QRO

THE PALOS VERDES AMATEUR RADIO CLUB NEWSLETTER

AUGUST 2023

Inside this month's QRO...

PVARC upcoming meetings2
ARRL files comments against "seriously flawed" HF rules petition that benefits financial traders
What? Using HF bands for faster securities transaction? <i>by Diana Feinberg, Al6DF</i> 5-7
Upcoming events; ordering club badges, jacket, patch8
About us9
August 2023 calendar10
Upcoming PVARC ham license classes11
PVARC new membership & renewal form12
All QRO monthly issues since 2007 are on the PVARC website

at www.k6pv.org under the "Newsletter" tab.

Additional club news appears in the PVARC Weekly Bulletin sent by email to members.

It's Vacation Month,

enjoy some time off...

...or more time on the air

No PVARC meeting on August 3

Still meeting this month:

PVARC HF Enthusiasts Group meeting Saturday, August 5 (1st Saturday), 10:00 am-Noon at Palos Verdes Library Purcell Room (no Webex)

PVARC EmComm Interest Group meeting Saturday, August 19, 10:00-11:00 am via Webex

PVARC upcoming monthly meetings

We're taking a Vacation Break this month. There's no PVARC monthly meeting at Hesse Park or via Webex on Thursday, August 3. Don't show up at Hesse Park unless you wish to have some early-evening exercise on the park grounds.

PVARC's HF Enthusiasts Group will meet in-person on the 1st Saturday, August 5, from 10:00 am-Noon instead of the usual 2nd Saturday. Our room at the Palos Verdes Library was reserved by an SAT test preparation group on 2nd Saturdays in August, October, and November 2023. The College Board SAT test and ham radio do have some things in common: they're both still here, both require some knowledge and thinking skills, and both now have testing via either paper or digitally. (Gosh...your **QRO** Editor took the SAT test in November 1967 with two #2 pencils, how about you?)

Also this month our EmComm Interest Group meets virtually via Webex on the usual 3rd Saturday date and time–August 19, 10:00-11:00 am. The Webex meeting link will be emailed to all that week.

Our September 7 monthly meeting topic will be announced soon.■



Above: The PVARC's HF Enthusiasts Group meeting on June 10, 2023, in the Palos Verdes Library's Purcell Room. PHOTO: RAY DAY, N6HE

ARRL Files Comments Against "Seriously Flawed" HF Rules Petition

08/02/2023

From the ARRL website

ARRL The National Association for Amateur Radio®, as part of its mission to protect Amateur Radio, has filed comments against a proposal that would introduce high-power digital communications to the shortwave spectrum that in many instances is immediately adjacent to the Amateur HF bands.

The "Shortwave Modernization Coalition" (SMC), which represents certain high-frequency stock trading interests, filed the petition with the Federal Communications Commission (FCC). (Previous coverage can be found on ARRL News.) ARRL responded on behalf of its members and the 760,000 licensees of the Amateur Radio Service in the US.

The ARRL Laboratory performed a detailed technical analysis over several months to determine if the proposed rules would affect operations on the bands allocated to Radio Amateurs that are inter-mixed with the Part 90 bands in the spectrum in question.

ARRL's analysis determined that, if the proposed rules are adopted, the new operations inevitably will cause significant harmful interference to many users of adjacent and nearby spectrum, including Amateur Radio licensees. Ed Hare, W1RFI, a 37-year veteran of the ARRL Lab and internationally recognized expert on radio frequency interference, was the principal investigator on the study. Hare concluded the petition should not be granted. "This petition seeks to put 50 kHz wide, 20,000-watt signals immediately next to seven different amateur bands with weaker protections against interference than required in other services," said Hare.

In its formal opposition, ARRL stated, "That destructive interference would result if operations commenced using anything close to the proposed maximum levels."

ARRL's filed comments highlight flawed analysis and incomplete data submitted by the petitioners. It noted the petitioners "...significantly understate the harmful interference that is not just likely, but certain, if the rules proposed by SMC are adopted as proposed. It is noteworthy that SMC's proposed rules would provide less protection than the much-lower power amateur radio transmitters are required to provide Part 90 receivers." ARRL's opposition also noted that there was no reported tests conducted with Amateur or other affected stations, but referenced a spectrum capture in the Comments filed with the Dayton Group that showed actual interference into the Amateur 20-meter band from one of the High Frequency Trading experimental stations.

Part 90 HF rules currently authorize a maximum signal bandwidth equal to a voice communications channel, at up to 1000 W peak envelope power (PEP). The petition seeks multiplication of signal width, greater transmitted power, and weaker rules that protect users of adjacent spectrum. ARRL's comments expose the likely fallout: Continued on next page ►

ARRL Files Comments Against "Seriously Flawed" HF Rules Petition

Continued from previous page

"Incredibly, notwithstanding the significant increase in potential interference that would result from using digital schemes with 50 kHz bandwidths and 20,000 watts of power, SMC also proposes to substantially lessen the protections required to protect adjacent and neighboring licensees. SMC proposes [out-of-band emissions] limits that offer less protection than the existing Part 90 limits and would actually permit no attenuation (0 dB) at the edge of adjacent allocations, many of which are bands allocated to and heavily used in the Amateur Radio Service. Consistent with lessening protections while increasing the potential for harmful interference, SMC also proposes a lower limit for spurious emissions. SMC would reduce the existing protection of -73 dB for the applicable 1000-watt power limit to just -50 dB protection for their proposed 20,000-watt limit. Due to the much wider 50 kHz proposed bandwidth, the resulting interference would penetrate deep into the adjacent Amateur bands."

The proposal has been assigned FCC Docket No. RM-11953. While the period for commenting on the petition has now closed, replies to comments in the record may now be submitted.

Hundreds of licensed Radio Amateurs filed comments in the Docket, expressing overwhelming opposition to the proposal. Those interested may read ARRL's full comments and the results of the technical analysis, which are included in the filing. "If granted as written, this would be devastating to Amateur operation for many tens of kHz into our bands," said Hare.

ARRL will continue to advocate for its members and the Amateur Radio Service in this proceeding.■

To see the SMC filing visit: https://www.fcc.gov/ecfs/document/1042840187330/1

To see the ARRL's comments visit: <u>http://www.arrl.org/files/file/FCC%20Documents/</u> ARRL%20Opposition%20FCC%20RM-11953%2008_2023.pdf

More about this subject appears on the following **QRO** pages.

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What? Using HF for faster securities transactions?

By Diana Feinberg, AI6DF **ORO** Editor

Many hams upset with low HF digital data rates have led calls to replace symbol rate limits with, say a 2.5 kHz bandwidth on modes that benefit. With all that angst it's now shocking seeing financial-trading firms think they should receive 50 kHz bandwidth to blast digital buy and sell orders or pricing data using up to 20,000 watts transmit power along the edges of multiple amateur bands FCC Part 90 licensees currently have a 1,000 watt max on most HF frequencies.

But wait...why would anyone rely on sometimes fickle HF bands to route high-dollar financial transactions across long distances? The answer is a familiar five-letter word: greed.

Apparently some minds concluded transactions sent via RF arrive several milliseconds faster than through high-speed fiber optics. While RF over the air is at the speed of light that speed slows slightly inside fiber cable (as RF does inside coaxial cable). The faster RF route supposedly could help a trader get a better price buying or selling before others can act.

Your **ORO** Editor had been remotely following since mid-2022 an experimental Part 90 HF station in suburban West Chicago, IL, owned by RCA Telecom LLC (a subsidiary of one of the SMC petitioners.) A ham living nearby spotted the giant antenna and brought it to others' attention. As shown below just beyond our 20-meter ham band this site's 10,000 watt signal has a 167.1 kW Effective Radiated Power using bandwidths ranging from 3.0 to 32.0 kHz. The SMC petitioners are now asking for 20,000-watt transmit and 50.0 kHz bandwidth. Continued

site at 1N741 Pilsen Road, West Chicago, IL filed on FCC Form 442									
Frequency (MHz)	Output Power	Effective Radiated Power	Emission Designators†	Modulating Signal					
14.350-14.990	10.0 kW	167.1 kW	10K0G1D	PSK					
14.350-14.990	10.0 kW	167.1 kW	10K0Q1D	PSK					
14.350-14.990	10.0 kW	167.1 kW	12K0G1D	PSK					
14.350-14.990	10.0 kW	167.1 kW	12K0Q1D	PSK					
14.350-14.990	10.0 kW	167.1 kW	18K0G1D	PSK					
14.350-14.990	10.0 kW	167.1 kW	18K0Q1D	PSK					
14.350-14.990	10.0 kW	167.1 kW	24K0G1D	PSK					
14.350-14.990	10.0 kW	167.1 kW	24K0Q1D	PSK					
14.350-14.990	10.0 kW	167.1 kW	32K0G1D	PSK					
14.350-14.990	10.0 kW	167.1 kW	32K0Q1D	PSK					
14.350-14.990	10.0 kW	167.1 kW	3K00G1D	PSK					
14.350-14.990	10.0 kW	167.1 kW	3K00Q1D	PSK					
14.350-14.990	10.0 kW	167.1 kW	6K00G1D	PSK					
14.350-14.990	10.0 kW	167.1 kW	6K00Q1D	PSK					

Just above the 20m Amateur Band: Requested Experimental Frequency, Power, Modes for HF

Source (above table and table atop next page): https://apps.fcc.gov/oetcf/els/reports/ 442 Print.cfm?mode=current&application seg=116842&license seg=118591

† Emission Designators: First four characters indicate Bandwidth, i.e. 10K0 = 10 kHz; 32K0 = 32 kHz, etc.; next letter indicates modulation type; "D" indicates Data mode

What? Using HF for faster securities transactions?

Continued from previous page



Above (circled): Pilsen Road experimental HF site in West Chicago, IL, at coordinates 41.89849027845364, -88.22073923457582 is surrounded by trees, railroad tracks, and industrial businesses. CREDIT: GOOGLE MAPS

What? Using HF for faster securities transactions?

► Continued from previous page

What a high-power HF station near the ham bands looks like: The West Chicago, IL, Pilsen Road HF site has three beam antennas on a 159' tower originally operated by US Cellular. Not good news for some of the 79 hams with addresses in West Chicago, IL, who will deal with very high Effective Radiated Power near the bottom of 40-meters and upper end of 20meters.

Above: General view of tower looking south from nearest cross street at railroad right of way.

Right: Closer view of beam antennas for three bands: 6.795-7.000 Mhz, 9.040-9.400 Mhz; and 14.350-14.990 MHz. A microwave dish near the top seems pointed west; it would need to be pointed southwest for line of sight with the Chicago Mercantile Exchange data center in nearby Aurora, IL.■

PHOTO CREDITS: GOOGLE MAPS STREETVIEW

Tower Height 48.6 meters =

159.4 feet,

per FCC Form 442

PVARC upcoming events

• PVARC hybrid monthly meetings online via Webex and in-person as announced

1st Thursday each month, 7:30-9:15 pm, except in August and December

- PVARC HF Enthusiasts Group meetings in-person at Palos Verdes Library main branch
 - 1st Saturday in August, October, and November, 10:00 am-Noon

2nd Saturday in September, 10:00 am-Noon

 PVARC EmComm Interest Group online meetings via Webex

3rd Saturday each month, 10:00-11:00 am or 11:00-Noon (time depends on other radio events that day)

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

November 4 and 11, 2023 in Fireside Room

- Volunteer Examiner license test session at Hesse Park, November 18, 2023 (Fireside Room) 10:00 am
- PVARC 2023 Holiday Dinner or virtual After-Dinner, December 14
- Public Service Events
 - Hills Are Alive 10K/5K, August 5, along Rolling Hills Estates trails and parks

Conquer the Bridge run/walk, September 4, across Vincent Thomas Bridge at Port of Los Angeles

Non-PVARC Events of Note:

- W6TRW Swap Meet, last Saturday each month. 7:00-11:30 am. Northrop Grumman parking lots, Aviation Blvd./Marine Ave., North Redondo Beach. VE license testing in Building S-2 at 10:00 am.
- Pacificon / ARRL Pacific Division Convention, October 20-22, San Ramon Marriott, San Ramon (East Bay), CA. Website: <u>https://</u> www.pacificon.org/

Become an ARRL member: support amateur radio while increasing your learning

Consider joining the American Radio Relay League (ARRL) if not already 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, which requires that at least 51% of club members be ARRL members.

Annual ARRL membership costs \$49 and includes your choice of the printed monthly **QST** magazine or the ARRL's new **On The Air** magazine for newer hams. Both are available electronically to all ARRL members plus free online access to ARRL's two other publications, **QEX** and **National Contest Journal**.

Additionally all ARRL members can access numerous web-based materials, ARRL staff, and assistance with ham radio issues. Visit: <u>www.arrl.org/</u>. ■

Need a PVARC badge?

If you wish to order a new or replacement engraved PVARC badge please contact Gary Lopes at wa6mem@cox.net and he will make arrangements for your payment and sending your new badge. Badges cost \$13. ■

Embroidered PVARC patches still available

PVARC club patches are still available by special arrangement for \$4 each. They may be sewn onto any cap, jacket, shirt, or bag.

During our period of virtual meetings if you would like a patch contact Diana, Al6DF, ai6df@arrl.net and we'll find a way to get your patch to you. ■

AUGUST 2023

About Us...

Welcome to the Palos Verdes Amateur Radio Club, K6PV.

Founded in 1975, today our 150+ members hail from every city in Los Angeles County's South Bay region...and beyond.

Our club fosters diverse ham radio interests including public service, DXing, contesting, digital modes, and electronic experimentation.

We also teach license classes several times annually and gladly assist newer hams in understanding amateur radio technology or procedures.

Many PVARC members serve in the government-affiliated disaster amateur radio groups for the South Bay's cities and Los Angeles County. We also provide public service communication at no charge to sponsors of community and running events.

No matter where you are along your ham radio journey you are welcome as a PVARC member. ■

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	Don Putnick, NA6Z
Secretary	Ron Wagner, AC6RW
Directors	Clay Davis, AB9A
	Gary Lopes, WA6MEM
Past Vice President	Bob Sylvest, AB6SY

Past Vice President

Appointed Offices:

QRO Editor K6PV QSL Manager K6PV Trustee LAACARC Delegate **VE** Coordinator VE ARRL Liaison Net Control Operators:

Diana Feinberg, AI6DF Jeff Wolf, K6JW Mel Hughes, K6SY Jeff Wolf, K6JW Dave Scholler, KG6BPH Jerry Shaw, KI6RRD Laura Remington, KA6LJR;

Ron Wagner, AC6RW; Dale Hanks, N6NNW; Bob Sylvest, AB6SY; Malin Dollinger, KO6MD; Dave Turner, KM6LGX; Jerry Shaw, KI6RRD; Gary Lopes, WA6MEM; Clay Davis, AB9A; Rick Heaston, KG6RH; Jeff Remington, KA6JMR; Marlee Remington, KA6MJR; Derek Okada, K6DMO

Contact us:

QRO Editor: 310-544-2917, ai6df@arrl.net Email: k6pv@arrl.net Website: www.k6pv.org Postal Address: Palos Verdes Amateur Radio Club PO Box 2316 Palos Verdes Peninsula, CA 90274-8316

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

Club badges: Gary Lopes, WA6MEM, wa6mem@cox.net Club jackets or patches: Dave Scholler, KG6BPH, 310-373-8166

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Front page photo — Pt. Vicente Lighthouse reflects last rays of light after sunset on September 25, 2019. PHOTO: DIANA FEINBERG, AI6DF

PVARC CALENDAR OF EVENTS August 2023								
SUNDAY	Monday	Tuesday	Tuesday Wednesday Thursday		Friday	Saturday		
		1 K6PV analog net, 7:30 pm	2 K6PV DMR net, 7:30 pm	3 No monthly meetingdo not show up at Hesse Park	4	5 PVARC HF Enthusiasts Group, 10:00 am. PV Library ARRL 222+ MHz Contest; No. Amer.QSO Party-CW		
6 ARRL 222+ MHz Contest	7	8 K6PV analog net, 7:30 pm	9 K6PV DMR net, 7:30 pm	10	11	12		
13	14	15 K6PV analog net, 7:30 pm	16 K6PV DMR net, 7:30 pm	17	18 Intl. Lighthouse & Lightship Wknd	19 PVARC EmComm Interest Group meeting, 10 am via Webex No. American QSO Party-SSB		
20 Intl. Lighthouse & Lightship Wknd	21	22 K6PV analog net, 7:30 pm	23 K6PV DMR net, 7:30 pm	24	25	26 W6TRW Swap Meet, Northrop Grumman, N. Redondo Bch. 7:00-11:30 am		
27	28	29 K6PV analog net, 7:30 pm	30 K6PV DMR net, 7:30 pm	31	Major ham radio contests shown in red			

Two Free Amateur Radio Courses

FCC <u>"Technician"</u> course (entry level) FCC <u>"General"</u> course (2nd level) Each course is 2 sessions

<u>The sessions</u> will be on 4 and 11 November 2023 <u>Technician</u> 9:30 AM to 1:15 PM both Saturdays (bring your lunch) <u>General</u> 1:30 PM to 5:00 PM both Saturdays The FCC tests will be 10:00 AM to noon on 18 November 2023

At the start of the 4 November Technician course, a member of the Palos Verdes Amateur Radio Club will give a 30-minute presentation on how to get further involved in 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>waltfordway@juno.com</u>

I charge <u>no fee</u> for either course. Taking the FCC test is \$15. After passing the Technician test the FCC will send you an e-mail for paying its \$35 license fee and then they will post your call sign.

> Optional Material (sold at cost) Gordon West books with all the FCC test questions, \$30 for the Technician and \$25 for the General Paper copy of Walt's Power Point charts, \$29 for the Technician and \$25 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.

Patos Resources	Palos Verdes Amateur Radio Club P.O. Box 2316 Palos Verdes Peninsula, CA 90274 <u>http://www.k6pv.org</u> Fillable PDF form is downloadable from PVARC website at: http://www.n6rpv.net/n6rpvpage/ pvarc/membership_form.pdf					MEMBERSHIP FORM New Renew Date						
Last Nam	e			_ First				Spou	se			
Street Ac	ldress											
City								State	Zip			
Home Ph	one		Work _					Cell				
Email add	dress											
		(Unless other	wise noted, e	emails will	l be sent to th	e applyin	g membe	r only)				
License C	all		_	Class _		_ ~	AR	RL Memb	er?			
Other am	ateur radio gro	ups you belo	ong to								_	
Additiona	l Household an	d/or Family	Members (i	f Applica	ble):							
Last		First			Call		Class			~	ARRL?	
Last		First			Call		Class			~	ARRL?	
Last		First			Call		Class			~	ARRL?	
Membership (\$20 Individual, \$25 Family) \$ (Optional) donation to support PVARC activities \$ TOTAL \$												
Paypal to recipient PVARC90274@gmail.com Go to www.paypal.com Cash Cash Cash Check made payable to Palos Verdes Amateur Radio Club Check #												
address at top. Dues based on January 1st to December 31st year. By submitting this application/renewal you agree to the Club's constitution and by-laws, available on-line at: http://www.n6rpv.net/n6rpvpage/pvarc/constitution.pdf.												