3 to 67.6. Geomagnetic indices were higher. Average planetary A index rose from 5.4 to 14.4, and average mid-latitude A index increased from 4.6 to 11.

Predicted solar flux for the next 45 days is 68 on every day, October 4 through November 17.

Over the same period predicted planetary A index is 8 on October 4-5, 5 on October 6-7, then 8, 10, 5, 5, 8 and 12 on October 8-13, 8 on October 14-15, 5 on October 16-20, then 12, 5 and 5 on October 21-23, then 18, 25, 12 and 10 on October 24-27, then 8, 8 and 12 on October 28-30, and again 8, 8 and 12 on October 31 through November 2, then 5 on November 3-5, then 8, 5, 8, 10, 8 and 8 on November 6-11, 5 on November 12-16 and 12 on November 17.

Geomagnetic activity forecast for the period October 04-October 29, 2019 from F.K. Janda, OK1HH.

Geomagnetic field will be Quiet on: October 8, 16-17, 29 Quiet to unsettled on: October 4-5, 7, 9, 20, 23 Quiet to active on: October 6, 10-11, 15, 18-19, 22, 27-28 Unsettled to active on: October (12-14,) 21, 26 Active to disturbed: October 24-25 Solar wind will intensify on: September 27-30, October 1 (-4,

7-9,) 11 (-14,) 21-26

Parenthesis means lower probability of activity enhancement.

The predictability of changes remains lower

On October 2, Mike Schaffer, KA3JAW, of Easton, Pennsylvania wrote: "To my surprise, due to its rarity, double-hop Sporadic-e was active on the 11-meter Citizens Band yesterday afternoon, Tuesday, October 1 from 12 noon to 2 pm eastern local time.

"Eight days past the autumnal equinox, and the unexpected happens inside the northern wedge of the Bermuda Triangle, which is the mid-point path over the Sargasso Sea in the western Atlantic Ocean. It (Es) turned on like a switch with no warning.

"The Es was being funneled in from Puerto Rico, Dominican Republic in the northern Caribbean Sea. Dominican Republic is 1,567 air miles and Puerto Rico is 1,629 air miles from my location. The typical maximum single-hop Es range is 1,400 miles. Both exceeded this limit; thus, this was a double-hop event that occurred.

"At 12:30 pm, readable with practically no difficulty (4), strength at good signals (6). Backscatter was heard from Pennsylvania and New York states calling stations at 1:19 pm." Tamitha Skov, WX6SWW, writes: "After spending far too long with a spotless Sun, our favorite star finally brings some bright regions back into Earthview. The emergence of several of these, including one that has officially been designated a sunspot (region 2749), has brought some much-needed smiles to many in this community-- including me. Already we have had about 200 days without any sunspots this year, which is

5

about as deep as solar minimum gets. Is anyone as ready as I am for a change?

"As for the forecast this week, we are expecting some fast solar wind to hit over the next few days as a southern coronal hole rotates through the Earth-strike zone. This could bring aurora to high latitudes, possibly through the weekend, but aurora photographers at midlatitudes should expect shows to be sporadic and elusive. As for emergency and amateur radio, this storm might boost radio propagation a bit, especially on Earth's night side. Improved trans-equatorial propagation might also occur near the gray line (which means there might be some good radio contacts between the northern and southern hemisphere during the dawn and dusk hours) as these conditions will likely be enhanced by the weak solar storm.

"Of course, the increased solar activity this week may fizzle as fast as it started. It's way too early to wish for big solar flares from a yet-to-be-seen Solar Cycle 25. But the return of bright regions on Earth's dayside is a nice gift. If nothing else, they make for a colorful backdrop while we wait for the weather to change."

Here is her latest video: https://youtu.be/j930BODV_bg

An update from SpaceRef: http://www.spaceref.com/news/viewsr.html?pid=52897

If you would like to make a comment or have a tip for our readers, email the author at k7ra@arrl.net.

For more information concerning radio propagation, see the ARRL Technical Information Service at http://arrl.org/propagation-of-rf-signals. For an explanation of numbers used in this bulletin, see http://arrl.org/the-sun-the-earth-the-ionosphere.

An archive of past propagation bulletins is at http://arrl.org/w1aw-bulletins-archive-propagation. More good information and tutorials on propagation are at http://k9la.us/.

Monthly propagation charts between four USA regions and twelve overseas locations are at http://arrl.org/propagation.

Instructions for starting or ending email distribution of ARRL bulletins are at http://arrl.org/bulletins.

Sunspot numbers for September 26 through October 2, 2019 were 0, 0, 0, 0, 0, 11, and 11, with a mean of 3.1.

10.7 cm flux was 67.1, 66.4, 67.3, 67.4, 67.9, 68.7, and 68.3, with a mean of 67.6. Estimated planetary A indices were 4, 21, 27, 13, 15, 13, and 8, with a mean of 14.4. Middle latitude A index was 2, 15, 21, 10, 11, 11, and 7, with a mean of 11.



Pacifica CERT (Community Emergency Response Team) For training and information

https://pacificacacert.samariteam.com/RequestInfo.aspx email: mailto:cert@pacificapolice.org

QCWA NorCal Chapter 11 - Lunch at Harry's Hofbrau

3rd Wednesday of every month 1909 El Camino Real Redwood City, CA. No host. 11:00AM to 1:00PM (approx).

ASVRO Silicon Valley Electronics Flea Market

2nd Saturday of each month from March through October. Web Page: http://www.electronicsfleamarket.com/ Talk-In: W6ASH 145.27- (100Hz PL) N6NFI 145.23- (100Hz PL)

LICENSE EXAMS

Bay Area Educational Amateur Radio Society Offering a one day study session for Technician or General theory, followed by testing. Fee: \$35.00

Web Page: http://www.baears.com/ for info and registration. Questions: Ross Peterson (650) 349-5349 or wb6zbu@arrl.net

Silicon Valley Volunteer Examiner Group

First and third Saturdays of each month, 8AM-11:00AM. Saratoga Fire Station 14380 Saratoga Ave, Saratoga, CA Fee: \$15

Walk-ins only, No pre-registration

• Web Page: http://www.svve.org

Sunnyvale VEC Exam Sessions

Fee: \$15 Cash Cut-off-time, 30 min. after starting time. Exam: changes, directions, call (408) 255-9000 24/hr Sat OCT 13th Sunnyvale, CA 10:30 AM Web Page: http://www.amateur-radio.org

◄►

Online Practice Exams

Within the practice tests, online study resources, (Wikipedia, NASA, ARRL, etc.), are provided for many of the questions. The list of resources available for each question is constantly growing because users can add their own favorite links to the study materials. Users can also track their test scores over time and see which sub-elements are giving them the most trouble. Practice Test

6

CARC MEETING/EVENT SCHEDULE

Jan 9th	2019 Agenda Planning, LM Fire Station
Feb 13th	Agenda Final, Repeater Controller LM Fire
Mar 10th	Daylight Savings Time Begins
Mar 13th	LM Round Table Pizza 1400hrs
Apr 10th	Repeater Controller LM Fire
Apr 28th	Dream Machines, El Granada
May 8th	Field Day Planning Mtg, LM Fire Station
Jun 8th	Devils Slide Ride, PARCA Bike Event
Jun 12th	Field Day Planning Mtg, LM Fire Station
Jun 22-23	CARC Field Day, Sweeney Ridge
Jul 10th	Field Day Wrap-Up Mtg, LM Fire Station
Aug 14th	LM Fire Station
Sept 11th	LM Fire Station
Sept 28-29	Pacific Coast Fog Fest, Pacifica
Oct 9th	2020 Officer Nomination, LM Fire Station
Nov 16th	Election Dinner, Sharp Park Golf Club
Dec 11th	Holiday Potluck Dinner Meeting, LM Fire

? to be determined # updated ---- canceled * tentative date



www.smcready.org cert@pacificapolice.org



In Memoriam



Roger G. Spindler-WA6AFT/SK



COASTSIDE AMATEUR RADIO CLUB

The Coastside Amateur Radio Club (CARC) is affiliated with ARRL, and meets the second Wednesday of each month at 19:30 hrs. in the Linda Mar Fire Station Community Room, on Linda Mar Blvd. in Pacifica. Visitors are welcome.

The CARC has been organized since 1959, serving Bay Area amateurs, and providing emergency communications services to the City of Pacifica. Membership dues are \$20.00 per year for the administration of the Club and the publication of the Communicator.

CARC supports two repeaters, WA6TOW/R (VHF and UHF); a Packet Digipeater, WA6TOW-1; and an APRS Digipeater, WA6TOW-2. Users of the machines provide repeater support and maintenance strictly through donations.

VHF: 146.925 MHz –offset 600 KHz PL 114.8 UHF: 441.075 MHz +offset 5 MHz PL 114.8

PL Tone: 114.8 Hz is used on both repeaters, as needed, for noise suppression.

Packet Digipeater: 145.050 MHz, Packet Node: PAC APRS Digipeater: 144.390 MHz.

CARC/Pacifica OES VHF Simplex: 146.535 MHz

PL Tone: 114.8 Hz is used, as needed, for noise suppression

VHF Net

The club sponsors a VHF net each Wednesday, with the exception of meeting nights, at 20:00 hrs. for membership check-ins, notices, and QST's. Note: The WA6TOW repeater on 441.075 MHz may be used as an alternate if the WA6TOW VHF repeater is down.

HF Net

The club sponsors a HF rag chew net on 3.852 MHz, or the first clear frequency up/dn, on Saturday at 09:00 hrs. with an alternate frequency of 7.228 MHz.

4

The Coastside Communicator is a monthly publication of the CARC. All articles contained herein are the opinions of the authors and not necessarily those of the club members or editor.

This newsletter contains material from The ARRL Letter as permitted by the American Radio Relay League

Permission may be granted by the editor to reproduce material of this publication. Credit must be given to the author, the Coastside Communicator, and one copy of the reproduced article is sent to the editor for approval.

CARC, P.O. Box 1106, Pacifica, CA 94044





COASTSIDE NETS

Monday

7:00 PM on WA6TOW 146.925 MHz, PL 114.8 Pacifica CERT Net

7:30 PM on WA6TOW 146.925 MHZ, PL 114.8 San Bruno ARC Net

Tuesday

7:30 PM on WA6TOW 146.925 MHZ, PL 114.8 Daly City ARES Net

8:00 PM on WA6TOW 146.925 MHZ, PL 114.8 and KC6ULT 146.865 MHz, PL 114.8 simultaneously, but not linked. San Mateo County ACS Net

Wednesday

8:00 PM on WA6TOW 146.925 MHz, PL 114.8 Coastside Amateur Radio Club Wednesday Night Check-in.

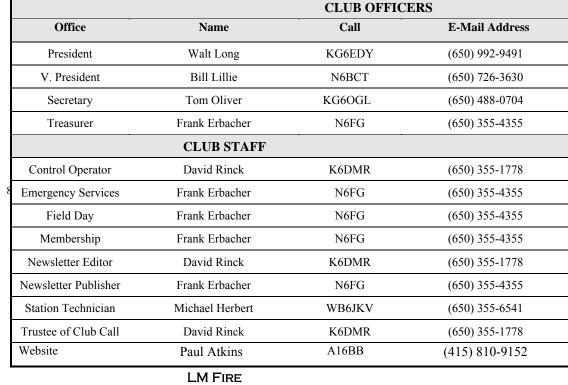
Saturday

9:00 AM on 3.852 MHz, or the first clear frequency up/dn. (alt freq of 7.228 MHz.) Coastside Saturday Morning Group.

10:00 AM on WA6TOW 146.925 MHZ, PL 114.8 QCWA Ch. 11 NorCal. Net

Sunday

7:00-7:30 AM on WA6TOW 146.925 MHz, PL 114.8 Knights of the Megahertz Net





PACIFICA 7:30PM

2020 OFFICER NOMINATION

COASTSIDE COMMUNICATOR DAVID RINCK, EDITOR P.O. BOX 1106 PACIFICA, CA 94044

FIRST CLASS

TO:

