

# PAARAgraphs



The Official Newsletter of the

**Palo Alto Amateur Radio Association, Inc.**Celebrating 84 years as an *active* amateur radio club—*Since 1937*

## My Adventure into Ham Radio

**STEPHEN GALCHUTT, WG0AT**

My adventure into Ham Radio started in the mid 50s with a one transistor crystal set I got for my 9th birthday. I roamed the neighborhoods clipping on to fences, down spouts and anything metal to see what I could pull in on that tiny earphone. I was enamored with radio waves. (Licensed as WV6HXL '58) The magic that happens when out on the trail miles from no where and able to make contact using a simple wire in a tree and a tiny CW rig you've built yourself is what really does it for me still today! It's that same thrill I got from having my very 'First QSO' aka hearing my call sign coming back to me from the other station. SOTA (Summits on The Air) is my current passion!

**This meeting will be conducted with Zoom**

Time: June 4, 2021 07:00 PM Pacific Time

<https://us02web.zoom.us/j/87316715482>

Login ID: First name and Call Sign

Meeting ID: 873 1671 5482

## Upcoming Events

• June 4	PAARA General Meeting, 7:00 PM
• July 2	Zoom Meeting
• Aug 6	
• June 16	Board Meeting, 7:00 PM.
• July 21	Everyone welcome! Zoom Meeting,
• Aug 18	eMail President for details!
• June	Electronic Flea Market Cancelled

## President's Corner

June 2021

Well, it finally happened. We don't have a story from anyone for this month! Seems no one could put pen to paper and submit a story for PAARAgraphs. I hope someone will find time to draft something for the July issue, PLEASE! This is a COVID-free activity!



If you read the board minutes, you'll notice that, sadly, the board voted not to host a PAARA sponsored Field Day event on June 26th & 27th. We conducted several surveys of the membership to see what the interest level was amongst the members. Not only didn't we get many responders but there just wasn't enough interest in going to San Martin for the event as the City of Menlo Park isn't going to consider opening up Bidwell Bayfront park for such activ-

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ities until July. I encourage everyone to get on the air that weekend and participate in whatever way you can. Please remember if you do work the event and submit your log, to list the “Palo Alto Amateur Radio Association” as your club so the club can get the points. Don’t use PAARA as the league will not recognize us. Submitting your log is easy and all done online.

A question for you to ponder, do you recognize what’s in this Figure 1 and where it is? I’ll give you a hint, it’s not in the US but is an important part of WWII. I’ll let you think about it before giving you the answer.

I hope some of you participated in the virtual International DX Convention on

May 15 & 16. I see on their website there were 1,624 registrants for the event. Unfortunately, though registered, I ended up out of town that weekend and not able to attend. That’s unfortunate as I was looking forward to participating. Oh well, maybe next year everyone will be able to attend in person, at least we can hope so.

How about the Dayton Hamvention, did you attend that? I managed to catch the Contest University on 5/20/21. It was rather interesting. I must admit, I wasn’t sure what I’d learn but the time ended up being well spent. Morning topics included “Cloud Contesting”, “Preparing your station”, “Selecting a contest category”, and “Youth participation”. The afternoon sessions I found more interesting. Topics included “Contesting in Russia”, “There’s Nothing Magic About Propagation”, and “Transceiver Performance for the contest and DXer”. As Rob Sherwood, NC0B, gave us a wonderful presentation on radio performance at one of our meetings,



Fig. 1 — An important part of WWII

the only interesting parts of his talk were a couple of new radios, like the IC705, which he’s reviewed since seeing us. That left two distinctly different talks to take my top honors.

The talk given by Vladimir (Willy) Umanets, UA9BA provided a very interesting look into how he’s been a successful contester since the ’70s. One interesting aspect of the Kazakhstan

superstation, UP2L, he’s assisted in designing the configuration of the site as well as designing some of the antennas they use. His design is one where “one” antenna is effectively two as it’s constructed from two 4 element Yagi antennas that share a common reflector and boom with each Yagi pointing in

opposite directions. He developed them due to a large number of contacts being either east or west of their location. He reported this antenna configuration provides about 36db of front-to-back isolation.

I’m not quite sure how many 140’ towers there are at the UP2L superstation but it’s safe to say there are at least 7 and maybe more. Each has 1~3 fixed antennas on it with a rotating antenna on top. As one might imagine, none of them are what you’d call small. An example is their rotating 40m 5 element Yagi which has a 90 foot boom! They also have a large number of wire antennas for the top bands.

You can find the slide deck from his presentation at:

<https://www.contestuniversity.com/wp-content/uploads/2021/05/Contesting-from-Russia-CTU-2021-UA9BA.pdf>

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You can watch the video of Willy's presentation here:

<https://www.youtube.com/watch?v=q-esob7BPtc>

Unfortunately, the video is of the entire 8+ hours of the conference. To see Willy's part, forward to the 4:39 mark. I found the last question Willy was asked quite interesting though not ham-related. He was asked to comment about his experience with the 2/15/13 Chelyabinsk meteor. His QTH isn't that far from where it entered the earth's atmosphere. I found his experience to be an interesting story. More information can be found at:

[https://en.wikipedia.org/wiki/Chelyabinsk\\_meteor](https://en.wikipedia.org/wiki/Chelyabinsk_meteor)

Likely the most interesting talk of the day was entitled "There is nothing magic about propagation, in search of MUF isolines" by José Nunes, CT1BOH. Now I'm sure many of you have this whole topic wrapped around your finger, but I don't. Additionally, his talk focused on real-time accurate predictions using information collected from the millions of real-time FT8 contacts. His approach provides real-time data on the current conditions and not predicting what they might be. He provides insight on how to interpret the information provided on these two sites:

<https://prop.kc2g.com/>

and:

<https://pskreporter.info/pskmap.html>

PSK reporter can be configured to show different information depending on what filters you set up at the top of the page.

His slide deck can be found at:

<https://www.contestuniversity.com/wp-content/uploads/2021/05/There-is-Nothing-Magic-About-Propagation-CTU-2021-CT1BOH.pdf>

The video of his presentation can be found at the same YouTube link I previously provided with his talk starting at 5:39. I think even if you have this whole propagation thing well under your belt, you might learn something new by at least thumbing through the 60-page slide deck.

Have you registered for the largest Hamvention in Europe, the Messe Friedrichshafen International Amateur Radio Exhibition on June 24th~26th? As with most shows, it will be a virtual event this year thus saving you the cost of traveling to Germany. Fortunately for us, they have an English site found here:

<https://www.hamradio-friedrichshafen.com/>

I know 2 of our members that made the trip to Germany a few years back to attend and fully enjoyed it. Of course, we'll not be able to enjoy German beer from the tap as they did. Though a virtual event isn't quite the same as going to the show, at least you can get a taste of what it's like.

If you've been to the Pacificon site lately, you'd notice MDARC is planning for an in-person October 15th~17th event. The only wild card is what the States guidelines will be for holding such an event. Once released in mid-June things should be clearer than they are now. That's good news in that it may end up being one of the first IRL Hamvention's around. It also means we need to start planning to host the special event station as we have done for the last several years. Mikko, AB6RF, is our station caption and coordinator who will need lots of our assistance in planning, assembling, overseeing the operation of, and disassembling the station. Please reach out to Mikko and offer your assistance so we can make this truly a special event.

Least I forget, did you come up with the answer to the question I posed at the top of this column? What did you come up with, smokestacks of some refinery making important parts for WWII? I mentioned it wasn't in the US but that leaves a rather large geographical area in which it could be located. Did you come up with anything?

Ok, enough of that, let's just jump into the answer. They are part of the Urashima Repatriation Center Pace Museum located in Sasebo, Nagasaki prefecture, Japan. More specifically, they are the 446' ferroconcrete antenna towers of the Hario Transmission Station. The towers

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are at the corners of a 984' equilateral triangle that took 4 years to build starting in 1918. Outside of being the sole remaining short wave radio station in Japan, there were 3 major stations at one time, they have a very important spot in the history of WWII. What was so important about them? Reportedly, they relayed the cipher message to the Japanese fleet that initiated the attack on Pearl Harbor which started the Pacific War.

This Google view (Fig.2) shows the relationship between the three towers. The antenna cable was strung between the three towers. Each section between the towers had a feedline down to the radio station in the center creating three rather large dipole antennas. Thus, they could steer the direction of transmission by selecting which section of antenna wire the signal was radiating from. Their story can be found here:

<https://www.wayfarerdaves.com/?p=1787>

Should you happen to be in the area, you can tour the facility;

[https://www.tripadvisor.com/Attraction\\_Review-g298217-d8543693-Reviews-Hario\\_Radio\\_Tower-Sasebo\\_Nagasaki\\_Prefecture\\_Kyushu.html](https://www.tripadvisor.com/Attraction_Review-g298217-d8543693-Reviews-Hario_Radio_Tower-Sasebo_Nagasaki_Prefecture_Kyushu.html)

I know this is a rather long column this month but as no one submitted a story, I wanted to try and have something of general interest in this issue. PLEASE, let's get some stories of something for the next issue. Maybe your FD experience, new radio, or other equipment you added to your shack. You might want to include a short equipment review. Or maybe something on an interesting seminar you attended. I'll bet there's something you could pen that would be of interest to others.

Thanks go to Ric, N6AJS, for sneaking a couple of short stories in at the last minute.

73, Jim K6SV

Get on the air to keep the airwaves alive!



Fig. 2 — Hario Transmission Station. Antenna Towers

### May 2021 Board Meeting Minutes

The May board meeting was held via videoconference. Present were: President Jim Thielemann, K6SV; Vice President Rob Fenn, KC6TYD; Secretary Ric Hulett, N6AJS; Treasurer Bob Korte KD6KYT; Directors Walt Gyger K6WGY, Doug Teter KG6LWE, Darryl Presley KI6LDM, and Joel Wilhite, KD6W.

A quorum was present. The meeting was called to order at 7:13 pm

#### President's Report

Due to the changes in state regulations and the opening of the state in June, Pacificon is a "GO" for October 15 to 17, 2021. Pending regulation changes, registration will begin on June 16. Mikko Sannala AB6RF has volunteered to organize the W1AW/6 special event station. PAARA members are encouraged to help out in any way they can. PAARA provides an important activity to the Pacificon Hamvention. Among other items, we will need to service the club's KT34 antenna.

We'll learn more soon about requirement for

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vaccination, and other things, but we need to start planning now.

### Secretary's Report

Our club membership is at 156. A dozen of our members have elected to receive their PAAR-Agraphs in PDF format, by e-mail. Contact Ric, [N6AJS@arrl.net](mailto:N6AJS@arrl.net) if you would like this option.

Congratulations to Clyde Pendleton, WW6PC on earning the Amateur Extra license!

### Treasurer's Report

The printshop invoice has been paid, and there have been minimal other expenses.

### VP / Program Chair Report

Next month's guest speaker is Steve Galchutt, WG0AT, "The goat guy". He's from Monument, Colorado and operates field QRP, while hiking with his goats.

When we go face-to-face back at Cubberley, we need to verify that we have high speed internet available so that we can continue to have remote guest speakers, as well as remote attendance.

### Old Business

The monthly meeting breakout sessions are a success. We will continue the breakout rooms in PAARA meetings.

We have no member articles for this month's PAARAgaphs! Please consider any ham-related topic of interest to you, and send in an article, even a short one!

The board considered the logistics of a Field Day operation at the end of June, in only 6 weeks.

After discussion, the board decided that there will not be a PAARA field day operation this year. Members are encouraged to operate in the activity, either from home or at a temporary site, and list "Palo Alto Amateur Radio Association" in their entry.

**Education Committee**, Rob, KC6TYD Rob met with Darryl KI6LDM and Rachel KK6DAC. Both were able to provide direction. Our planned ori-

entation is more towards physical activities. Rob will set a list of topics. The first event will be focused on basics: How to get on the air, etc.

The South County ARES (SCARES) has some EMCOM (Emergency Communications) related training with activities that incidentally teach a key skill.

Rob will tweak this to make a new operators template.

Next action item is to create a list of educational activities.

Doug Teter and Joel Wilhite have visited Gerry Tucker's remote site. There are some club-owned tower sections there. They have the action item to generate a list. We will offer these items to club members.

We will be videoconferencing the next club meeting on June 4th.

### New Business

ARRL affiliated club status: The Secretary has updated our information with ARRL.

The meeting was adjourned at 8:17pm

Respectfully submitted,

Ric Hulett N6AJS  
PAARA Secretary

## PAARA Puzzle

There is a puzzle on Page 7 that was created by one of our members, Bob Korte. See if you can find all the items spelled out in the maze of letters. You may circle horizontal, vertical, 45 degree lines and maybe even backwards or upside down spellings.

The solution will be published in a future PAARAgaph.

## An Antenna Tuning Rule of Thumb

*Ric Hulett, N6AJS*

Spring has arrived in the bay area, and it's time to hang up some new wire antennas behind the house

Most of us have done this, cutting a half-wave dipole to the approximate length (long, if we're lucky!), and hanging it between the trees. A quick SWR sweep shows that the resonant frequency isn't where it needs to be. Need to shorten the dipole – but by how much?

Here's a rule of thumb I use to estimate the amount to trim:

$$\text{Trim length} = \Delta F * 3 / F^2$$

where: Trim Length is in inches

DeltaF is in Kilohertz

F is in Megahertz

It's easy enough to do in your head, with a bit of practice.

Here is an example using a 40-meter dipole

Target Frequency = 7250. Measured resonant frequency is 7150 – 100KHz too low!

$$T = 3 * \Delta F / F^2$$

Trim length is 3 times 100 divided by 49. Since this is an approximation, we can divide by 50 instead of 49, giving a trim length of  $300/50 = 6$  inches on each side of the half-wave dipole. It's approximate, but works pretty well.

Here is another example, for an 80-meter antenna.

Target resonant frequency is 3.550 MHz. Measured resonance is 3800 – 250 KHz too high.

We calculate  $F^2$  again. Say, 3.5 times 3.5 = 12.25 (approximately 12).

$T = 3 * 250 / 12 = 62$  inches, close enough. This formula is imperfect, so if you need to make a major adjustment like this, you should adjust so that your next trial is a few inches long: planning to make one more adjustment.

Give this a try, the next time you are tuning your dipole!

## Ham Radio Outlet Is Moving

The rumors are true. HRO is moving the Oakland store to Sacramento. Your reporter spoke to HRO founder Robert Ferrero, W6KR to discuss the move.

Robert started Ham Radio Outlet as a single store in Burlingame, in 1971. Over the last fifty years, they have grown to a total of a dozen stores: Anaheim and San Diego in California, Atlanta, Denver, Portland, Phoenix, Milwaukee, Plano Texas, New Castle Delaware, Salem New Hampshire, Woodbridge Virginia, and of course the new, larger store in Sacramento.

The Oakland store closing is estimated for May 27, and the new store will should open mid-June.

Mail order and shipping will not be interrupted. Shipping for most items from Sacramento to the Bay Area should be one day. Robert told me, "We're still here for the ham community."

The new store, located at 4813 Auburn Boulevard in Sacramento, will encompass 15,000 square feet – significantly larger than the Oakland store. It will be big enough to have the HF base station radios, the HF mobiles and VHF radios all on display for hams to try.

HRO wouldn't leave the Bay Area, but the city of Oakland is taking over their building, and they could not pay Bay Area rents and keep the prices that the ham community expects.

Ham Radio Outlet has supported PAARA with a full-page ad in PAARAgaphs for many years. Robert said "Clubs are important, like radio stores. Ham radio is a complex hobby, and we need to have places for people to come and find out about Ham Radio, ask questions, and learn about the many facets of our hobby".

HRO will be announcing another store opening soon – but not in the Bay Area!

# PAARA PUZZLE

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D	B	W	R	H	I	S	T	O	R	Y	M	H	O	Y
E	I	G	H	T	Y	F	O	U	R	Y	R	S	Q	N
T	S	C	I	T	E	N	O	H	P	R	Q	S	O	R
A	S	F	L	E	A	M	A	R	K	E	T	P	K	Y
I	E	E	A	L	D	Q	Q	N	B	T	Y	I	T	C
L	K	W	F	U	E	N	S	D	G	A	L	R	S	E
I	S	I	W	A	C	W	M	O	D	E	A	T	E	V
F	Q	H	T	T	R	B	D	D	P	P	T	D	I	A
F	T	N	O	H	S	A	L	I	A	E	I	L	L	W
A	P	W	H	S	J	E	A	N	B	R	G	E	D	O
L	E	N	C	T	I	D	N	P	Z	R	I	I	N	R
R	Q	S	L	F	Q	E	I	X	X	M	D	F	E	C
R	Q	Y	I	K	T	Y	F	I	I	D	G	F	I	I
A	X	G	K	N	I	L	P	A	R	A	A	P	R	M
L	B	P	A	A	R	A	G	R	A	P	H	S	F	H

ANTENNA PARTY

FLEA MARKET

QRM

ARRL AFFILIATED

FRIENDLIEST

QSL

BIDWELL

HISTORY

QST

CW MODE

MICROWAVE

QTH

DIGITAL

PAARA

SSB

DMR REPEATER

PAARAFEST

TOWER

EIGHTY FOUR YRS

PAARAGRAPHS

XYL

FIELD DAY

PAARAPLINK

FIELD TRIPS

PHONETICS

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	bob@rgktechsales.com	

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	ki6ldm@arrl.net	

### Appointed Positions

Membership .....	Vic Black, AB6SO	650-366 0636
	ab6so@smrn.com	
Database .....	Ric Hulett, N6AJS	408-332-4593
	energyconserved@sbcglobal.net	
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Station Trustee W6OTX, W6ARA....	Gerry Tucker, N6NV	
Station Trustee K6YQT...	Doug Teter, KG6LWE	650-367-6200
Station Trustee K6OTA...	Ron Chester, W6AZ	
Property Manager .....	Gerry Tucker, N6NV	
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	Shrikumar, KA6Q	
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Speaker Coordinator .....	Rob Fenn, kc6tyd	650-888-9060

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	ab6so@smrn.com	
Photographer .....	<i>Position Vacant</i>	

## 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](mailto: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 1<sup>st</sup> 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](mailto:KD6W@ARRL.NET), 650-325-8239

## FARS — Foothills Amateur Radio Society

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

## NCDXC — Northern California DX Club

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

## 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 3<sup>rd</sup> 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](mailto:pres@k6mpn.org)

## SCCARRA

### 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 2<sup>nd</sup> 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](mailto: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: 441.35 (+5.0) 88.5 ctcss  
 147.39 (+600) 151.4 ctcss 1286.20 (-12m) 100.0 ctcss  
 223.96 (+1.6) 156.7 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](mailto: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](mailto:shensley@Novell.com)

(Please send changes to [PAARAgaphs editor](mailto:PAARAgaphs editor))

WE ARE PLEASED TO ANNOUNCE  
THE NEXT CHAPTER FOR US:

**HSC** HAS SOLD TO

**EXCESS SOLUTIONS!**



**That's right!**

- ✦ Halted Specialties Co., Inc. has sold HSC Electronic Supply to Excess Solutions of San Jose...making the biggest surplus electronics store in the Bay Area!
- ✦ Much of the millions of parts seen on HSC's shelves will be showing up soon on Excess Solutions' shelves...for your electronic needs.
- ✦ Techs, Developers, Experimenters, Hobbyists and Creators will once again have access to the basic parts that Silicon Valley was built upon!
- ✦ Support your local surplus store...there are few left, and you know how much this Silicon Valley resource is needed!

## Excess Solutions and HSC Electronic Supply

Now under one roof!

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San Jose, CA 95112

(Diagonally across intersection from Spartan Stadium)

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[www.excesssolutions.com](http://www.excesssolutions.com)

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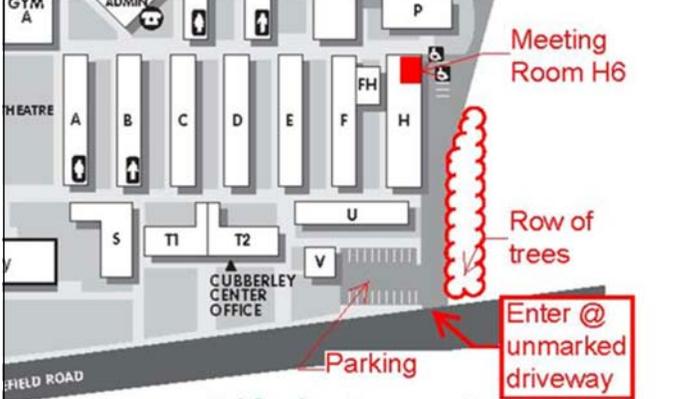
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www.jameco.com



**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 <sup>st</sup>	Joel - KD6W
2 <sup>nd</sup>	John - W6JMK
3 <sup>rd</sup>	Ric - N6AJS
4 <sup>th</sup>	Rob - KC6TYD
5 <sup>th</sup>	Rob - KC6TYD

If you're interested in trying out at Net Control, Contact Doug, KG6LWE. It's good practice, and lots o' fun! Give it a try.

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### 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).

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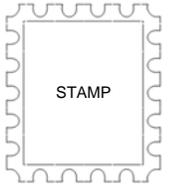
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# PAARAgaphs — June 2021

Accept no substitutes. Produced and printed in California USA



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 PAARAgaphs Newsletter  
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