

PAARAgraphs



The Official Newsletter of the

Palo Alto Amateur Radio Association, Inc.
Celebrating 85 years as an *active* amateur radio club—*Since 1937*

Ham Radio: Serving Large Public Events Rob Orr, K9RST

Rob will be discussing how ham radio became part of the Chicago Marathon and roles they played. He will discuss several practical issues, like how they recruited 140 ham radio operators, how they were deployed and the roles they played in providing communications for the medical teams serving this event. Also, we'll discuss how they integrated with the many other governmental services that supported the event.

Rob Orr is the lead for the ham radio support team for the Bank of America Chicago Marathon, a volunteer position. He has been working this event for 14 years. He is on the Board of Director for the North Shore Radio Club where he served as President for 10 years. He has also volunteered for the American Red Cross as a member of their national Emergency Communication Response Vehicle (ECRV). He responded to tornado, hurricane, flood, fires and other disasters. He was the lead for the Chicago based crew of 40 who maintained and de-

(Speaker — Continued on page 2)

This meeting will be a Zoom Meeting Only

Time: Mar 4, 2022 07:00 PM Pacific Time

<https://us02web.zoom.us/j/88962976505>

Login ID: First name and Call Sign

Meeting ID: 868 4789 6468

Upcoming Events

Mar 4###	PAARA General Meeting, 7:00 PM
April 1	In-Person and Zoom Meeting
May 6	### Zoom Meeting Only
Mar 16	Board Meeting, 7:00 PM.
April 20	Everyone welcome! Zoom Meeting,
May 18	eMail President for details!
April 9	Electronic Flea Market



President's Corner

March 2020

Did anything special happen to you on 2/2/22, or 2/20/22, or 2/22/22? I may or may not have had something special happen on those days but I sure did at Quartzfest! Before I tell that story, a BIG thanks go to Rob, KC6TYD, for running the February meeting in my absence! His stepping up to run that meeting enabled me to stay in AZ so I could attend the Yuma Hamvention that was held 17 days after Quartzfest. We also need to thank Joel, KD6W, for providing the video interface between the IRL (in real life) meeting and Zoom, though I understand it wasn't needed due to the extremely low IRL turnout, and Doug, KG6LEW, for hosting the zoom part of the

*(President — Continued on page 2)*

Ham Radio Outreach

Rob Fenn, KC6TYD

For the past several months I've been developing an outreach program specifically designed for new hams. Stories have been told of new hams that have no clue what to do once they've obtained their Amateur Radio License. Many of us were introduced into the hobby through an Elmer making this step a lot easier. With the ease of online training, and even online testing, new hams may not be getting the whole picture, especially when it comes to taking the next step. After much research and viewing similar programs, I've finally put together a presentation outline that covers a lot of information what I believe these new hams need. Choosing the right radio, programming, radio etiquette, and exploring other modes, etc., are just a few areas I'd like to cover. This would be presented live, or on Zoom for now, as a 2 or 3-hour event. The material covered would be presented on a PowerPoint platform. But I can't make this happen without presenters. If you're confident in your teaching skills and can conduct clear presentations, then I need you. Whether it's one topic or a few, no problem. Hoping to kick this off soon so anyone who is interested can email me at kc6tyd@gmail.com

(Speaker — Continued from page 1)

played the vehicle, one of 9 ECRV's across the country.

He is an Extra class ham radio operator and enjoys kit building, Dxing and QRP operations, However, public service has dominated his focus in the last couple of years.

In real life, he is a video producer and operates his own video production business. He has worked in more than 83 countries, although during COVID times, he has enjoyed not travelling so frequently!

Married to a very patient wife for 42 years and has two adult children and two teenage grandchildren.

(President — Continued from page 1)

meeting.

Now back to Quartzfest. As you can see by my new picture, there is an interesting hat on my head. I'll explain what that's about down the road but first, Quartzfest, <https://quartzfest.org/>, is a weeklong adventure combining camping with ham radio. Also at Quartzfest, the Northern Arizona DX Association, <https://www.nadxa.com/>, hosted a DX distance contest as well as providing the special event station. In the contest whomever makes the longest contact on CW/SSB or FT8 or using the special event station using 100W or QRP (5W or less) wins. Thus, there were 4 categories with a grand champ and runner up in each category. You had 3 days to make and submit contacts, Monday, Tuesday and Thursday. In order to win, you needed the longest contact of all other entries in whatever category you entered and be there on Saturday at the closing ceremony.

Before I get further into the DX contest, there were 6 PAARA members out of ~542 who attended Quartzfest. Five of us, Joanna, K6YL, Jeanette, N6DQ, Frank, AF0XX, Karen, KK6BGA, and myself were in one camp along with Randy (Joanna's BF), and Kathy, KE5KFA (my sister). Rob, KC6TYD, was in a tent not far away from our collected campers. We enjoyed many hours of chatting, game playing, storytelling, and whatever. Pink, K7ILA, even drove 2 hours from her house to spend a short time with us and say HI. You can see Rob's camp at the upper left arrow and camp PAARA's in the lower right arrow in the arial



(Continued from page 2)

image.

A day at Quartzfest, of which there are 7, consisted of listening to the days upcoming events on the net at 7:45 AM & noon. Various seminars or events happened each day in one of several locations. Several mornings before sunrise, a Pico Balloon was launched. APRS information was provided so everyone could track it. By the end of Quartzfest, several of the balloons were over Europe. As of the board meeting, one of the balloons had traveled twice around the earth! Each day ended with “happy hour” where information was provided on ongoing and upcoming activities. A raffle finished off the day. At sunset, a big campfire provided warmth for those wishing to exchange stories or tall tales, take your pick.

Tuesday, 39 4x4's of all sorts took part in an off road adventure lasting about 4 hours. Every vehicle had every seat filled with others who didn't have a 4x4. Every member of team PAARA and friends managed to get a ride. We took a dusty bouncy ride back to an old quartz mine where we ate lunch and ex-



plored. Though everyone ate some dirt, we all had a great time. The picture shows us gathered for lunch and exploration at our destination. The white rectangle in the background is a water collection device that feeds a large cistern for animals in the area. Though there are big horn sheep in the area, they eluded us.

On Thursday, our own Frank, AF0XX, conducted a solar walk about. Frank took interested participants around to various campers

and learned about each installation and what made it unique. Frank came back mumbling, “next year I have to plan it better so we don't crisscross the camp so many times”! Otherwise, even the veteran Frank learned a few new tricks.

Now that you've survived the diatribe, what's with the DX contest? Yours truly received an end fed wire antenna kit for Christmas. I managed to get the 49:1 impedance transformer built before leaving but did not finish the antenna. After completing the antenna at Quartzfest and stringing it up, one end on a 25' fiberglass flagpole, the other 10' up on a painter's pole, I was eager to give it a test. Camp PAARA is in the pix below with my wire off the flagpole and my Bravo 7K, made by Tom Schiller, N6BT, and setup on the right.



Wednesday night found me tuning around on 40M to see what I could hear. Even though not a contest day, I wanted to see how the wire antenna worked before considering setting up my Bravo 7K. I heard several stations and I made contacts with a few. About 9:30 PM, on 7.145, I heard a station booming in at S9+! After listening for a short time, I got his call sign, ZS6CCY, Bill from South Africa! He was working the grey line to the US and as you can imagine, had quite the pileup. I tried to get through but the band went dead before he could even hear me through all the east coast stations. After some thinking, I felt my wire wasn't oriented in the optimal direction, which I couldn't change due to space constraints, to contact him thus it was time for the Bravo 7K and the hope that he'd once again be on the air on Thursday and I might be able to

(President — Continued on page 4)

(President — Continued from page 3)

contact him using that antenna.

Thursday, the last contest day, I managed a contact, off my wire, into Canada with VE7FYQ working POTA. That evening I changed to my Bravo 7K figuring that it might do a better job at getting signal toward South Africa. About 2100, there was ZS6CCY again on 7.145 booming away. He was working stations west of the Mississippi that were hitting him at S9+10 or 20! Hard to work someone with 100W on a vertical with all the high power booming his way. That didn't stop me from trying all the tricks in my bag to attempt to get through the pileup.

About 40 minutes later, he finally respond to a station in Arizona, is there hope? I decided to add the tag "Quartzfest" to my call in the hope he might hear it and wonder what it was. A few minutes later, he responded to a station in Monterey who told him about Quartzfest and suggested he give us a listen, which he gracious did. I'm guessing that had I not added Quartzfest to the tail of my call, none of us would have gotten him in our log.

The first station he responded to his call was one of the organizers of the DX event who was exempt from competing but he told Bill about Quartzfest. I'm getting impatient as I knew from the night before that the band wouldn't stay open much longer. FINALLY, they signed off and I pounced! Wonderfully, he came back to me with a 58 signal report. I sent 59+, he asked my name and boom, we were in each other's log! This makes only my second contact from Africa! It's also the longest contact by far using my IC7100 and the Bravo! The calculated distance was 10,099.6 miles! Whao for the grey line and good band conditions and for a little help from the Monterey station!

I popped out of my motorhome and announced that I made contact with him, needless to say, everyone in "camp PAARA" were elated. BTW, I was correct, not 10 minutes after my contact, the band went dead! Interestingly enough, Randy was the most excited and wanted to know everything. Though stud-

ying for the Technician test, he had no idea you could talk with someone so far away. It's one thing to read about making far away contacts, it's another to witness it!

The next morning I went over to the special event station to get my submission slip and make sure they received it before noon, which was the cutoff time. Of course, they already knew someone made a rather long distance contact and were hoping they'd submit it. I met the DX ham who made the 1st contact with Bill and had a fun conversation about the previous evening.

As they say, the rest is history. As you can see, that contact won me the SSB distance challenge. As it turns out, the second place ham also made contact with Bill but 3 minutes after I did! He was happy telling others, "I'm ok with the outcome; after all, he did all the heavy lifting". I got the hat and some other prizes as my reward for the longest SSB con-



tact from Quartzfest. Interestingly, it's the first award for anything I've received in ham radio. Awards are not the kind of thing I seem to be chasing. Nevertheless, I LOVE a wonderful DX contact! Though frustrating at times, it's more rewarding when you have to work for it.

(President — Continued on page 5)

(President — Continued from page 4)

In case you were wondering, I was advised the antenna on top of my hat is specially tuned for 40M! Maybe I'll not need the Bravo 7K (seen over my left shoulder) next year, hi hi. Yes, I did proudly wear my PAARA Field Day shirt during the award ceremony.

What a wonderful thing to happen during this trip!! I had no intension of making such a contact before I went to Quartzfest. I only hoped to make a few fun contacts along the way. One thing is for sure, if you don't turn your radio on, you'll never make that unforeseen contact!

Of note, Rob, KC6TYD, also competed in the challenge in the QRP category. See his story elsewhere in this issue.



Above are the PAARA members and friends. Left-right, Jim, (K6SV) Kathy (KE5KFA), Randy (& King his dog), Rob (KC6TYD), Joanna (N6YL), Jeanette (N6DQ), Karen (KK6BGA), and Frank (AF0XX).

Mark your calendar for next year's event and join the fun at camp PAARA. Next year Quartzfest will be held on January 22nd through the 29th. A camper isn't required as Rob, along with others, use a tent to enjoy the experience.

As I stated at the start of this column, thanks to Rob, I decided to stick around in the area to attend the Yuma Hamvention. I found a wonderful site just inside of CA just north of Parker, AZ. In fact, I can easily see Parker from

my camp site. I'm still in the desert on BLM land. I've enjoyed many an interesting hike through the volcanic fields and up a couple of what I think are cinder cones. The thing that hasn't been fun is the wind that decides to pay you a visit on a regular basis. When not blowing, it's been wonderful. It also allowed me to setup my radio again and see what was on the bands.

Being during the day, I configured my antenna for 20M. There was lots of activity in the higher part of the band with LOTS of POTA (Parks on the Air) stations activating various parks. They seem to be on the air in large numbers (37 on one day) and just looking for contacts. After making contact with several, I happened upon someone just transmitting responses. I knew from experience that it must have been a station-working split (transmitting on one frequency and listening on another). I finally got his call sign and that he was working up 5 (listening up 5MHz from where he was transmitting).

My challenge now was to try to remember how to work split with my IC7100. It's not something that I do all the time on this radio nor have I at any time in the recent past. I finally figured it out and tossed my call out. To my shock, he came back to me on the 1st try! I bagged TU5PCT (~7,000 mi away from where I was) with a big smile on my face. Then did a QRZ lookup to find it was a DXpedition and he was on the Ivory Coast of Africa! OMG, 2 Africa contacts on the same trip working portable! Never in my wildest dreams did I foresee this as a possibility on this trip, or any other for that matter.

Next month I'll talk about my Yuma experience.

PLEASE Note: in light of the extremely light turn out at the last club meeting, the board agreed to not have a meeting in person next month but only have a meeting using Zoom. Moving forward, we'll reassess every month the validity of having an in person meeting.

73, Jim K6SV

Get on the air to keep the airwaves alive!

My QRP Woes

-Rob Fenn, KC6TYD

While attending Quartzfest 2022, I participated in the Long Distance Challenge. There were three days designated for this event. You weren't required to work all three days. You simply listed four of your furthest contacts for each day you worked the event. With my new KX3, I opted to enter the QRP category. Well, this didn't go as easy as I thought it would. My campsite was situated about 30 feet from the Special Event Station W7Q. I quickly learned that as long as someone was operating at W7Q I had no chance. Regardless of which



band I was using, the W7Q bleed over was too much to contend with.

On the last day, as a last ditch effort, I decided to pack up the radio and antenna and head west. This was easy to do as there are miles of open BLM land available. I found a spot approximately a half a mile from my campsite. Using a brand new tilt-over hitch mount for the antenna mast, I was back up and running in less than an hour. Awwww, much better. Using an End Fed Half Wave antenna attached to a 9:1 UNUN, I was hearing stations from Brazil, New York, and Florida all calling CQ. Unfortunately, I was only running 5 watts and was lost in the pile ups. I kept trying. Eventually I made a contact with a POTA, (Parks on the Air), station in Oregon using a slinky antenna. I also made contact to Summerville, Tx, Ventura, OR, and a 40 meter QSO with a mobile station at Point Mugu in Malibu, CA. I learned that late in the afternoon when all the big guns move to the lower bands I was able to pick up

some of the left overs still hanging around on 20 meters.

Nope, I didn't win in my category but it was fun using the December Dream To Reality KX3, I won, and getting used to all the functions and features it has to offer. I have added the optional protective side rails and a cover. I've also ordered the internal battery charger and real-time clock module. I also wanted to get a carrying case and after some research, I purchased the Lowepro Nova AW II camera bag. It's larger than what I've seen most KX3 owners use, but I wanted room for mic, battery, antenna/UNUN, and other misc parts.



Next attempt: Rigging up the KX3 for Parachute Mobile.

Recent ASVARO Meeting Report Clark Martin, KK6ISP

Flea markets (FMs) will start again April 9, (2022) and currently it is planned to run till October. The location is in Sunnyvale, we will announce the exact site when the last details are nailed down. Stall prices are dependent on the precise contract made with the site owner. It is anticipated that the stall price will be in the neighborhood of \$30 and discounts will be available for multiple adjacent stalls.

PAARA is the host for May 14th. October is not assigned at this time.

Since we are the second club to host the Flea Market a delegation will be sent in April to view and plan for our hosting of the FM.

For more information see

www.electronicfleamarket.com

Feb PAARA Board Meeting Minutes

Present were President Jim Thielemann K6SV, Vice President Rob Fenn KC6TYD, Secretary Ric Hulett N6AJS, Treasurer Bob Korte KD6TYD, Directors Doug Teter KG6LWE, and Walt Gyger K6WGY. Clark Martin KK6ISP also checked in briefly. The meeting was called to order at 8:17 p.m. A quorum was present.

President's Report: At Quartzfest, we lost a fellow ham, who became a silent key, while attending his eleventh Quartzfest. Life is short. Let's not waste any of our minutes on this planet.

On a lighter note, you never know who you can contact, unless you turn your radio on. While travelling, and using my IC-7100 and Bravo-7K antenna, I worked one African and two POTA (Parks on the Air) stations. There were 37 POTA stations on the air on Tuesday afternoon. You just have to turn your radio on, and make the contacts. It's fun to figure out where the POTA stations are located.

Secretary's Report: We are holding steady at 175 PAARA members. We still have quite a few who have yet to renew for 2022.

Treasurer's Report: The club finances have been pretty quiet. We issued a check to PIP for production of the newsletter.

VP/Program Chair Report: Rob Orr K9RST will be giving the presentation in March. He is a communications planner for the Chicago Marathon. They recruit 140 hams, interacting with emergency services. We will have a ham pico- balloon launcher for the April meeting.

No raffle was held in February, as the in-person meeting attendance was quite low.

Old Business

PAARA Members: We need more content for our unique PAARAgaphs newsletter! Please write up you interesting ham-related experiences and activities, even if brief. We have a shortage of material 'in the hopper'.

Education Committee: Rob KC6TYD. We have an upcoming article for PAARAgaphs,

and we are looking to create a speakers committee of knowledgeable volunteers.

EFM: Clark KK6ISP is communicating with ASVARO about restarting the flea market. Pending resolution of some details, there will be an Electronic Flea Market beginning April 9. PAARA will host on May 14.

Club-owned equipment: We have created a listing of club-owned equipment. Rob KC6TYD, Doug KG6LWE, and Ric N6AJS will meet online to decide which equipment to keep, and which to offer for sale to members and others. We will announce the plan at the March PAARA meeting.

KN6DH antenna removal: DONE! Thanks to all who helped & Doug for gathering the troops.

The board voted to offer the hex-beam antenna to a club member.

PAARA 85th year event: Ric N6AJS has created a draft survey to gauge member interest in a special operating event. Will publish the link at the March club meeting.

New Business

Online/In-person meetings: There were only 7 attendees in person at the February club meeting. The board voted to hold the March meeting online only. We will decide on further in-person meetings on a month-to-month basis, based on COVID and member interest.

PAARAgaphs ad invoices: Walt K6WGY will invoice our advertisers this month.

ARRL Field Day: Doug will check with the city of Menlo Park to determine whether Bedwell Bayfront park will be available. New Field Day rules have been made permanent: The low-power limit is 100 watts; home stations can contact other home stations for credit, and the bonus points for media exposure require accomplishment rather than effort.

The meeting was adjourned at 8:45 pm

Respectfully Submitted
Ric Hulett N6AJS
PAARA Secretary

Palo Alto Amateur Radio Association, Inc.

PO Box 911 Menlo Park, CA 94026

Officers

President	Jim Thielemann, K6SV	408-839-6815
	thielem@pacbell.net	
Vice President	Rob Fenn, kc6tyd	650-888-9060
	kc6tyd@gmail.com	
Secretary	Ric Hulett, N6AJS	408-332-4593
	energyconserved@sbcglobal.net	
Treasurer	Bob Korte, KD6KYT	408 396 4745
	bob@rgktechsales.com	

Directors

Director ('21-'22)	Joel Wilhite, KD6W	408-839-5948
	kd6w@arrl.net	
Director ('20-'21)	Walt Gyger, K6WGY	408-921-5901
	walt@tradewindsaviation.com	
Director ('21).....	Doug Teter, KG6LWE	650-367-6200
	dteter@wvci.com	
Director ('21).....	Darryl Presley, KI6LDM	650 255-2454
	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	
Chaplain	Rick Melrose K6RDM	408-341-9070
	K6RDM@yahoo.com	
Public Affairs	<i>Position Vacant</i>	
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	
Badge Coordinator	Doug Teter, KG6LWE	650-367-6200
	dteter@wvci.com	
Historian Position	<i>Position Vacant</i>	
Raffle Coordinators	Rob Fenn, KC6TYD,	rtyd@aol.com
	Shrikumar, KA6Q	
	shri.paara@enablery.org	
Field Day Coordinator ...	Doug Teter, KG6LWE	650-367-6200
ASVARO Rep.....	Clark Martin, KK6ISP	
	kk6isp@comcast.net	
Webmaster	John Miller K6MM	
	webaron@gmail.com	
Technical Coordinator ...	Joel Wilhite, KD6W	408-839-5948
	kd6w@arrl.net	
QSL Manager	Marty Wayne, W6NEV	408-234-8023
Speaker Coordinator	Rob Fenn, kc6tyd	650-888-9060

PAARAgaphs Staff

Editorial Board	Bob Van Tuyl K6RWY	Kristen McIntyre K6WX
	Ron Chester W6AZ	Vic Black AB6SO
	Joel Wilhite, KD6W	Jim Thielemann K6SV
Editor	Bob Van Tuyl, K6RWY	408 799-6463
	rrvt@swde.com	
Back Up Editor	Jim Thielemann, K6SV	408-839-6815
	thielem@pacbell.net	
Advertising.....	Walt Gyger, K6WGY	408-921-5901
	walt@tradewindsaviation.com	
Member Profiles	<i>Position Vacant</i>	
Technical Tips	Vic Black, AB6SO	650-366 0636
	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

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

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>

San Mateo Radio Club W6UQ.ORG

Meets, 3rd Friday, January through November

Tuesdays, [Directed] Net, 7pm, N6ZX 145.370Hz -600KHz PL107.2Hz

Contact: <http://W6UQ.org/calendar>

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)

EXCESS SOLUTIONS

ELECTRONIC SURPLUS MEGA-STORE!

We have completed our move, you should visit to see the new store!

- ✦ That's right...Excess Solutions in San Jose recently lost the lease on their old site as the property was sold. We have moved to new premises very nearby at the far end of S. Seventh St., just before Tully Rd. It's easy to find!
- ✦ Techs, Developers, Experimenters, Hobbyists and Creators will once again have access to the basic electronic parts, hardware and infrastructure that Silicon Valley was built upon!
- ✦ Support your local surplus store...there are few left, and you know how much this vital Silicon Valley resource is needed!



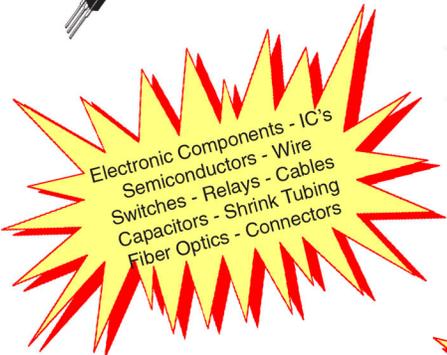
Hardware - Nuts - Bolts Screws
 Spacers - Standoffs Keyways -
 Dowel Pins - Fans
 Springs - Feet - Clips - Motors



Computers - Monitors
 Modems - Cases
 Power Supplies
 Keyboards - Mice



Tech Benches - Work Stations
 Conference Tables - Desks
 Chairs - Kiosks - Lunchroom
 Furniture - Other Office Items



Electronic Components - IC's
 Semiconductors - Wire
 Switches - Relays - Cables
 Capacitors - Shrink Tubing
 Fiber Optics - Connectors



Security Cameras - Shelving
 Lighting Systems
 Entertainment Systems
 Process Equipment



Tools - Wrenches - Sockets - Pliers
 Screw & Nut Drivers - Allen Wrenches
 Impact Guns - Arbor Presses - Solder &
 Desolder Equipment - Test Equipment

Excess Solutions

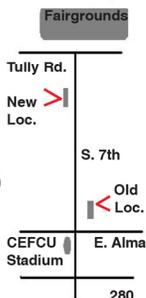
2070 S. Seventh St., Unit C
 San Jose, CA 95112

(Approx. 5 blocks down Seventh St. from old site!)

1-408-262-3900 --or-- visit us online!

Web: www.excesssolutions.com

eBay Stores: "excess-solutions"



Store Hours

Mon. - Thur. 8:00 - 6:00, Fri. 8:00 - 5:00, Sat. 10:00 - 3:00





James Farrey
 Sales Manager

James Electronics Ltd
 1355 Shoreway Road, Belmont, CA 94002
 Tel: 650•592•6718 x 350 Fax: 650•802•1520
 Direct: 650•802•1511 jfarrey@jameco.com

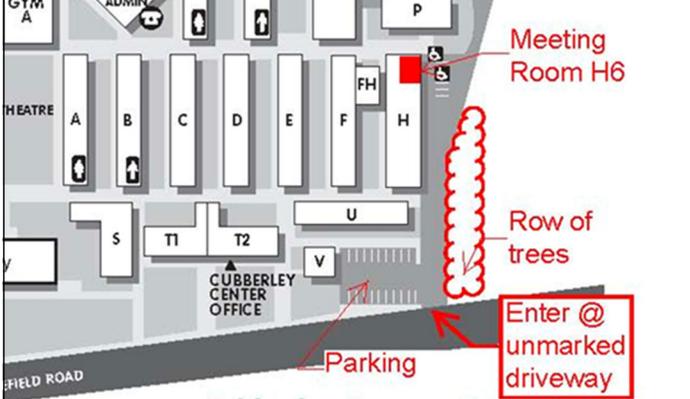
www.jameco.com

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	John - W6JMK
3 rd	Ric - N6AJS
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, and lots o' fun! Give it a try.



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

Legend
 Disabled Parking
 Public Pay Telephone

Meeting Location — Middlefield Road between San Antonio and Charleston in Palo Alto. 4000 Middlefield Road

Tribulations about moving?

We Have Seen It All And I Can Help You

Experienced in Residential and Commercial Property, Full time REALTOR since 1975

Call me at Terrace Associates, Inc.
 MOBILE 650-274-8155, OFFICE 650-369-7331

KARL DRESDEN, R.E.# DRE 00525686
 KJ6GUK General License, PAARA member
 777 Woodside Rd., Suite B, Redwood City, CA 94061
 Email: KARLDRESDEN@juno.com

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

Permission is granted to reprint from this publication with appropriate source credit.




THE SKY IS NO LIMIT!

SCHEDULE YOUR INTRODUCTORY FLIGHT LESSON TODAY

AT



Your One Stop Shop For Aviation Services

- > Flight Training
- > Aircraft Rental
- > Pilot Supplies
- > Maintenance
- > Aircraft Sales

Contact
 Maya and Walter Gyger
 1-408-729-5100
 mail@tradewindsaviation.com

Address
 2505 Cunningham Ave, San Jose, CA 95148

Information
 www.tradewindsaviation.com

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



ARV'S, WA6UUT (SK)
WEDNESDAY
HAM RADIO
LUNCHEON
 Our 11th year!
 - Since May 2, 2007 -
BLACK BEAR DINER
Sunnyvale, California
 415 East El Camino Real
 (Just "North" of South Fair Oaks
 Avenue on El Camino Real)
11:30 AM ~ 3:00 PM
 Website: www.blackbeardiner.com

Many food choices available from the breakfast, lunch or dinner menus. Ample parking is available. Walk in & "bear" left for our location in the restaurant!

NOT A CLUB, CLOSED GROUP OR CLIQUE; AMATEUR RADIO OPERATORS AND FRIENDLY PEOPLE ARE ENCOURAGED TO ATTEND!
 Call in on the N6NFI Repeater, 145.230 MHz, PL® 100Hz

Submit items to
PAARAgaphs
 by the 3rd Wed to:
 rrvt@swde.com
 Text: .doc, .rtf,
 or .txt
 Photos:
 jpg, png or tiff

Subscription
 Problems?
 Contact Database
 Manager:
 Ric Hulett, N6AJS
 408-332-4593
 energyconserved@
 sbcglobal.net



Have you discovered us?
 Silicon Valley's favorite brick'n'mortar for components and supplies for prototyping
 (408) 727-3693

Anchor Electronics 2040 Walsh Ave, Santa Clara
 Download our Price List PDF
www.anchor-electronics.com



PowerFlare® safety lights:
 Ultra-rugged 360 degree LED beacon for your emergency kit, car, home ...
www.powerflare.com

PAARA W6OTX DMR Repeater Frequencies	
144 – 144.9625 up 2.5 MHz	DMR—NOR CAL Brandmeister
440 – 444.475 up 5 MHz	DMR
900 – 927.225 down 25 Mhz	On Line

Silicone
RESCUE TAPE
NO ADHESIVE!
NO STICKY RESIDUE!
8,000 V 500° F
 ELEC. INSULATION HEAT RESISTANCE

The highest quality coax sealing tape on the market!

ENTER YOUR SPECIAL COUPON CODE TO GET THE PAARA DISCOUNT
 Order online at www.rescuetape.com - (702) 953-0968

PAARA Badges

In the absence of in person meetings, you can still order a badge from the Club's website, PAARA.org. Go to the bottom of the membership page to order. Badges will be mailed to purchasers, at an additional cost of \$4.95 until we can meet face to face again.

PAARAgaphs Ad Rates

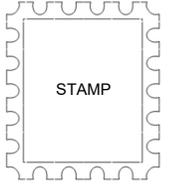
PAARAgaphs accepts paid advertisements from non-members. (short personal ads remain free for members in good standing). All ad rates listed are per issue.

- Not-for-profit ads by association members for ham-related items and wants. No cost for business card-size ads (additional space at \$2.50 per business card size per issue).
- For Profit organizations and/or individuals: \$5-business card size, \$14.00-quarter page, \$25-half page, \$50 full page or back cover per issue.

These fees may be reduced or waived in exchange for a valuable consideration that is given to the Association or its general membership. Such consideration must be in addition to any existing arrangements with the association. The PAARAgaphs editors reserve the right to reject any ad deemed to be not in the best interest of the Association.
 All fees payable in advance by the year with "scanner-ready" copy or text-only ads. Give payment and copy to Walt Gyger, K6WGY.

PAARAgaphs — March 2022

Accept no substitutes. Produced and printed in California USA



Palo Alto Amateur Radio Association, Inc.
 PAARAgaphs Newsletter
 P.O. Box 911
 Menlo Park, California 94026

FIRST CLASS MAIL

Address Service Requested

HAM RADIO OUTLET
 Family owned and operated since 1971
 WWW.HAMRADIO.COM



FTDX101MP | 200W HF/50MHz Transceiver
 • Hybrid SSB Configuration • Unparalleled 70 dB Max. Attenuation VC-Tune • New Generation Scope Display 30SSS • ABL (Active Band Indication) & MPVD (Multi-Purpose VFO Outer Dial) • PC Remote Control Software to Expand the Operating Range • Includes External Power With Matching Front Speaker



FT-891 | HF-50 MHz All Mode Mobile Transceiver
 Rugged construction in an ultra compact body • Stable 100 Watt Output with Efficient Dual Internal Fans • 32-Bit IF DSP Provides Effective and Optimized QRM Rejection • Large Dot Matrix LCD Display with Quick Spectrum Scope • USB Port Allows Connection to a PC with a Single Cable • CAT Control, PTT/RTTY Control



FTM-4000XD | 2W/40 Mobile
 • Color display-green, blue, orange, purple, gray • GPS/APRS • Packet 1200/9600 bit/sec • Spectrum scope • Bluetooth • MicroSD slot • 500 memory per band



FTDX10 | HF/50MHz 100 W SDR Transceiver
 • Narrow Band and Direct Sampling SDR • Down Conversion, 9MHz IF Filtering Filters Produce Excellent Shape Factor • 5-Full-Color Touch Panel w/30 Spectrum Stream • High Speed Auto Antenna Tuner • Microphone Amplifier w/3-Stage Parametric Equalizer • Remote Operation w/optional LAN Unit (SD4-LAN10)



FTM-300DR | C4FM/EM 144/430MHz Dual Band
 • 50W Ballistic Output Power • Real Dual Band Operation (V-X, U-H, V-L, U-H) • 2-inch High-Res Full Color TFT Display • Band Scope • Built-in Bluetooth • WIRES-X Portable Digital Noise Filter Mode with RH-200



FT-70DR | C4FM/EM 144/430MHz Xcvr
 • System Fusion Compatible • Large Front Speaker delivers 700 mW of loud audio output • Automatic Mode Select detects C4FM or F3000 Audio and Switches Accordingly • Huge 1.05 Channel Memory Capacity • External DC Jack for DC Supply and Battery Charging



FT-991A | HF/VHF/UHF All Mode Transceiver
 • Real-time Spectrum Scope with Automatic Scope Control • Multi-color waterfall display • State of the art 32-Bit Digital Signal Processing System • 3kHz Tracking Filter for enhanced performance • 3.5 inch Full Color TFT USB Capable • Internal Automatic Antenna Tuner • High Accuracy TCXO



FT-2980R | Heavy-Duty 80W 2M FM Transceiver
 • Massive heatsink guarantees 80 watts of solid RF power • Loud 3 watts of audio output for noisy environments • Large 6 digit backlit LCD display for excellent visibility • 200 memory channels for serious users



FT-65R | 144/430 MHz Transceiver
 • Compact Commercial Grade Rugged Design • Large Front Speaker Delivers 1W of Powerful Clear Audio • 5 Watts of Reliable RF Power With- in a compact Body • 3.5-Hour Rapid Charge-In- cluded • Large White LED Flashlight, Alarm and Quick Home Channel Access



FTM-6000R | 50W VHF/UHF Mobile Transceiver
 • All New User Operating Interface E20-III (Easy to Operate-III) • Robust Speaker Delivers 3W of Clear, Crisp Receive Audio • Detachable Front Panel • Mounted in Multiple Positions • Supports Optional Bluetooth® Wireless Operation Using the SSM-BT10 or a Commercially Available Bluetooth® Headset



FTDX101D | HF + 6M Transceiver
 • Narrow Band SDR & Direct Sampling SDR • Crystal Routing Filters Phenomenal Multi-Signal Receiving Characteristics • Un- parallelized - 70dB Maximum Attenuation VC-Tune • 15 Separate (HAM 10 + GEN 5) Powerful Band Pass Filters • New Generation Scope Displays 3-Dimensional Spectrum Stream



FT-818ND | HF/6M/2M/440 All Mode Portable Xcvr
 • Ultra-Compact/Portable • Multi-Color Easy to See LCD • 208 Memory Channels/10 Memory Groups • Built-in Electronic Keyp • Internal Battery Operation Capability • Two Antenna Connectors • Built-in High Stability Oscillator $\pm 0.5\text{ ppm}$



• RETAIL LOCATIONS - Store hours 10:00AM - 5:30PM - Closed Sunday
 • PHONE - Toll-free phone hours 9:30AM - 5:30PM
 • ONLINE - WWW.HAMRADIO.COM

• FAX - All store locations
 • MAIL - All store locations



ANAHEIM, CA (800) 894-8046 PLANO, TX (877) 455-8750	SACRAMENTO, CA (877) 892-1745 SAN DIEGO, CA (877) 520-9823	PORTLAND, OR (800) 765-4287 DENVER, CO (800) 444-9476	PHOENIX, AZ (800) 559-7388 ATLANTA, GA (800) 444-7927	MILWAUKEE, WI (800) 595-0471 NEW CASTLE, DE (800) 644-4476	WOODBRIDGE, VA (800) 444-4799 SALISBURY, NH (800) 444-0047	WINTER SPRINGS, FL (800) 327-1917 WWW.HAMRADIO.COM
--	---	--	--	---	---	--