

PAARAgraphs



The Official Newsletter of the

Palo Alto Amateur Radio Association, Inc.

Celebrating 82 years as an *active* amateur radio club—*Since 1937*



An Overview of Inter-Station Interference

Jim Brown, K9YC

This talk provides solutions for all of the ways that closely spaced stations can interfere with each on Field Day, SO2R contesting, and multi-transmitter setups for contesting, CQP county expeditions, and even DXpeditions.

Jim was first licensed in 1955 as WN8F-NI, W8FNI (General Class) in 1956, and Amateur Extra and First Class Radiotelephone in 1959. He received his BSEE at University of Cincinnati in 1964, where he was trustee of W8YX, and as a student, worked for R L Drake. He moved to Chicago in 1964, (received W9NEC) worked briefly for Motorola, taught for 5 years at DeVry, then worked in pro audio, retiring in 2009. In 2003, he received K9YC under the Vanity licensing program. In the spring of 2006, he moved to Santa Cruz. He is active in the Northern California Contest Club (NCCC) and is a contributor to the ARRL Handbook and ARRL Antenna Book.

Nov 1st, 7:00 PM, Cubberly Community Center Room H-6

Upcoming Events

Nov 1	PAARA General Meeting, 7:00 PM Cubberly Community Center, Room H-6, 4000 Middlefield Rd, Palo Alto
Dec 6	
Jan 3	
Nov 20	Board Meeting, 7:00 PM Everyone welcome! Location: Marty, W6NEV, QTH
Dec 18	
Jan 15	



President's Corner

November 2019

October was an incredible month of ham radio for me and I hope for you too. We started the month with the California QSO Party and finished it with Pacificon. In between, there was a PAARAtip to the Jeremiah O'Brien, and a trip to the San Diego Hamfest for me. I can't tell you about the Jeremiah O'Brien, since I missed it, but I'm sure if you ask around you will hear about it. By all accounts it was a great success.



Unfortunately I had to miss the California QSO Party (CQP) this year. I committed to speak at the San Diego Hamfest back in May at Visalia. At the time I don't think I realized it was CQP weekend, but I both promised to go and wanted to support the hamfest, as it's the only one in Southern California this year. More on that later. I saw a number of soapbox posts for CQP operations and felt

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Do Hams Still Matter?

Darryl Presley
KI6LDM

PAARA Board Member (Director)

Are we as hams still relevant and can we provide a critical service to our communities? Does amateur radio still matter? Given all of the latest advances in technologies that we now have with smart phones, commercial radios, broadcast alerts to various devices, etc., isn't the Amateur Radio Service old and obsolete? Isn't the Amateur Radio Service just a hobby? These questions have been raised several times in recent years. Let me answer these questions using the recent PG&E power outage in Northern California as a case study.

Pacific Gas & Electric (PG&E), which serves central and northern California, has implemented a new policy called the Public Safety Power Shutoff (PSPS). The purpose of this policy is to de-energize the PG&E electric infrastructure when it comes to dangerous conditions such as high winds and low humidity.

In the early morning hours of October 9th, PG&E implemented PSPS, which at its peak impacted over 2 million people across 32 counties in the state of California. A primary goal of this PSPS strategy was to prevent high voltage transmission lines from sparking wildfires during a high wind and red-flag warning fire condition as predicted by the National Weather Service. Compared to previous power shutoffs in similar conditions that were more localized, this was a "nuclear option" that shut down several main high-voltage transmission lines affecting multiple counties. This response was based on how the Camp Fire was started due to high voltage transmission lines igniting that fire. The Camp Fire destroyed the entire town of Paradise.

The City of Cupertino, along with other nearby cities and the County of Santa Clara, activated their Office of Emergency Services (OES) prior to the start of the planned power shutoff. According to the PSPS map provided by PG&E, East San Jose, parts of West San Jose, and

areas west of Foothill Blvd. in Cupertino would be impacted. The Cupertino Director of the Office of Emergency Services requested that the volunteers of Cupertino's Citizens Corp be activated. Cupertino Amateur Radio Emergency Services (CARES) was officially activated at noon on Tuesday, October 8th. In addition to CARES, CERT and city employees reported to the Monta Vista Fire Station, where there is an ARK (a staging area that also contains emergency supplies). Cupertino has several such ARKs located throughout the city.

The mission objective for CARES, CERT, and the city employees was to canvas the impacted neighborhoods in Cupertino, inform residents of the planned PSPS event, and hand out flyers with information about advance preparation. CARES provided communications



CARES ComVan

support and deployed its communications van (ComVan 469) for this effort. The canvassing activity took place Tuesday afternoon, all day Wednesday, and Thursday morning -- after the PSPS power shutoff was implemented. These volunteers visited approximately 3,300 homes.

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ComVan Interior

On Thursday, during the power outage, several issues were discovered. The teams canvassing the neighborhoods reported that some homes only had cell phones and no other service such as VoIP or a simple copper-based POTS landline. Cell service was barely available at the Monta Vista Fire Station (maybe one bar of signal strength) and non-existent in the neighborhoods. This was true for all cellular carriers. Those who had VoIP and cordless phones would find them useless because the base stations for cordless phones and internet/Wi-Fi routers require power. Per a presentation to PAARA given by Allan Thompson about the Camp Fire, phone companies are no longer installing copper POTS landlines to new homes and are no longer providing new services on existing ones.

Other issues involved residents who depended on medical equipment that requires power. Some had battery backup for a period of time but, if the outage were to last more than a day, this could become a life-critical issue. In addition, medicine that required refrigeration would be lost in a prolonged power outage.

Most residents will have the challenge of keeping frozen and cold food items from spoiling during a prolonged power outage lasting more than 24 hours. This was also brought up as a major concern by residents during the canvassing activity. Many grocery stores would be closed during the outage so it would not be

possible to purchase food.

Now, back to our question: Do hams still matter? In short, yes. Here is my experience working with CARES during this power outage event. On Thursday, October 10, several hours after PG&E had implemented the PSPS, it was determined that several cell sites were no longer providing service; hence, no cell service was available in several areas. The city EOC asked CARES if we could stay activated until 1800 hours (6 pm) to provide an "alternate -911" capability. The flyer handed out during the canvassing said that, if residents could not call 911 in an emergency, they could come to the Monta Vista ARK and we would pass their 911 request to the EOC by radio. Our mission was now changed -- CARES now served as a critical communication link between residents and the EOC for 911 emergencies.

I had set up a portable station with my ICom IC-7000 as a base station at the ARK. We used the W6TDM Cupertino repeater in cross band repeat mode between 2m and 70cm. The Cupertino EOC was operating on 70cm. We had established a net for handling both canvassing activities and any emergency traffic. While we did have many concerned residents, who might need emergency assistance if the outage persisted, we did not actually have any emergency situations. We were prepared to assist should the need arise.

Fortunately, at approximately 1300 hours power was being restored and, by 1400 hours, nearly all neighborhoods impacted in Cupertino and parts of San Jose had their power restored. At 1534 hours, demobilization was ordered by the EOC, and CARES was officially deactivated by 1600 hours.

The Cupertino City manager, the Director of OES, and city officials were impressed by how organized we were in our deployment and how professional we were in the execution of the mission. They saw the value of CARES, how the amateur radio service played a primary "front and center" role in the mission, and how

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their investment in the ComVan paid out as a force multiplier.

The PG&E PSPS exposed several things about our current infrastructure. Our lives are very dependent on electrical power. You will need to find some place to charge your cell phone and even if you do, there is no guarantee of cell service. If additional important alerts were sent to cell phones, they would not have been received.

All-electric vehicles won't have a way of charging unless they can do so from an alternate power source such as solar. Most homes that have solar power do not have any form of battery backup. When there is a power outage, they too are experiencing the outage. Medicine that requires refrigeration can be lost when there is no power to run the refrigerator. Those who are dependent on life-critical medical equipment have an even bigger challenge. Many of these devices have backup power with a capacity of only a few hours, not days.

During the PSPS event, CARES demonstrated that, with proper training, hams can deploy almost anywhere, can be flexible, and can provide critical communication where needed.

Craig Fugate, a former FEMA Administrator, spoke at an FCC forum in May, 2011. Here is a quote from his speech at that forum:

"We get so sophisticated and we have gotten so used to the reliability and resilience in our wireless and wired and our broadcast industry and all of our public safety communications, that we can never fathom that they'll fail. They do. They have. They will. I think a strong Amateur Radio community [needs to be] plugged into these plans. Yes, most of the time they're going be bored, because a lot of the time, there's not a lot they're going to be doing that other people aren't doing with Twitter and Facebook and everything else. But when you need Amateur Radio, you re-

ally need them.

See:

<http://www.arrl.org/news/fema-administrator-calls-amateur-radio-the-last-line-of-defense>

While these comments were made eight years ago, it appears that YES, hams still do matter!!

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that pang of missing a really fun event that I have fond memories of. My most memorable ones are operating with Rick, N6DQ, now a Silent Key, and Joanna, K6YL. The three of us started doing CQP together maybe around 2011. I don't have any pictures from that year, sadly, so I'm not sure. From then until 2015 we operated with a number of different team members, first in Trinity County and then finally in Alpine County. That final year Rick, who always put on a 150% effort for CQP, outdid himself for the 50th running of CQP by having a multi-multi operation on the same site as a single-op operation. The single-op was me, trying to go for the YL award. It was one of my most cherished ham radio experiences. I was honored to be supported in this way by both Rick and Joanna. That year I took the single-op county expedition in addition to the YL award. It was spectacular. And the multi-multi was top tier too. Over the years we set several records in Trinity and Alpine. We also perfected multi-station operations - techniques that we now use for Field Day and Pacificon at PAARA. I was reminded of all this as I spent CQP this year at the ARRL booth in San Diego. It was a worthy cause, but I still had wistful dreams of CQPs past.

In San Diego I had some time after my talk to sit with ARRL Southwestern Division Director, Dick Norton, N6AA, and chat about League matters and other things. It was great to catch up with Dick. I also spent time talking to the San Diego Section Manager, Dave, N8KBC. It was great to understand issues im-

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portant to hams in Southern California and get their perspectives on how to keep our hobby vibrant into the future. The hamfest itself is still small, but it's growing. As I mentioned earlier, it's the only one in SoCal this year. That is apparently because hotels are getting too expensive to be viable. The two places I've been in the past, Torrance and Santa Barbara, are just too expensive to be worth it. I suggested maybe looking at one of the casinos a bit out of town. We will see if that works out. Regardless, please give the San Diego Hamfest a visit if you are in the area. It's a great chance to get to know our neighbors to the south and support ham radio.

Pacificon is the ARRL Pacific Division Convention and the premier ham radio event on the West Coast. I hope you had a chance to visit. I had a great time helping out and seeing what was on offer there. From great talks to vendors to friends from all over, it was every bit the event that was promised. Misa Siemons, KJ6BUE, chaired the committee that made it all happen. If you get a chance, please thank her or anyone else who made Pacificon what it is. They did an absolutely amazing job. And PAARA, of course, was there again with the W1AW/6 special event station. Thousands of contacts were made. I visited the station at around 9pm on Saturday and it was a party! The radios were humming and lots of people were crowding around in excited conversation. Big thanks to Mikko, AB6RF, and the Pacificon SES team! I haven't heard about attendance yet, but it seemed very busy.

That's it for this month. As many of you know, I plan to retire as PAARA president at the end of this year. Next month will be my farewell column in this space. I'm not sure what it will be yet, but it will be something a little different. 73 ES GUD DX DE K6WX

October 16, 2019, Board Meeting

The meeting was held at Marty's home QTH, commencing at 7:20 PM on October 16, 2019. In attendance were Kristen McIntyre, K6WX, (Pres), Marty Wayne, W6NEV (VP), Jim Thielemann, K6SV (Secretary/Membership), Darryl Presley, KI6LDM (Dir), Joel Wilhite, KD6W (Dir & Technical Coordinator), and visitors Shrikumar (Shri) Hariharasubrahmanian, KA6Q and Mieko Sannala, AB6RF. A quorum was present.

Kristen, (K6WX), opened with a discussion on Pacificon and PAARA's participation in hosting the special event station. She reminded the board that PAARA was positively mentioned in an internal ARRL memo last year about our participation at Pacificon. She reminded attendees to wear their PAARA badges.

Kristen mentioned her reserve of stories is still almost nonexistent, thus there is an urgent need for more. Please, if you've committed to a story but not submitted it (there are several people out there fitting this category) put pen to paper or fingers on the keyboard and let your creative juices flow! Do you have any projects, Field Day experiences, technical articles, hints n kinks, DX contacts, or experiences setting up your station or antenna, on the air experiences that might be of interest? If you have not previously drafted that story or have a new story, now is the time to get a byline of your own in PAARAgaphs and get that story submitted to Kristen for publication. "Remember it is 'homegrown' stories that make PAARAgaphs great", she said.

Vice President's Report: Marty, W6NEV announced that Jim Brown, K9YC, will provide a talk entitled "An Overview of Inter-station Interference". Marty also reported having the speakers for the rest of this year and a few for next year. He's in the hunt to fill next year, so please reach out to Marty if you have any suggestions for someone who can provide an interesting presentation at an upcoming meeting.

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Secretary's report: Jim, K6SV, reported the membership now stands at 200. Four new members joined and one rejoined at the October meeting. He reminds everyone that it's time to renew your membership for 2020. Look at your PAARAgaphs mailing label to see when your membership expires. You can always renew through our web site via PayPal or at a meeting.

Ron Chester, W6AZ, wasn't able to attend but mentioned the finances are in fine shape.

Under Old Business,

Marty, W6NEV, reported those who attended the last field trip to the SS Jeremiah O'Brien Liberty Ship had a great time. There was a discussion on possibilities for the next field trip. Everyone agreed that having only one field trip a year was a lot more manageable owing to all the other activities.

The board had a short discussion regarding finding a new Raffle coordinator. No one has stepped up yet. Please let a board member know if you have any questions about the volunteer opportunity or wish to take on this important position. Should a volunteer not be found before the January meeting, there will not be a raffle at the January meeting.

Mikko Sannala, AB6RF, the special station coordinator for the W1AW/6 station at Pacificon, updated the board on the status of the station. He indicated having most volunteer positions covered but was still looking for a few more. He reminded us of the online signup list so you could sign up for operating time slots. October 18th isn't very far away so reserve your operating slot now for the best choice.

Clark Martin, KK6ISP, (ASVARO Representative and election chair), wasn't able to attend the meeting. He did report via email that he's still looking for someone to fill the President and Treasure slots. He hopes to find a candidate for each position before the November meeting closes as that's the cutoff date for nominations. An asset for someone seeking

the Treasurer position is knowledge of Quick-En, which is the program currently being used to keep the books. Please let Clark know if you're interested in either position.

The other items on the agenda that haven't been worked on very much or weren't as critical will be topics for next month

Under New Business:

Kristen, K6WX, commented that the 9 AM talk net has a smaller check-in than in past years. She also mentioned a couple of the net control operators are running into time constraints. This net has proven very helpful over the years in attracting new members to PAARA. Please remember to check-in if you have a chance. Let Kristen know if you have an interest in being net control.

Shrikumar (Shri), KA6Q (KFS interface) has embraced the project of working with the City of Palo Alto (PA) to save the old KFS Historic radio station transmission site next to Bayshore freeway south of Oregon Expressway. Doug, KG6LWE, Gerry N6NV, and Shri met with two members of the PA Parks and recreation department to see the site and talk about the status of the property. Shri provided an update to the board on his meeting with the City. A lengthy discussion followed. There's a lot of work to be done interfacing with the City to even stand a chance of saving the site and antennas. Contact Shri if you have any input or can assist.

The board meeting was adjourned at 8:50 PM.

Jim Thielemann, K6SV
 Secretary/membership

Please join me in welcoming new members:

David Creemer	W0DAV,
Srinath Sudarsanam	KN6EKQ,
Hriyai Srinath	KM6UZW,
Dallavi Vittal	KM6UZZ

And returning member:

Alessio Sangalli	KE6JDE
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Raffle Winners

Front to Back, Left to Right

- 7th prize Jim, K6SV, Universal Wire Bale Stand
- 1st prize Walt, K6WGY, Arrow II, Handheld Dual-Band Yagi Antenna
- 6th prize Truman, N6TRU, Coax Wrap
- 3rd prize Greg, KE7DO, Lido Adjustable Cup Holder Mount
- 4th prize John, KM6SKA, MFJ ClearTone Speaker
- 5th prize Clark, KK6ISP, ARRL Log Book
- 2nd prize Mike, N6WGY, Daiwa 2 Position Coax Switch

Palo Alto Amateur Radio Association, Inc.

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Officers

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Director ('19)	Larry Rebarchik N6DB n6db@arrl.net	650 465-8210
Director ('19)	Darryl Presley, K16LDM ki6ldm@arrl.net	650 255-2454

Appointed Positions

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Database	Jim Thielemann, K6SV thielem@pacbell.net	408-839-6815
Chaplain	Rick Melrose K6RDM K6RDM@yahoo.com	408-341-9070
Public Affairs	<i>Position Vacant</i>	
Station Trustee W6OTX, K6YQT, W6ARA....	Gerry Tucker, N6NV	
Station Trustee K6OTA...	Ron Chester, W6AZ	
Property Manager	Gerry Tucker, N6NV	
Asst. to the Treasurer....	Bob Korte, KD6KYT bob@rgktechsales.com	408 396 4745
Badge Coordinator	Doug Teter, KG6LWE dteter@wvci.com	650-367-6200
Historian Position	<i>Position Vacant</i>	
Raffle Coordinator	Jim Rice, K6AK	650-851-2274
Field Day Coordinator ...	Doug Teter, KG6LWE	650-367-6200
ASVARO Rep	Clark Martin, KK6ISP kk6isp@comcast.net	
Webmaster	John Miller K6MM webaron@gmail.com	
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Technical Tips	Vic Black, AB6SO ab6so@smrn.com	650-366 0636

VE Exams

Redwood City Main Library, Community Conference Room, 4th Saturday 10:30 am each month and De Anza Park, Sunnyvale, 2nd Saturday 10:30 am each month except November and December. See website for details and exceptions: <http://amateur-radio.org> or Contact Al, WB6IMX@att.net

Electronics Flea Market

Sponsorship by A.S.V.A.R.O. — Association of Silicon Valley Amateur Radio Organizations
 Second Saturday of month, March-September, 6am-12 noon
 Contact: <http://www.electronicfleamarket.com/>

PAARA — Palo Alto Amateur Radio Association

Meets 1st Friday 7:00pm each month at Room H-6, Cubberley Community Center; Net 145.230 - PL 100Hz Mondays at 8:30. See our website at <http://www.paara.org> for more information or contact: Joel Wilhite KD6W, kd6w@arrl.net, 650-325-8239

FARS — Foothills Amateur Radio Society

Meets 4th Friday each month at 7:30pm
 Contact: <http://www.fars.k6ya.org>

NCDXC — Northern California DX Club

Meets 3rd Thursday 7:30pm each month,
 Repeater for member info 147.360, Thursday 8:00PM
 Contact: <http://ncdxc.org> or Mike Gavin W6WZ, (650) 851 8699

QCWA Chapter 11

Northern California Quarter Century Wireless Association

Meets third Wednesday monthly at Harry's Hofbrau in Redwood City @ 11:30 AM.
 Guests are welcome. Saturday morning net on 146.850 MHz, PL 114.8

50 MHz & Up Group

Meets 1st Thursday each month at 7pm in the Summit Room at the Sunnyvale Sports Basement, 1177 Kern Ave, Sunnyvale
 Contact: <http://50MhzandUp.org>

SPECS

Southern Peninsula Emergency Communication System

Meets each Monday 8:00pm on Net 145.27, 440.80 MHz
 Contact: <http://specsnet.org> or Tom Cascone, KF6LWZ, 650-688-0441

SCARES

South County Amateur Radio Emergency Service

Meets 3rd Thursday 7:30pm each month, Belmont EOC, Belmont City Hall, One Twin Pines Lane, Belmont CA 94002. Net is on 146.445 [PL 114.8] & 444.50 (PL-100) 7:30 Monday evenings. Contact: President Gary D. Aden, K6GDA 650-743-1265 (D), 650- 595-5590 (N)
 Web: <http://k6mpn.org> E-mail: pres@k6mpn.org

SCCARA

Santa Clara County Amateur Radio Association

Operates W6UU & W6UU/R, repeater 146.985-pl
 Nets: 2m, 7:30pm Mon; 70cm, 10M (28.385) 8PM Thur.
 Meets 2nd Mon each month @ 7:30 PM.
 ARRL/VEC license testing contact 408-507-4698

SVECS — Silicon Valley Emergency Communications

Operates AA6BT repeater (146.115 MHz+)
 contact: <http://www.svecs.net> or Lou Stierer WA6QYS 408 241 7999

TEARS — The Elmer Amateur Radio Society

Dedicated to operational training, knowledge building & FCC exam testing.
 KV6R repeater under construction.
 Contact: AA6T@ARRL.NET
 Most members are Extra Class or VE's. See QRZ dot com/kv6r for class info

WVARA — West Valley Amateur Radio Association

W6PIY six-meter repeater on 52.58MHz. Normally, six-meters is linked with 147 and 223, while 441 and 1286 repeaters are linked.
 VHF: 52.58 (-500) 151.4 ctcss UHF:
 147.39 (+600) 151.4 ctcss 441.35 (+5.0) 88.5 ctcss
 223.96 (+1.6) 156.7 ctcss 1286.20 (-12m) 100.0 ctcss
 Meetings are 2nd Wednesday of every month except July, August and December.
 Contact: <http://wvara.org>, Bill Ashby N6FFC, 408-267-3118, president@wvara.org

American Red Cross, Santa Clara Valley Chapter

Contact: <http://santaclaravalley.redcross.org> or Scott Hensley KB6UOO, (408) 967 7924
shensley@Novell.com

(Please send changes to PAARAgaphs editor)

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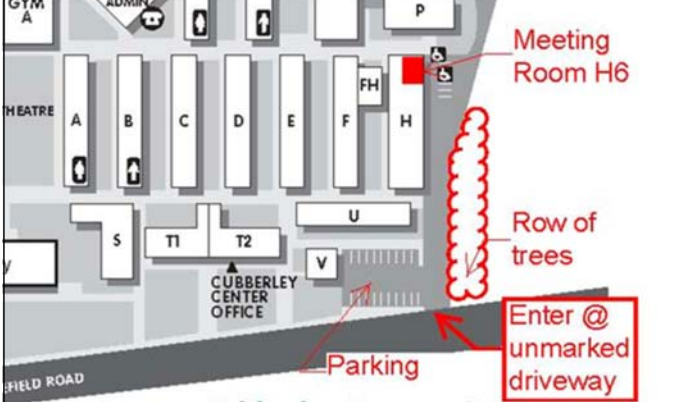
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www.jameco.com



Cubberley Community Center
 4000 Middlefield Road, Palo Alto, CA 94303
 650/329.2418
 650/856.8756 fax
 www.cityofpaloalto.org

PAARA Weekly Radio Net

Info and Swap Session
 every Monday evening at 8:30pm
 on the N6NFI 145.230 MHz repeater

Week	Control Operator
1 st	Joel KD6W
2 nd	Doug - KG6LWE
3 rd	Jack - W1VSL
4 th	Rob - KC6TYD
5 th	Rob - KC6TYD

If you're interested in trying out at Net Control,
 Contact Doug, KG6LWE. It's good practice,

**Meeting Location — Middlefield Road
 between San Antonio and Charleston in Palo
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Information
 www.tradewindsaviation.com

Opening hours
 Monday-Friday: 8 AM – 7 PM; Saturday-Sunday: 8 AM – 6 PM



Palo Alto Amateur Radio Association
P.O. Box 911, Menlo Park
California 94026-0911

Club meetings are on the first Friday of each month,
 7:00pm at the Room H-6, Cubberley Community Center.

Radio NET & Swap Session every Monday evening, at
 8:30pm, on the 145.230 –600 MHz repeater, PL 100Hz.

Membership in PAARA is \$25.00 per calendar year,
 which includes one subscription to PAARAgaphs
 \$6 for each additional family member (no newsletter).

Make payment to the
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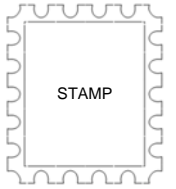
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PAARAgaphs — November 2019

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