

PAARAgraphs



The Official Newsletter of the

Palo Alto Amateur Radio Association, Inc.Celebrating 81 years as an *active* amateur radio club—*Since 1937*

9K2HN, Abdali

Kuwait 2014 DXpedition

Bob Vallio, W6RGG


Setting our sights on a new record high score from Asia, in the 2014 CQ World Wide CW DX Contest.

Bio:

Bob Vallio, was first licensed in July of 1952 and upgraded to General Class in 1953. Bob has held an Extra Class license since 1968. His DX and contest operations include FO0XX (Clipperton Island twice!), XF4L (Revillagigedo), 6Y5BF (Jamaica), 5W1AZ (Western Samoa), KP2A (Virgin Islands), 4U0ITU (ITU HQ in Geneva), VP5VW (Turks & Caicos Islands), 5V7A (Togo) two times, HC8N (Galapagos Islands) four times, OJ0/W6RGG (Market Reef), OH0/W6RGG (Aland Islands), BS7H (Scarborough Reef), in 1997 and 2007, and 9K2HN (Kuwait) in 2014. He has also served in various capacities on the Yasme Foundation Board of Directors since 1965, was a member of the very first ARRL DX Advisory Committee, and is a long time member and past president of both the Northern California DX Club and the Northern California Contest Club. Bob first made Top of the DXCC Honor Roll in 1982 and still holds that ranking. He has twice been named NCDXC DXer of the Year, and was elected to the CQ DX Hall of Fame in May of 1997.

Bob was Section Communications Manager and Section Manager of the ARRL East Bay Section from 1978 to 2000, and Vice Director of the ARRL Pacific Division from 2000 to 2003. When his friend of over 40 years, Director Jim Maxwell, W6CUF, unexpectedly passed away in 2003, Bob took over as Director and has served continuously in that position since then. Bob has served on every standing committee of the ARRL Board of Directors, most recently being elected by his fellow Directors to the position of Second Vice President. During all of those years of service to the ARRL, Bob has also been involved in Emergency Communications with Alameda County RACES (aka Alameda County Sheriff's Communications Team) since 1975. He has served for many years as Chief Radio Officer and currently holds the position of Chief Radio Officer, Emeritus.

Upcoming Events

• May 4 • June 1 • July 6	PAARA General Meeting, 7:00 PM Cubberly Community Center, Room H-6, 4000 Middlefield Rd, Palo Alto
• May 16 • June 20 • July 18	Board Meeting, 7:00 PM Everyone welcome! Location: Marty, W6NEV, QTH 
• May 26	Intel Tech Museum in Santa Clara Field Trip and Picnic
• June 23-24	Field Day begins at 11am PDT Sat and runs to 11am Sun

President's Corner

May 2018

I'm just back from the International DX Convention in Visalia, having had a great time. There was some interesting gear there to see and some great eyeball QSOs. Don't forget about our upcoming trip to the Intel Museum too.



The 69th Annual International DX Convention was held in Visalia on April 20th through 22nd. Despite being licensed for more than half that period, I had never been there before (my bad!), but given that there would be a couple of ARRL events and that I was invited to give a short talk, I thought it might be a good idea to finally check it out. People have been telling me about "Visalia" for many years, but I never really had

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Enigma

A Father’s Day Tinkering Story

Leigh L Klotz, Jr - WA5ZNU

Ever since I was four or five years old, my father Leigh Sr, a World War II Navy veteran photographer and I had built things or learned things together, from ham radio to electronics to computers. He loved tinkering, and experimenting with photography, especially wild animals, and would often tell me stories about them. When I grew up and chose a career in software engineering, we stayed close and shared ham radio and computer interests.

By 2014 he found operating his Elecraft K1 and PSK-20 too challenging, and shortly moved into a VA home. He received excellent care and took plenty of pictures, but we couldn’t communicate with him. He could still talk perfectly, but couldn’t hear well, or use a phone or tablet. I decided to build him a simple and reliable text messenger, a single-purpose receive-only device with a big display and three buttons, showing only the most recent message from each of his three children.

I had recently written a book on the Arduino, (Ham Radio for Arduino and PICAXE, published by the ARRL), and was ready for a more complex project. Arduinos have expansion boards that plug together, called “shields.” I needed the Arduino and two shields: a GSM cellular modem shield and a custom board for the message storage, buttons, LEDs, and display.

I wrote the first software that made the display work in June, 2014.

Once the software was done, then came the hard part...I wanted a sturdy metal case that could protect the Enigma if it was dropped or had something set on top of it. Since my father

was also fascinated with the German Enigma cryptographic device from WWII, I found a similarly-shaped case and named the new device “Enigma.” Drilling the LED and switch holes with stepped drill bits was easy, but the large rectangular opening for the LCD was difficult. I wound up making some unpleasant looking cuts, but covered them up with translucent paper and a plexiglass plate.

Even though the SIM card could store messages, it wasn’t reliable, and I didn’t want bugs to cause my father to doubt whether he’d re-

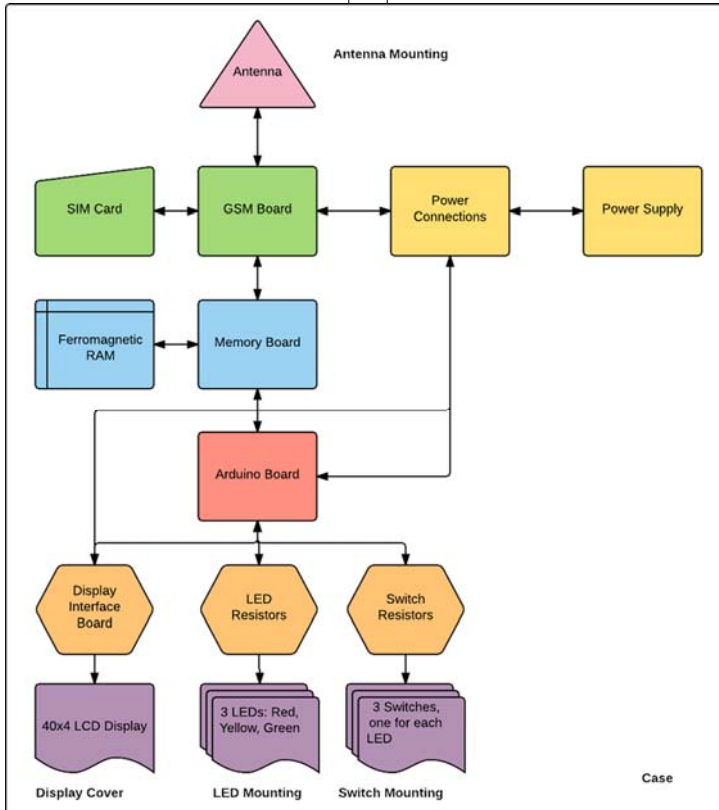


Figure 1: Block Diagram



Photo 1: Shield Stack

ceived a message. So I put on my Mad Scientist hat and used a new “Ferromagnetic RAM” chip I bought from Adafruit. The RAM could store over a hundred messages, but I limited it to three. I put the display and switch connectors on the

(Enigma — Continued from page 2)

same board. And we both liked the idea that the message storage was magnetic core memory on a chip!

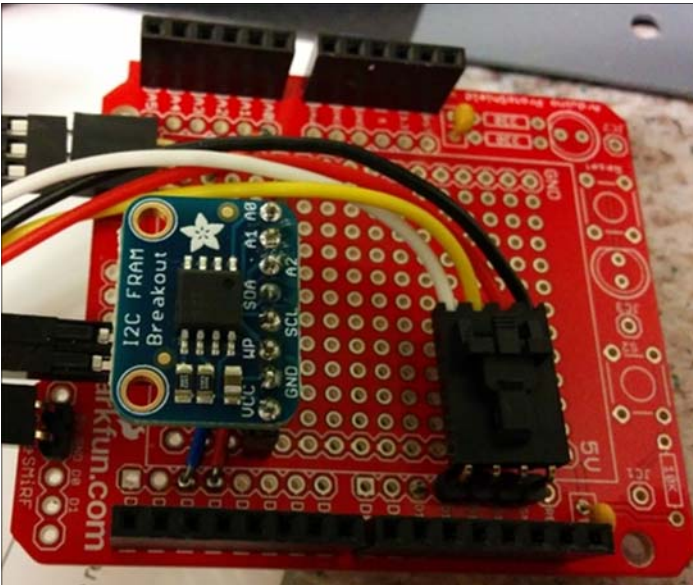


Photo 2: Ferromagnetic Memory and Interface Shield

I was able to use mostly pre-made shields and simple cables to plug everything together into one stack. To make it all line up, I just had to be judicious in my use of Arduino I/O pins, and use one custom board in the stack, based on a standard prototype shield.

For a display, I choose a 40x4 character display, with 160 characters total, just the length of an SMS message. When a new message arrived, the LED above the mailbox button would blink. Once you press the button, it would display the message date and time first, then pause, then display the contents. As a bonus it would send back an SMS reply with the date



Photo 3: Inside



Photo 4: Outside

and time, so we could tell when he was awake and ready to talk.

A week or so of testing and bug fixes made me confident, so I mailed it off, but

unfortunately the post office lost my package... Miraculously, they found it after two months and delivered it, and it still worked perfectly!

A few months later, I was able to visit my father on his 94th birthday. Here he is with his Sony camera in hand, showing me the photos he'd taken, and the Enigma in the background.

We talked using the Enigma many times, and it made communications so much easier!



Photo 5: Leigh Sr with Enigma

I'm glad my father was able to pass a love of tinkering with things and ideas on to me, and that I was able to

use that to stay close to him in his last year. If you want to build your own, the designs, more photos, and a slide presentation are available at:

<https://github.com/wa5znu/enigma>

Leigh/WA5ZNU

(President — Continued from page 1)

the time to go before. April is usually a pretty busy month for me. What I discovered was that I just needed to carve some time out on my schedule to make sure it happened. I drove out on Thursday evening, making the obligatory stop at Harris Ranch for steak dinner. I spied some hams there, of course, though I didn't get a chance to talk to them. Visalia is only about 50 minutes from Harris Ranch, so I was at my hotel after a short drive.

I spent Friday, after catching up on some admin-istrivia in the morning, registering and then chat-ting with old friends. I ran into Rusty, W6OAT, and John, K6YP, among others. I also ran into my friends from Southern California, many of whom have come to hear my talks. I also talked to some people from the San Diego DX Club, where I will speak in mid-May. It was wonderful to see everyone. There was no time for much else. I took myself out for a quiet dinner that evening, as I was rather wiped out from the drive and needed to be up early for a 7am breakfast on Saturday.

The breakfast was prior to the NCDXF board meeting, and included ARRL officials and some well known DXers. One of them is Martti Laine, OH2BH, whom I've worked a number of times. After the breakfast, the convention started in earnest. I attended some sessions and then ran into even more people I knew. Some of you may remember Bob, AD6HF, on the 9am Talk Net some years ago. Well, there was Bob at lunch and we got caught up. He's moved from San Leandro to Inyokern and it sounds like he has a really nice antenna farm there. At 1pm we started our Radiosport 2.0 lightning talk session sponsored by Ward Silver, N0AX. Ward and I have communicated a lot recently about programs to help Amateur Radio stay alive and vibrant. There was also a demo planned by Jeri, AI6TK. We only had 5 minutes to get our point across, which is quite challenging. I was up second, which was great because I had to run to the ARRL Forum, which was scheduled for the same time slot. I did a mad dash between rooms and joined Dick, N6AA, and Jim, K6JAT, both ARRL directors. Dick talked for a long time about his own situation, as did Jim. I got a chance to

talk and introduce myself. That was fun and interesting. Video was recorded by Bob, N6TV, and should be up on YouTube shortly.

Pretty soon it was time for the "Attitude Adjustment Hour", which features adult beverages, and then dinner. There were great conversations both before and after dinner. The banquet featured a number of awards, including one for K6YP for the Elmering Project, and then a talk by Martti about Kosovo. It was fascinating to learn how much work went into not just getting Amateur Radio rejuvenated there, but to creating the nation itself.

Somewhere during the middle of the banquet, there was an acknowledgment of those who had become silent keys during the past year. Our dear friend and PAARA member Rick, N6DQ, was recognized. It was a special moment.

Please see the PAARA website for information on our Intel Museum Tour. I hope to see you all there. CU ON THE BANDS DE K6WX

April 18, 2018, Board Meeting Minutes

The meeting was held at Walt's QTH, commencing at 7:27 PM on April 18, 2018. In attendance were Kristen McIntyre, K6WX (Pres), Jim Thielemann, K6SV (Secretary/Membership), Walter Gyger K6WGY (Dir), Joel Wilhite, KD6W (Dir & Technical Coordinator). Those in attendance thanked Walt for hosting the meeting. A quorum was not present.

Kristen, (K6WX), commented on what a wonderful presentation Ralph Simpson gave on Cipher machines. Having presenters with widely interesting topics have a direct positive impact on meeting attendance from members and non-members.

Kristen mentioned her reserve of stories is a little better, but there is always a 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

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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, though not present at the meeting, had previously sent an email to the Board with this month’s presenter information. Bob Vallio, W6RGG, will give a presentation on the 2014 9K2HN Abdali, Kuwait DXpedition. This will be Bob’s 1st visit to PAARA since his election to the 2nd Vice President’s position with the ARRL.

Secretary’s report: Jim, K6SV, reported that there were 4 new members joining in April. All members who hadn’t renewed their memberships for 2018 have been dropped from the roster. Thus, the current membership stands at 166.

Treasurer’s Report: Ron, W6AZ, wasn’t able to attend but reported via email that the March proceeds were \$785 from various sources. This didn’t include a \$979 transfer from the PayPal account which represented the last 3 months of dues, T-shirts, badges, and the Intel field trip. Ron has a little catch up to do now that Tax “season” is over. He hopes to provide the Board with a complete financial status at the next Board meeting.

Under Old Business,

As you recall, the Electronic Flea Market (EFM) was held at Fry’s in Sunnyvale. Kristen, K6WX, dropped by mid-morning to check out the venue. She reported the event was well attended with a larger turnout than in the recent past. She also reported the space to be a bit smaller than we’ve been accustomed to. At this time, there hasn’t been any word on the location of the May EFM.

Kristen, K6WX, reminded the Board that the next field trip is to the Intel Tech Museum in Santa Clara on May 26. The event is followed by a picnic at Baylands Park in Sunnyvale. There is no cost to take the tour but there is a \$10 cost, to cover the food costs, for the picnic. This is a drive yourself trip. For more information, or to sign up and or pay for the picnic, see Marty, W6NEV, or visit our website: <http://www.paara.org/pages/events-current.html>

Joel, KD6W, reported on his investigation regarding a club Life Membership award plaque. As there wasn’t a quorum, no vote on the plaque

could be held. There was a discussion about adding the names of as many past Life Members as we could to the plaque. If you know of anyone who received this award, please let a Board member know their name and or call sign.

Joel, KD6W, also reported that the link to establish a redundant internet connection at the repeater site is close to being a reality. He and Jim, K6SV, plan on getting the dish installed on the tower and the feed line run this coming weekend. Installation of the equipment will follow along with testing the backup link.

Jim, K6SV, updated the Board on the status of the Field Day preparations. At the time of the Board meeting, the antenna party dates hadn’t been set. Dates are now set for May 5th and May 19th. See Doug, KG6LWE, or Marty, W6NEV, for more information. Bob Korte, KD6KYT, has been active in getting the word out about the event. He received a positive response from a Boy Scout Troop. A few members of the FD team have been invited to a Scout meeting to talk about the event to raise the scout’s interest. The details are still being worked out.

There are several other items on the agenda that haven’t been worked on very much or could wait until the next meeting, thus at this point there is no new news on them.

Under New Business:

Walt, K6WGY, mentioned the Backcountry Weekend in Henry Coe State Park is April 17 ~29. Once again Walt is involved with Amateur Radio communications for the event. He advised the Board that the frequencies being used are 7180 during the day and 3805 at night.

Jim, K6SV, indicated he attended the club meeting of KH6RS while on a recent vacation on Maui. Of interest was a discussion on their Field Day effort. Also, the dues structure of their club. The Board will likely have a discussion at a future meeting on that topic.

The Board meeting was adjourned at 8:27 PM.

Jim Thielemann, K6SV
Secretary/membership

Please welcome new members:

Doug Hendricks	KI6DS
Larry Reeves,	K0YPC
Christine Pastrokas	KK6PNV



April Raffle Winners

Left to Right, Front to Back

- 2nd prize Walt K6WGY — Arrow compact Yagi antenna
- 1st prize Darryl, KI6LDM — VFDX HT
- 4th prize Hannah, KM6NTA — Mini multi-meter
- 8th prize Steve, WB6KIO — Tube of solder
- 7th prize Andrew, N6DRU — Auto emergency kit
- 5th prize Rob, WO6NDR (ex-KI6GCL) — Headband magnifier
- 3rd prize Fred, W6BSD — Daiwa 2-position coax switch
- 6th prize Bob, KD6KYT — FRS radios

Palo Alto Amateur Radio Association, Inc.

PO Box 911 Menlo Park, CA 94026

Officers

President	Kristen McIntyre, K6WX kristen@alum.mit.edu	510-703-4942
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Secretary	Jim Thielemann, K6SV thielem@pacbell.net	408-839-6815
Treasurer.....	Ron Chester, W6AZ ron@taxhelp.com	408-243 2221

Directors

Director ('17-'18)	Joel Wilhite, KD6W kd6w@arrl.net	408-839-5948
Director ('18-'19)	Walt Gyger, K6WGY walt@tradewindsaviation.com	408-921-5901
Director ('18).....	Larry Rebarchik N6DB n6db@arrl.net	650 465-8210
Director ('18).....	Darryl Presley, K16LDM ki6ldm@arrl.net	650 255-2454

Appointed Positions

Membership.....	Vic Black, AB6SO ab6so@smrn.com	650-366 0636
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@rgktechsaves.com	408 396 4745
Badge Coordinator	Doug Teter, KG6LWE dteter@wawi.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	
Technical Coordinator ...	Joel Wilhite, KD6W kd6w@arrl.net	408-839-5948
QSL Manager	Marty Wayne, W6NEV	408-234-8023
Speaker Coordinator	Marty Wayne, W6NEV	408-234-8023

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	Joel Wilhite, KD6W	
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Technical Tips	Vic Black, AB6SO ab6so@smrn.com	650-366 0636
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.k6va.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 Texas Instruments Building E conference room in Santa Clara.
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, 442.425+ (pl 107.2) Thur.
Meets 2nd Mon each month @ 7:30 PM.
Contact: <http://www.qsl.net/sccara> or Clark Murphy KE6KXO 408-262-9334
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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Badges are ready for pickup.

If you would like to order a badge, see **Doug Teter, KG6LWE.**

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

<u>Week</u>	<u>Control Operator</u>
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, 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

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

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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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ARV'S, WA6UUT (SK)
 → WEDNESDAY ←
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 Call in on the N6NFI Repeater, 145.230 MHz, PL^o 100Hz

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440 – 444.475 up 5 MHz	DMR
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 408-839-6815, thielem@pacbell.net

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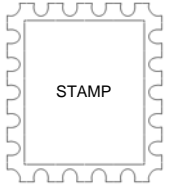
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- For Profit organizations and/or individuals: \$5-business card size, \$25-half page, \$50 full page or back cover per issue.

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PAARAgaphs — May 2018

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Palo Alto Amateur Radio Association, Inc.
 PAARAgaphs Newsletter
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FT-60R
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