QRO

MONTHLY NEWSLETTER OF THE PALOS VERDES AMATEUR RADIO CLUB

DECEMBER 2019

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Palos Verdes Amateur Radio Club's Holiday Dinner

Thursday, December 12, 2019

(Reservations required)

Los Verdes Golf Course 7000 W. Los Verdes Drive Rancho Palos Verdes, CA

6:30 pm: Meet & Greet 7:00 pm: Dinner Buffet, followed by program and door prize drawings



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PVARC's upcoming meeting topics

The PVARC's January 2, 2020, meeting kicks off the New Year with Brian Johnson, AB6UI, returning to speak about school educational programs involving amateur radio on helium-filled balloons. Brian has volunteered during the past year with Compton schools to demonstrate amateur radio's APRS capability with ballooning. He also spoke at our November 2019 club meeting about amateur radio on the International Space Station.

Our February 6th meeting features Terry Dennison, K9TAD, speaking about sunspots and HF propagation. Terry recently gave this presentation at a Southern California DX Club monthly meeting.

Our March and April program topics will be announced soon.

Wish we could be there...no Islands On The Air DXpedition for K6PV in February 2020

20/20 vision is ideal for the eyes but 2020 turned out not to be an ideal year for our Islands On The Air DXpedition to Catalina Island. The PVARC Board of Directors recently decided not to mount our yearly trek to Two Harbors during February 19-23, 2020, due to a convergence of factors.

First and foremost, HF propagation conditions are projected to remain poor next February (see separate article on Sunspots in this **QRO** issue) resulting in our contacts being heavily focused on FT8 or FT4 digital modes.

Second, with 2020 being a Leap Year the two major HF contests we participate in from Two Harbors will be held

on separate weekends. The CQ Worldwide 160-Meter SSB contest is still on the month's last full weekend, February 21-23. But the North American RTTY QSO Party contest is always the last Saturday in February, i.e. Feb. 29 in 2020. K6PV usually makes around 400 contacts in the RTTY QSO Party, a fast-paced contest we really enjoy on Catalina.

Lastly, our choices for other dates in early 2020 became limited by likely weather, other activities some team members have, and factors at Two Harbors precluding our cabin usage. But we'll be back in 2021. ■







Palos Verdes Amateur Radio Club 2019 Holiday Dinner

Los Verdes Golf Course

7000 W. Los Verdes Drive, Rancho Palos Verdes, CA

Thursday, December 12, 2019

Meet and Greet beginning at 6:30 pm, Dinner at 7:00 pm, followed by Program and Prizes



Directions:

Take Hawthorne Blvd. to Los Verdes Drive.

If heading southbound on Hawthorne towards the ocean, Los Verdes Drive is the first street on the right after passing the Ralph's supermarket at Crest and Hawthorne. Turn right onto Los Verdes Drive and go downhill to the end.

If traveling northbound uphill on Hawthorne look for the Los Verdes Drive sign and turn left where you see various apartment buildings. Follow Los Verdes Drive to the bottom.

Our dining room is the very last section of Los Verdes' clubhouse building. Passengers may be dropped off at the circle outside the patio gate. Walk across the patio to our room entrance and check in there.

Handicapped parking spaces are across from the Los Verdes Clubhouse.

Questions or problems? Contact Diana, Al6DF, at 310-544-2917 (cell)

2019 Field Day results: Our K6PV excelled as Class 2A station

Field Day	(A)	(B) K6PV Rank	(C) K6PV	(D) K6PV
Year * FD operations disrupted by lawn sprinklers overnight	K6PV (2A Station) Total Points	Nationwide of all Field Day stations (all classes)	Rank of all 2A stations in ARRL Southwestern Division	Rank of all 2A stations, ARRL LAX Section
2019	5,284	178th of 3,112 (top 6% of all FD stations)	1 st of 27	1 st of 7
2018	4,288	305 th of 2,902	3 rd of 24	1 st of 8
2017	4,238	338 th of 2,965	3 rd of 28	2 nd of 10
2016	4,742	243 rd of 2,696	2 nd of 31	1 st of 9
2015	5,780	193 rd of 2,270	4 th of 27	3 rd of 9
2014	4,932	252 nd of 2,686	4 th of 32	2 nd of 9
2013*	4,248	331 st of 2,548	5 th of 26	1 st of 5
2012	5,188	259 th of 2,617	5 th of 24	1 st of 8
2011*	4,492	341 st of 2,632	6 th of 24	1 st of 5
2010	5,468	219 th of 2,617	5 th of 31	1 st of 8
2009*	3,930	391 st of 2,603	9 th of 27	3 rd of 7
2008	4,160	332 nd of 2,409	4 th of 27	1 st of 9
2007	3,216	511 th of 2,331	6 th of 28	2 nd of 7
2006	5,242	223 rd of 2,169	4 th of 30	2 nd of 5
2005	6,216	162 nd of 2,199	3 rd of 32	2 nd of 8
2004	7,118	126 th of 2,242	3 rd of 30	2 nd of 7
2003	6,192	126 th of 2,079	4 th of 37	3 rd of 8
2002	6,246	194 th of 2,099	3 rd of 28	1 st of 7

The ARRL released results of the 2019 Field Day shortly after our November **QRO** issue was published and we now know K6PV did extremely well.

For the first time in recent history our K6PV 2A station finished 1st among all 2A stations in the ARRL's Southwestern Division (10 counties in Southern California plus the entire state of Arizona.)

We also were first among 2A stations in the Los Angeles Section and in the top 6% of all 3,112 Field Day stations nationwide (Note: 2A class means two transmitters using emergency power, plus a bonus VHF/ UHF station.)

Not shown in the table on left: PVARC finished 32nd nationwide among all 360 Class 2A stations in Field Day 2019.

In the ARRL Los Angeles Section, K6PV finished 5th among 55 FD stations of all classes. The highest scoring station in the Los Angeles Section was 5A N6HC (a consortium of several groups) with 17,082 points.

Thank you again to everyone and our Field Day Chair Rocco, N6KN, who made this year's Field Day both possible and successful.

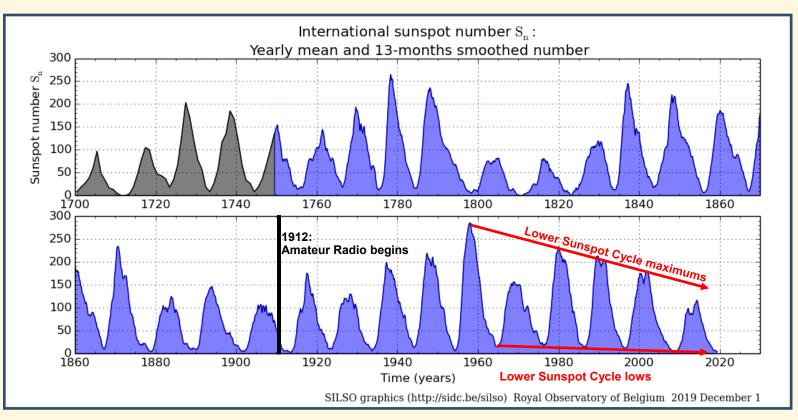
The Sun still shines brightly but few sunspots lately hurt HF propagation, "worst solar cycle" in ham radio history?

By Diana Feinberg, Al6DF QRO Editor

To understand why the PVARC Board of Directors largely decided to scrap our 2020 Catalina Island DXpedition see the graph below: we're at the absolute bottom of a solar cycle whose sunspot counts have continued a trend of lower lows following lower highs. That's not great for DXing...and the current cycle is the worst in ham radio's history. This graph plots sunspot numbers as a 13-month smoothed average to better show the trend.

As of December 10, 2019, there were 263 days this year (76%) with no sunspots to ionize the ionospheric layers that facilitate DXing. With similar prospects for the first half of 2020 we felt only weak-signal digital modes such as FT8 or FT4 would have decent days on a consistent basis.

When U.S. amateur radio began in 1912 the current 11-year sunspot cycle was near its bottom too. But hams then had only a single long-wave frequency of 200 meters (1.5 MHz) where sunspots don't really enhance long-distance communication.



DXing took off after World War II as ham radio rapidly grew and the late 1950's had a spectacular solar cycle, with many HF bands open 24 hours a day at the peak. It also helped that most DX-entity islands throughout the world until the late 1970's had resident ham operators in various capacities.

Some solar weather experts predict the next solar cycle might have peak sunspots only half of the latest peak in 2014—not good. Our 2014 Catalina Island DXpedition was phenomenal, with SSB contacts piling in daily from all across Europe and elsewhere on 20, 17, 15, and 10 meters. This year all these bands were "closed" for phone and RTTY DX, only somewhat open for CW, but reasonably good for FT8. Given the costs and time expended to mount our Catalina Island DXpeditions we are hoping for better band conditions in 2021.

PVARC website gets substantial revamp, ability for new tools and future features

Have you seen the PVARC's newly-revamped website at <u>www.k6pv.org</u>? Thanks to extensive inputs from Kel Vanderlip, W6KCV; Clay Davis, AB9A; and Ron Wagner, AC6RW, our website has been completely revised using site-building tools that allow for extensive future development and ease of content addition.

As shown below the new K6PV homepage layout has 10 horizontal tab selections, each with multiple dropdown choices.

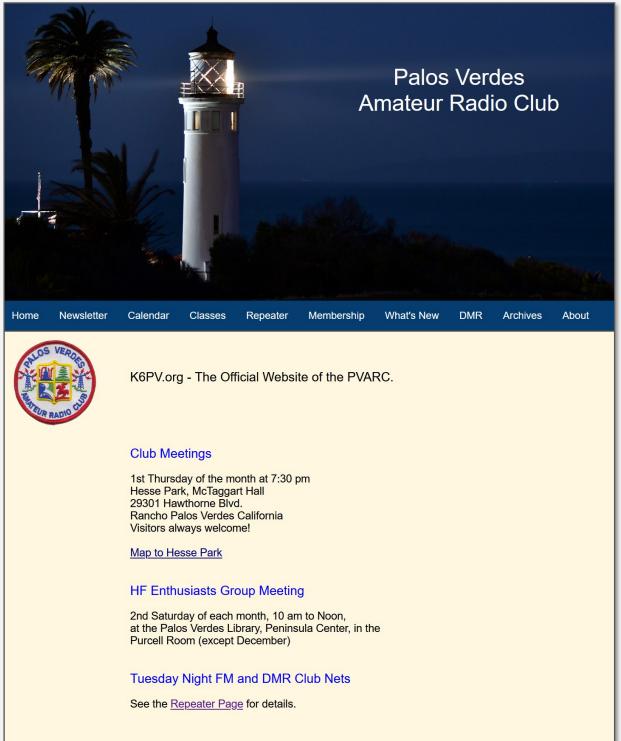
Of interest to many will be the new **Repeater** and **DMR** tabs containing information and links enabling better understanding our repeater protocols.

While embracing new aspects we've kept much content from our previous website. You'll still find all past **QRO** issues under **Newsletter** and other content under **Archives.**

Our membership roster is still being updated into a new format.

Going forward, we hope to seamlesslyintegrate PVARC's membership, reservations, and other payment processes with PayPal or similar platforms.

Let us know if you have any website comments.



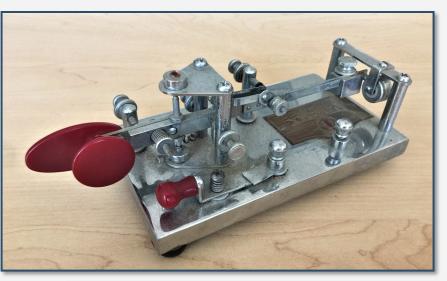
Next HF Enthusiasts Group meeting at PV Library, December 14

The PVARC's HF Enthusiasts Group meets next on Saturday, December 14, from 10:00 am to Noon, at the Palos Verdes Library's main branch (701 Silver Spur Rd / 650 Deep Valley Dr.) in the Purcell Room behind the Reference Desk. Free parking is available on the Library roof, in a parking structure on Deep Valley Drive, or inside a small parking area accessed from Silver Spur Rd.

Thanks to Ray, N6HE, here are some topics discussed at the November 11th HFEG meeting with 11 attendees:

- Jerry NG6R reported widening his lead as top SOTA chaser in California, loves his new TI84 scientific calculator.
- George ex-WA6YBR, ex-AJ6JG, ex-NA6Q, now maybe NA6V, looking to upgrade from Flex 3000 to 6300 or 6400; perfected his "Stalk and Pounce" technique during ARRL CW Sweepstakes contest.
- Jeff K6JW still working to get the DB-18E SteppIR antenna working for the DX season.
- Rocco N6KN has his Flex 6400 working remotely now, reported his quest to get his headset mic working with the laptop for remoting, and discovered the mysterious "black dot" that made all work OK finally
- Brian K6UHM is looking for a tower base plate to tilt his tower over buy or homebrew?
- Bob AC6RM is looking at either a 43' vertical or a SteppIR BigIR antenna
- Ray N6HE brought 2 give-away speakers and demo'd his 1960's era Vibroplex "bug" key (see right photo)
- Carlos WD6Y updated us on his 432 MHz moonbounce project, and passed around his "how do I plug the hole" experiment
- Neal N6YBM is waiting for his DXCC award certificate to arrive, and talked about satellite paths getting tracked on a Geochron
- Clay AB9A demo'd his Raspberry Pi relay box (bottom right) and showed how he and Gary WA6MEM are using nifty new software to remotely control the K6PV repeater modes.

Hope you can attend the next HFEG meeting—all are welcome. ■





PHOTOS: RAY DAY, N6HE

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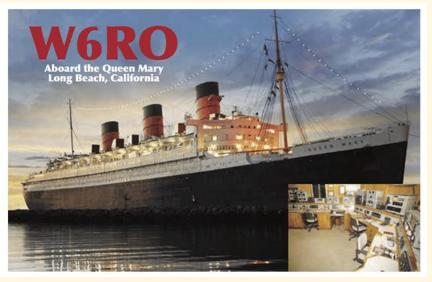
Queen Mary in Long Beach open to amateurs, December 14

The Associated Radio Amateurs of Long Beach and the Queen Mary invite all licensed amateur operators to freely board the legendary ocean liner for "Ham Radio Day Aboard the Queen Mary" on Saturday, December 14, 2019.

The ARALB's world-famous station W6RO will be fully staffed all day. Hams may visit the station, take a turn as a guest operator, or work it on the air to earn a special 40th Anniversary QSL card. Ham radio aboard the Queen Mary began in December 1979.

The following special activities are also planned:

• Static displays of the Queen Mary's vintage maritime radio equipment.



W6RO QSL card from recent years.

- On-air demonstrations of ham radio 'go-kits' at locations around the ship.
- Demonstrations of 'eclectic communications gear', including an Aldis lamp and semaphore flags.
- Demonstrations of satellite ham radio, with actual contacts being made through satellites in orbit.

Basic admission to board the ship is FREE for licensed radio amateurs this day. Simply show your current amateur radio license at the Hotel entrance and come aboard!

Please note the free boarding offer is subject to these restrictions:

- A valid FCC license document must be presented. (QM personnel will not look you up in the FCC database, QRZ, etc.)
- Non-licensed friends and family members are not included.
- Free boarding of the ship does not include admission to the Queen Mary Christmas event.
- Free boarding does not include parking. Normal parking rates apply (\$3 first hour, \$15 after one hour). For an alternative, ride the free Long Beach Transit Passport bus, or try LBT's AquaBus or AquaLink boat shuttles to get to the Queen Mary.



As photographed in February 2015, the Queen Mary has been permanently moored in Long Beach since 1967. Ham radio operations aboard the ship began in December 1979.

PHOTO: DIANA FEINBERG, AI6DF

PVARC Club News

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Consider being an ARRL member

Please consider joining the American Radio Relay League (ARRL) if not currently a member. The ARRL is the only national organization representing amateur radio and has another significance for the PVARC: We receive benefits from being an ARRL-affiliated club. But being an ARRL-affiliated club requires at least 51% of club members also be ARRL members. Annual ARRL membership costs \$49 and includes the monthly **QST** magazine as well as access to numerous webbased materials and assistance with ham radio issues. Visit: www.arrl.org/ then click "Join/Renew."

PVARC badges await pickup at next monthly meeting...or another time

Gary Lopes, WA6MEM, has the following PVARC badges ready for distribution at our December 12 Holiday Dinner or by other arrangement.

- K6MU
- KI6YMD
- NJ6I

To make special arrangements with Gary (or to order a badge) contact him at: wa6mem@cox.net.

Embroidered PVARC patches available at monthly meetings

PVARC club patches are available at our monthly meetings for \$4 each. They may be sewn on any cap, jacket, shirt, or bag.

The four illustrations in the patch center are emblems of the Palos Verdes Peninsula's four cities (clockwise from top left: Palos Verdes Estates, Rolling Hills Estates, Rancho Palos Verdes and Rolling Hills.)



Palos Verdes Amateur Radio Club

An American Radio Relay League Affiliated Club

Board of Directors:

President	Diana Feinberg, Al6DF
Vice President	Ray Day, N6HE
Treasurer	Peter Landon, KE6JPM
Secretary	Ron Wagner, AC6RW
Directors	Clay Davis, AB9A
	Gary Lopes, WA6MEM
Past Vice President	Bob Sylvest, AB6SY

Appointed Offices:

QRO Editor	Diana Feinberg, Al6DF			
Webmaster	Kel Vanderlip, W6KCV			
K6PV QSL Manager	Jeff Wolf, K6JW			
K6PV Repeater Trustee	Mel Hughes, K6SY			
LAACARC Delegate	Jeff Wolf, K6JW			
VE Coordinator	Dave Scholler, KG6BPH			
VE ARRL Liaison	Jerry Shaw, KI6RRD			
Net Control Operators	Malin Dollinger, KO6MD;			
Dale Hanks, N6NNW; Bob Sylvest, AB6SY;				
Ron Wagner, AC6	RW; Dan Yang, K6DPY			

Contacts:

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Webmaster: 310-742-6123, kelvin@vanderlip.org

Email us: <u>k6pv@arrl.net</u>

Website: www.k6pv.org

Mailing Address:

Palos Verdes Amateur Radio Club PO Box 2316 Palos Verdes Peninsula, CA 90274-8316

Monthly Meetings:

1st Thursday (except July and December in 2019) at 7:30 pm at Fred Hesse Park, 29301 Hawthorne Blvd., Rancho Palos Verdes, CA. Visitors always welcome.

Repeaters (Open, though often listed as "Closed"):

PVARC: K6PV, 447.120 MHz

- Analog FM: (-), PL 100.0, CTCSS
- **Digital DMR:** 447.120 MHz (RX); 442.120 MHz (TX) Talkgroup 31060, Color Code 1, Time Slot 2

"PV-West": W6MTA, 449.980 MHz (-), PL 173.8, CTCSS

To order a Club badge:

Gary Lopes, WA6MEM, wa6mem@cox.net

To order a Club jacket or patch: Dave Scholler, KG6BPH, 310-373-8166

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Front page photo — Pt. Vicente Lighthouse shortly before sunset on December 4, 2019, with a large rain cloud on the horizon. PHOTO: DIANA FEINBERG, AI6DF

PVARC Club News

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PVARC upcoming dates in 2020

 PVARC monthly meeting at Hesse Park, McTaggart Hall

1st Thursday each month, 7:30-9:30 pm, except in August and December. 6:30-7:25 pm, "What's Next?" group for newer hams and "DMR Basics".

 HF Enthusiasts Group meetings at Palos Verdes Library, Peninsula Center main branch

2nd Saturday every month, 10 am to Noon, in the Purcell Room (corner behind Reference Desk.)

Walt Ordway, K1DFO, Technician and General amateur radio license classes at Hesse Park

Saturdays, Feb. 1 and 8, 2020; exams, Feb. 15.

Saturdays, May 2 and 9, 2020; exams, May 16.

Saturdays, Nov. 7 and 14, 2020; exams, Nov. 21.

Public service events in 2020:

Ridgecrest Int. School 5K, Apr. 26 RHE Hills Are Alive 10K/5K run/walk, Aug. 10 Conquer the Bridge race, Labor Day, Sept. 7 Palos Verdes Half Marathon-10K-5K, Nov. 21.

• PVARC 2020 Holiday Dinner: To be announced.

Non-PVARC Events of Note:

- W6TRW Swap Meet: last Saturday each month, Northrop Grumman Space Park, North Redondo Beach, 7:00-11:30 am.
- Yuma Hamfest & ARRL Southwestern Division Convention, Yuma, AZ: Feb. 14-15.
- International DX Convention, Visalia, CA: Apr. 24-26.
- Dayton Hamvention, Xenia, OH: May 15-17.
- Sea-Pac & ARRL Northwest Division Convention, Seaside, OR: June 5-7.
- PACIFICON & ARRL Pacific Division

WELCOME NEW MEMBERS OF THE PALOS VERDES AMATEUR RADIO CLUB IN 2018-2019

Daniella Ward, KM6TRC Dylan Brown, KM6TDI Ellen Tessitore, N6XJM Michael Vulpillat, KJ6RVU Brian Clebowicz, K6BRN Warren Arata, KM6YGR Chris Sundlee, N6CGS Brad Rachielles, KC6NNV Georgiann Keller, KM6YGM Annalise Little, KM6YGS Tim Couture, KM6QWA Frank Brown, KM6YGQ Charlie Hansen, AJ6HZ Diana DiDomenico, KM6IQN William McClure, W7QLI Rick Shigio, K6RTS David Calloway, K6DKC Jon Kuroyama, K6LDQ Ray Grace, WA6OWM Robert Keller, K9BGC Alex Marko, KD6LPA Erin Okada, KN6FYV Derek Okada, KN6FYS Xing Yang, KN6FYX Stephen Anderson, KN6FZA Charles Tang, KN6FYY Ikue Duncan, KN6FYW

FCC developments potentially affecting amateur radio...or not.

Perhaps you are already aware of these. But three issues currently before the Federal Communications Commission could potentially affect amateur radio in significant ways.

First, at its December 12, 2019, meeting the FCC Commissioners will consider whether to remove amateur radio's 3.3-3.5 GHz frequency allocation to provide more bandwidth for cellular data. This follows the 'Mobile Now Act" approved by the 115th Congress requiring the FCC and Department of Commerce to make more spectrum available for mobile phones and related uses.

While few PVARC members are known to be using this spectrum there are numerous hams from San Diego to Santa Barbara (and elsewhere) who invested in 3.3-3.5 GHz MESH networking gear to send high-speed data, video, and audio data during emergency situations. The ARRL has already petitioned the FCC to keep amateur radio's spectrum. See: <u>http://www.arrl.org/news/arrl-to-oppose-proposal-to-eliminate-3-3-3-5-ghz-amateur-allocation</u>

Second, also at the FCC's December 12 meeting the Commissioners will consider other applications for the 5.9 GHz band that might compete with amateur radio in certain portions of that spectrum. Amateur radio currently is a secondary user in the 5.9 GHz band.

Third, an electrical engineering professor at New York University (also a ham operator) had filed a petition with the FCC seeking to ban many ham HF digital communication modes, claiming these are "encoded" and thus not permitted under FCC rules prohibiting encryption of amateur radio signals. This petitioner earlier claimed there was too much HF digital traffic that detracted from his enjoyment of amateur radio. The ARRL has filed with the FCC to dismiss this petition that would theoretically restrict nearly all HF digital traffic.

All these HF digital modes have software freely available for decoding, thus no traffic is truly encrypted and unreadable. The HF email protocol known as Winlink makes use of PACTOR and to facilitate that ARRL had petitioned the FCC to change the 300-baud symbol rate limit on amateur HF bands to a bandwidth of up to 2.8 kHz. PACTOR-4 has a 1.8 kHz bandwidth and given a temporary FCC exemption for disaster relief efforts when data needed to be transmitted rapidly. Some EmComm hams are already capable of using PACTOR-4. For the latest see:

http:// www.arrl.org/news/ arrl-asks-fcc-todismiss-petitionseeking-declaratory -ruling-on-encoded -message-rule.

Right: Screenshot from www.winlink.org website showing internet gateway points for RF message forwarding if internet isn't available locally.



PVARC Calendar

December 2019

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3 PVARC weekly net on K6PV re- peater & cross- band, 7:30 pm (analog); 8:00 pm (DMR)	4	5	6	7
8	9	10 PVARC weekly net on K6PV re- peater & cross- band, 7:30 pm (analog); 8:00 pm (DMR)	11	12 PVARC Holiday Dinner, Los Verdes Golf Course: Meet & Greet, 6:30 pm; Dinner, 7:00 pm + program, prizes	13	14 PVARC HF Enthusiasts Group, 10 am to Noon, Palos Verdes Library Peninsula Center Purcell Room
15	16	17 PVARC weekly net on K6PV re- peater & cross- band, 7:30 pm (analog); 8:00 pm (DMR)	18	19	20	21
22	23	24 Christmas Eve: <u>No PVARC nets</u>	25 Christmas Day	26	27	28 W6TRW Swap Meet, 7:00-11:30 am at Northrop Grumman, North Redondo Beach
29	30	31 New Year's Eve: <u>No PVARC nets</u>		Jan. 2, 2020 PVARC monthly meeting, Hesse Park. What's Next, & DMR 6:30 pm; Main meet- ing, 7:30 pm		

Tell your friends and family about our upcoming ham license classes at Hesse Park.

Two Free Amateur Radio Courses

FCC <u>"Technician"</u> course (entry level) FCC <u>"General"</u> course (2nd level) <u>Each course is 2 sessions</u> <u>The sessions</u> will be on 1 and 8 February 2020 <u>Technician</u> 9:30 AM to 1:30 PM both Saturdays (bring your lunch) <u>General</u> 1:45 PM to 5:00 PM both Saturdays The FCC tests will be 10:00 AM to noon on 15 February 2020

At the start of the 1 February Technician course, the Palos Verdes Amateur Radio Club will give a 30 minute presentation on how to get further involved with amateur radio.

The class location is at Fred Hesse Community Park, 29301 Hawthorne Blvd., Rancho Palos Verdes, CA 90275 Confirm your attendance to Walt, K1DFO at <u>waltordway@juno.com</u>

> There is <u>no fee</u> for either course. Taking the FCC test is \$15.

Optional Material (sold at cost) Gordon West books with all the FCC test questions, \$26 for the Technician and \$26 for the General Paper copy of Walt's Power Point charts, \$22 for the Technician and \$18 for the General

For courses sponsored by the Palos Verdes Amateur Radio Club, students thru grade 12 who pass their examination at a PVARC VE test session will, upon application to the Club, be eligible for reimbursement up to a maximum of \$50 to cover the cost of materials and the examination fee.

Everyone who obtains their first ham radio license through a PVARC VE test session, regardless of age, will receive a free membership in the Palos Verdes Amateur Radio Club for the remainder of the current calendar year.

Street Address:	QRO		DECEMBER 2019		PAGE 14
Last Name:	RALIOS VEADER	P.O. Box 231 Palos Verdes Peninsul	L6 a, CA 90274		
Street Address:	New:	or Renewal: _	Мемве	ERSHIP	Дате:
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			Household and/	or Family member	ship (\$25.00) \$
PayPal:Cash: or Check #: Date TOTAL \$			Additional donation	on to support PVA	RC activities \$
	PayPal:	Cash: or	Check #:	_ Date	TOTAL \$

PayPal payment: Go to <u>www.paypal.com</u>, enter recipient name: PVARC90274@gmail.com

All New and Renewal Member applications must be signed below.

I am applying for a new or renewal membership in the Palos Verdes Amateur Radio Club and understand that by accepting membership I agree to abide by the Club's constitution and by-laws (available on-line at: http://www.k6pv.org or upon request.)			
Signature:	Date:		
Family Member Signature:	Date:		
Family Member Signature:	Date:		