

**W6OTX****W6ARA****PAARA NEWSLETTER**  
VOLUME 66, NUMBER 2, February 2015**K6OTA****K6YQT**

# PAARAgraphs



The Official Newsletter of the  
**Palo Alto Amateur Radio Association, Inc.**  
Celebrating 78 years as an *active* amateur radio club—Since 1937



## C82DX Mozambique 2013 International DXpedition

The Feb 6th speaker for PAARA is Rob Brownstein, K6RB, Rusty Epps, W6OAT, and Kevin Rowett, K6TD telling us about the C82DX DXpedition. Join us for a great talk and fun meeting.

### Upcoming Events

- Feb 6** PAARA General Meeting, 7:00 PM  
Cubberly Community Center, Room H-6  
400 Middlefield Rd, Palo Alto
- Feb 18** Board Meeting, 7:00 PM  
Everyone welcome!  
Round Table Pizza Parlor in Menlo Park
- Mar 1** PAARApLink—San Jose gun range
- March 21** Computer History Museum field trip



## President's Corner

February 2015

We've had a great month that just passed and we have another great month of PAARA activities coming up. There's also two big activities slated for March that you'll only find at The Friendlies Club Around.



The January meeting was our annual Homebrew Night at PAARA, and the creativity of

our membership was on full display. We had projects ranging from new antennas, to code oscillators, to builder clubs, homebrew recreations of favorite radios, software for radio control, and much much more. I just love seeing what each of you do with our hobby. We really appreciate those who took the time to prepare and show your work. I'd like to thank Howard W6HOC, Tony W6AWK, Rick W6NIR, Kelly WB6AAJ, Jon KI6RT, Ed W6ELA, Paul, AC6B, Bob KF6ABC, Joel KD6W, and Gerry N6NV for making Homebrew Night a success. I have to say that I especially liked the radio Rick, W6NIR, made as a home made copy of his dream radio. If I missed anyone, please e-mail me and let me know. I'll acknowledge you in the next PAARAgraphs. I took pictures of you and your creations which are available at [k6wx.smugmug.com/Electronics/PAARA-Homebrew-Night-2015/](http://k6wx.smugmug.com/Electronics/PAARA-Homebrew-Night-2015/).

This past month also featured the PAARA / FARS FARS / PAARA Winter Banquet. As you can surmise from the name of the event, it's a joint production of us and the Foothills Amateur Radio Society. I think of it as one last Holiday fling, though. This years Banquet featured a talk by Rich, KE1B, about Holiday DXpeditioning. It was a real hit. I think that each of us was imagining what it would be like to wine, dine, enjoy the sand and the surf, and somehow get in 6000+ Qs on some faraway island. Now that's the life! Rich keeps it simple too, with an easy to assemble "DXpedition

(President — Continued on page 7)

**Three notable scientists ... each in a different field, but all with a shared interest in their youth ... one that most of us share as well. AH6CY takes a closer look.**

## Three Scientists and Their Radio Days

Hiroki Kato, AH6CY

Part 1. First  
 published in CQ  
 Magazine

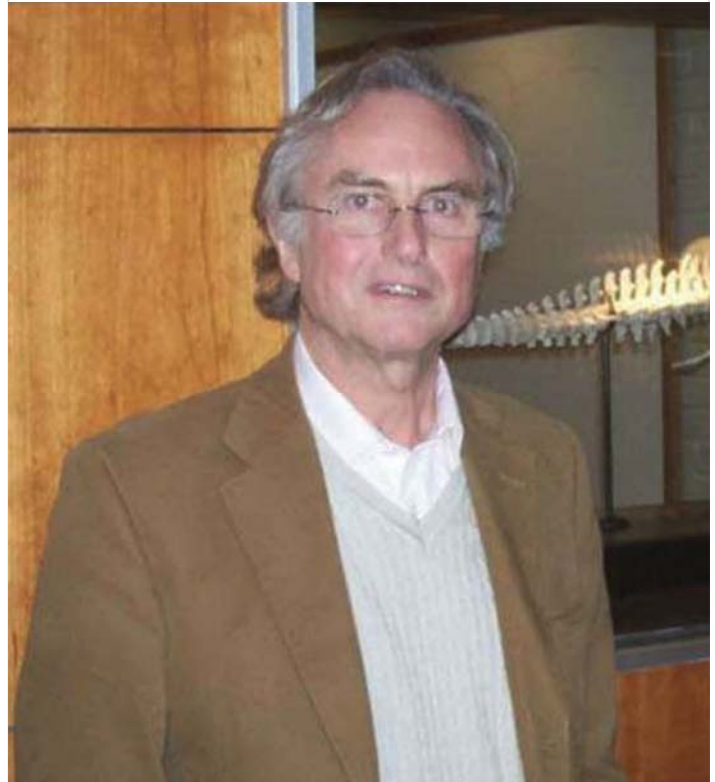
It is common among radio amateurs to attribute their professional success or rewarding careers to their early exposure, usually in their teenage years, to tinkering with radios. I count myself among lucky individuals who benefited from such experience, though I did not turn out to be a famed scientist or a wildly wealthy engineer.<sup>1</sup>

There are, however, extraordinarily successful scientists whose achievements are directly and tangibly influenced by their exposure to radios in their youth, though they did not necessarily become licensed hams. In one of my favorite areas of reading, science or course, I have come across three scientists whose own published writings or utterances relate such direct connections. I would like to share my fortunate encounter with the relevant passages with the readers.

### **Richard Dawkins**

Richard Dawkins (photo A) — a Cambridge University scientist who has not yet received a Nobel prize but should have gotten one long ago, in my opinion, and whose contribution to science and philosophy goes far beyond his specialization, evolutionary science — just published his memoir, *An Appetite for Wonder*. After reading most of his earlier books, beginning with his now classic *The Selfish Gene*, I could not wait to read it as soon as it became available last year.

I learned that, among other family connections, Dr. Dawkins' maternal grandfather, Alan Wilfred Ladner, was a radio engineer in the employ of the Marconi company and worked around 1913 at the same radio station at Poldhu where in 1901 Marconi had succeeded with the first ever transatlantic radio transmission. (Ladner joined too late to be involved in that historic event.) However, it was Dawkins' uncle, Colyear Dawkins, who encouraged him to build radios in his



**Photo A.** Evolutionary biologist Richard Dawkins, pictured here at Randolph College in Virginia, has family connections to radio. His grandfather worked at the Marconi station in Poldhu, England, one end of the first transatlantic radio communication. (D. Shedd photo)

teens. Uncle Colyear gave little Richard a book by F. J. Camm that contained the plans to build a crystal set, which Dawkins recalls, "just faintly worked."

However, Dawkins moved on to a one-tube (valve) radio...

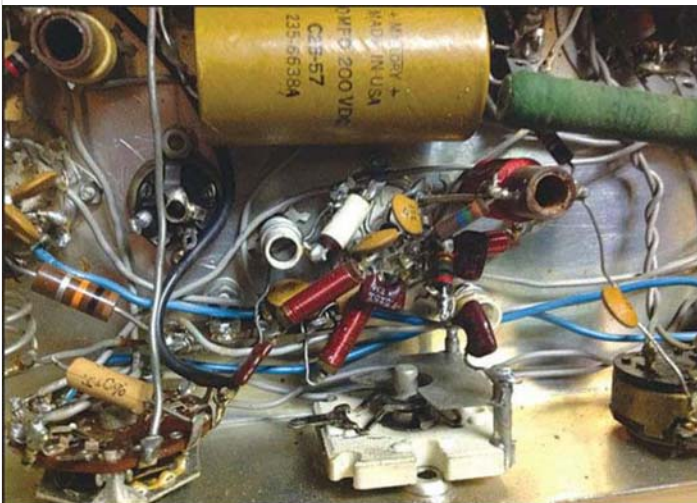
... with a large, bright red valve—which worked slightly better but still needed headphones rather than a loudspeaker. It was unbelievably badly made. Far from arranging the wires tidily, I took delight in the fact that it didn't matter how untidy were the pathways they took, stapled down on a wooden chas-

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sis, so long as each wire ended up in the right place. I won't say I went out of my way to make the course of each wire untidy, but I certainly was fascinated by the mismatch between the topology of the wires, which really mattered, and their physical layout, which didn't. The contrast with modern integrated circuit is staggering. Many years later, when I gave the Royal Institution Christmas Lectures to children of about the same age as I was when I made my one-valve set, I borrowed the hugely magnified layout diagram of an integrated circuit from a modern computer company to show them. I hope my young auditors were awestruck and a bit bewildered by it. Experimental embryologists have shown that growing nerve cells often sniff out their correct end organs in something like the way I built my one-valve set, rather than by following an orderly plan like an integrated circuit.<sup>2</sup>

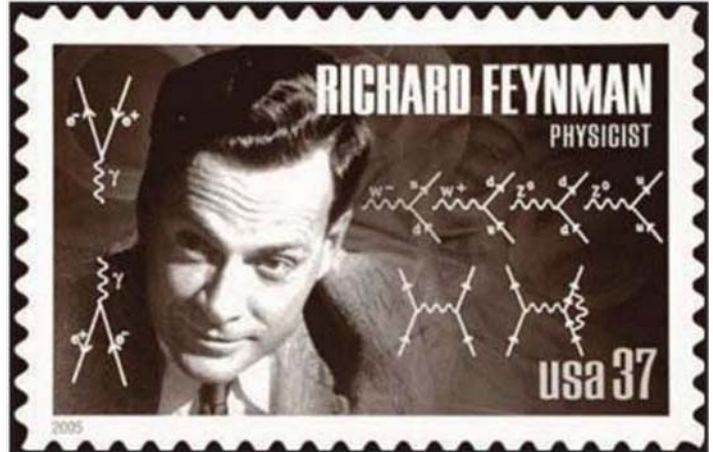
What fascinates me in this passage is that Dawkins finds a simile between the untidy wirings (no doubt between, to and from resistors, capacitors, and tube pins) and animals' nerve cells "sniffing out their correct end organs" in embryonic development. Many of us who played with tube radios know exactly what Dawkins means by how untidy wiring (photo B) doesn't matter as long as the electrical pathways are correctly arranged.



**Photo B.** Dawkins compares the seemingly haphazard physical arrangement of wires in a point-to-point circuit with the way in which embryonic nerve cells "sniff out" their correct organs in a developing organism. (W2VU photo)

## Richard Feynman

The second scientist I wish to mention in connection with youthful interest in radio is Richard Feynman (photo C), a Nobel laureate physicist from California Institute of Technology who unfortunately died in 1988 at the age of 69.



**Photo C.** Richard Feynman, who was honored with a postage stamp in 2005, got his start fixing radios for neighbors and relatives.

Feynman wrote many books both for professional and lay audiences. Many biographies and many books about his work have also been published.<sup>3</sup> Feynman is one of my favorite science writers<sup>4</sup> and I have collected and read many books and articles by and about him over the years. There is one book in my view, that does the most excellent job of a biographical sketch of Dr. Feynman—*Genius: The Life and Science of Richard Feynman* by James Gleick. Then, too, there are Feynman's own autobiographical writings—*Surely You're Joking, Mr. Feynman!* And *What Do You Care What Other People Think?*

Gleick's description of Feynman's formative years includes the following:

He assembled a crystal set, attached over-size earphones from a rummage sale, and listened under the bedcovers until he fell asleep. Sometimes his parents would tiptoe in and take the earphones off their sleeping boy. When atmospheric conditions were right, his radio could pull in signals from far away — Schenectady in upstate New York or

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even station WACO from Waco, Texas.<sup>5</sup>

Apparently, Feynman was luckier than Dawkins with his first crystal radio. As we know, the location where one receives radio signals, the season and time of the day, the distance from transmitting stations, etc., all affect how well one can pick up signals. Feynman's house outside of New York City was a better location than where Dawkins spent his radio days in Devonshire, England. Also, the sunspot cycle was at about the highest point when Feynman was playing with his radios, and, according to my estimation, the sunspots were not cooperative with Dawkins when he was playing with his sets in early 1950s, the highest point in that 11-year cycle occurring in 1957.

Gleick continues:

He accumulated tube sets and an old storage battery from around the neighborhood. He assembled transformers, switches, and coils. A coil salvaged from a Ford automobile made showy sparks that burned brown black holes in newspaper. When he found a leftover rheostat, he pushed 119-volt electricity through it until it overloaded and burned. He held the stinking, smoking thing outside his second-floor window, as the ashes drifted down to the grassy rear yard. This was standard emergency procedure. When a pungent odor drifted in downstairs during his mother's bridge game, it meant that "Ritty" was dangling his metal wastebasket out the window, waiting for the flames to die out after an abortive experiment with show polish; he meant to melt it and use the liquid as black paint for his "lab", a wooden crate roughly the size of a refrigerator, standing in his bedroom upstairs in the rear of his house. Screwed into the crate were various electrical switches and lights that Ritty had wired, in series and parallel. His sister, Joan, nine years younger, served eagerly as a four-cents-a-week lab assistant. Her duties included a finger into a spark gap and enduring smiled shock for the entertainment of Ritty's friends.

In Feynman's own words, the scenes of how he tinkered with radio and electricity are recreated vividly:

One day, when I had my earphones on, I connected them to the loudspeaker, and I discovered something: I put my finger in the speaker and I could hear it in the earphones; I scratched the speaker and I'd hear it in the earphones. So I discovered that the speaker could act like a microphone, and you didn't even need any batteries. At school we were talking about Alexander Graham Bell, so I gave a demonstration of the speaker and the earphones. I didn't know it at the time, but I think it was the type of telephone he originally used.

Feynman went on to recount how he began to get a reputation as a kid who could fix radios.

One day I got a telephone call:

"Mister, are you Richard Feynman?"

"Yes."

"This is a hotel. We have a radio that doesn't work, and would like it repaired. We understand you might be able to do something about it."

"But I'm only a little boy," I said. "I don't know how ..."

"Yes, we know that, but we'd like you to come over anyway."

It was a hotel that my aunt was running, but I didn't know that. I went over there with — they still tell the story — a big screwdriver in my back pocket. Well, I was small, so any screwdriver looked big in my back pocket. I went up to the radio and tried to fix it. I didn't know anything about it, but there was also a handyman at the hotel, and either he noticed, or I noticed, a loose knob on the rheostat—to turn up the volume—so that it wasn't turning the shaft. He went off and filed something, and fixed it up so it worked.

The next radio I tried to fix didn't work at all. That was easy: it wasn't plugged in right. As the repair jobs got more and more complicated, I got better and better, and more elaborate. I bought myself a milliammeter in New York and converted it into a voltmeter that had different scales on it by using the right lengths (which I calculated) of very fine copper wire. It wasn't very accurate, but it was

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good enough to tell whether things were in the right ballpark at different connections in those radio sets. The main reason people hired me was the Depression. They didn't have any money to fix their radios, and they'd hear about this kid who would do it for less. So I'd climb on roofs to fix antennas, and all kinds of stuff. I got a series of lessons of ever increasing difficulty. Ultimately I got some job like converting a DC set into an AC set, and it was very hard to keep the hum from going through the system, and I didn't build it quite right. I shouldn't have bitten that one off, but I didn't know.<sup>6</sup>

Feynman's resourcefulness and enterprising spirit are legendary. His youth spent in the post-Depression era apparently gave him added serendipitous opportunities for playing with and learning from radios by putting himself in great demand in the neighborhood. Feynman continued with another problem he encountered, brought to him by a grumpy neighbor whose radio began to make horrendous noise when first turned:

And all the time, on the way to his house, he was saying things like, "Do you know anything about radios? How do you know about radios—you're a little boy!" He was putting me down the whole way, and I was thinking, "So what's the matter with him? So it makes a little noise."

But when we got there I went over to the radio and turned it on. Little noise? My God! No wonder the poor guy couldn't stand it. The thing began to roar and wobble—WUH BUH BUH BUH BUH—a tremendous amount of noise. Then it quieted down and played correctly. So I started to think, "How can that happen?"

I started walking back and forth, thinking, and I realized that one way it could happen is that the tubes were heating up in the wrong order; that is, the amplifier was all hot, the tubes were ready to go, and there was nothing feeding in, or there was some back circuit feeding in, or something wrong in the beginning part—the RF part—and therefore it was making a lot of noise, picking up something. And when the RF circuit was finally going,

and the grid voltages were adjusted, everything would be all right.

So the guy said, "What are you doing? You come to fix the radio, but you're only walking back and forth!"

I said, "I'm thinking!" Then I said to myself, "All right, take the tubes out, and reverse the order completely in the set."

Many radio sets in those days used the same tubes in different places. ...So I changed the tubes around, stepped to the front of the radio, turned the thing on, and it was as quiet as a lamb: it waited until it heated up, and then played perfectly—no noise.

We can clearly see how his radio days served as his lab time in physics. By the way, Joan Feynman, his one-time young "lab assistant," is an accomplished academic physicist in her own right. She, too, no doubt benefited from her brother's tinkering with radios.

To be Continued...

## Notes

1. While I was a college professor for 20 years, my switch to a more financially rewarding career in high-tech industry was possible mainly because I understood enough of the emerging micro-computer technology thanks to the knowledge of electronics and engineering acquired through amateur radio. I had never taken a single formal course on radio or electronics in school, but I had tinkered with radios since fourth grade in Japan, including building my own all-tube receivers and transmitters in high school, I never owned a commercially built radio until I was well into my adulthood.
2. Richard Dawkins, *An Appetite for Wonder*, Harper-Collins Publishers, New York, 2013
3. There seems to be a "Feynman industry" even as late as 2013 to cash in on would-be authors' acquaintance with him or his work, however tenuous or insubstantial; a number of books to me, frankly, proved to be disappointing.
4. My other favorite science writers are Stephen Jay Gould (SK), Carl Sagan (SK), Steven Pinker, Oliver Sachs, and (naturally) Richard Dawkins.
5. James Gleick, *Genius: The Life and Science of Richard Feynman*, Vintage Books, New York, 1993
6. Richard Feynman, *Surely You're Joking, Mr. Feynman!*, WW Norton, New York, 1985

## Fallen tower at Bayfront Park

Matt Milde is an “Official Friend of PAARA.” As the Recreation Coordinator for the City of Menlo Park, he has cheerfully accommodated the unusual use we put Bayfront Bedwell Park to for Field Day every year.

I was pleasantly surprised to receive an E-mail from him a couple of weeks ago, but knew exactly what it was about from the subject, “Fallen tower at Bayfront Park.”

Anyone familiar with our Field Day site, will remember the tower that has been standing on the hill to the West of our current 1,000 foot circle for longer than we’ve been holding FD there. It had meteorological instruments on it at one time but had not seen use in many years.

Each year when we first get to the park, we comment that it’s still standing, although the starboard list seems a few degrees worse. Well, it finally succumbed to gravity. Thankfully, no one was anywhere near it when it fell. Matt sent me this picture, and asked if it was one of ours.

I thanked him for asking, but assured him that ours leave the park with us every year. After telling him what I knew about it, I asked if he’d like the Club to remove it for the City.

Of course, he took me right up on the offer. Menlo Park’s budget for these sorts of rude surprises is probably no better than any city’s, so this seemed like a perfect opportunity to express PAARA’s gratitude for their support in a meaningful way.

I pinged a few members of the FD antenna/tower team and three of us, Gerry, N6NV, Gary, KI6HIG and I went over to the park at lunchtime that Friday for a “pre-field.”

It appeared that the North-East guy, the up-wind leg, had failed, and the tower fell in the opposite direction, probably on a windy day. We’ve had few of those recently, but no one’s sure when it fell.

We found all the hallmarks of Rohn 25, a triangular galvanized steel tower that bolts together in 10 foot sections. This one had the interesting mid-tower tilt-over hinge with the “Strong-back” arm locking the top half of



The tower fell hard like a “noodle”

the tower upright. It was about 50 feet tall when it went up.

Unfortunately, it fell hard, conforming to the uneven ground it fell on a bit like a noodle. There are probably only one or two sections that are still straight. After trying a couple of bolts, which turned easily, we agreed to meet there with a few more of the team the last weekend of the month.



40 bolts had to be cut to take it apart

Joining us for a beautiful day in the park on Sunday the 25th were Don, KE6CFX, and Jim, K6SV, who brought serious cutting tools. Good thing he did. The bolts we had tested were almost the only ones we didn’t have to grind off. Of course!

We probably had to cut 40 bolts to take it apart, but once we had the bolts out, the sections came apart relatively easily. Don cut the base-plate bolts flush with the concrete, and we trimmed the guy anchors off below grade.

Even with a few complications, we had it fully disassembled and loaded onto Gerry’s faithful old truck for the trip South in about two hours. What a team!

I sent Matt a report on Monday with a couple of pictures of the process, and the result. He responded with thanks, which he asked me to pass along to the crew. My thanks too guys, for helping to keep our relationship with the City strong.

Doug Teter  
 KG6LWE  
 PAARA Field Day & Tower Removal Team Coordinator



All loaded on Gerry’s faithful old truck!

(President — Continued from page 1)

in a Box” and a Buddipole. Getting the station on the air seemed like a snap. Beyond the talk, there was wonderful dinner conversation to be had with all of our friends. I had a chance to catch up with people whom I haven’t spoken with in quite a while. It was also great to be able to see everyone face-to-face. I hope that we can do that again at an upcoming PAARA meeting too - hint, hint. Of course, everyone was waiting for the big raffle to see who would win the Elecraft KX3. The big winner this year was Josh, K6JSH. Congratulations!

There are a couple of PAARA events coming up that I’d like to remind everyone about. First, the PAARApLink is soon, but the date has changed. Please disregard my earlier mention of a date in February. Our hosts at the 10th Street Range graciously offered to reschedule the event when they heard that I would be unable to make it because of the Yuma Hamfest. It is now scheduled for Sunday, March 1st. For those who aren’t aware, this event is where ham radio and the 2nd Amendment come together. The types of firearms that are allowed are restricted to handguns, shotguns, and rimfire rifles, for the most part. More details about the range, including the range rules, are available here: [http://www.scvrc.com/10th\\_street.htm](http://www.scvrc.com/10th_street.htm). Please don’t hesitate to e-mail me if you have any questions.

Second is the upcoming PAARATrip to the Computer History Museum. Please see the details elsewhere in PAARAgaphs, and don’t forget to get your \$10 in to Marty, W6NEV, so that you can join us. I’ve heard tell that my mythical son, KG6SVI, might even make an appearance for this. It’s that good! So, until I see you at one of these upcoming events ... TAKE CARE ES 73 DE Kristen K6WX

## Raffle Prizes

1st Kenwood TM281A / 2m Mobile Transceiver

- High Power 65W Output
- Large Front Speaker
- Vivid Amber LCD Display with 32-step brightness control
- 200 Memory Channels, plus one call channel



2nd Two Midland LXT118 FRS/GMRS Radios



3rd Stanley Ratcheting Screwdriver (Thanks Vic Black AB6SO!)

- Three-position switch enables clockwise and counter-clockwise ratcheting and locked position
- Ergonomically designed bi-material handle
- Nickel-plated bar for corrosion resistance



4th MFJ 108 Dual Band Clock

- Features a dual display for both 24 hour UTC and 12 hour local time. 4 x 1 x 2 inches.
- You can synchronize the two clock faces to WWV for split-second timing.
- Clocks are quartz controlled for excellent accuracy. The battery is included with both models.



5th ARRL Pocket Repeater Directory

6th Bongo Ties

### January 2015 Board Meeting Minutes

The January Board Meeting was not held due to most of the board members having conflicting schedules. An email poll was taken at which time the board decided to cancel the meeting. There were a record number of new members joining in January as listed below.

Jim Thielemann  
Secretary/membership  
K6SV

#### New Members:

Mark Miller	AE6TT
Cheryl Miller	W6RHJ
Cliff Lloyd	KN6DH
Keith Dimmick	N6KDX
Nicole Dimmick	KK6NHP
Branson Collins	KK6QLF
Brian (Greg) Stegman	KK6QIW



### January Raffle Winners

**Front: Clark KE6KXO**  
**Back Row left to right:**  
**Paul KK6HWN, Walter K6WGY,**  
**Howard W6HOC, Mark AE6TT,**  
**Gerry N6NV**

**Not Shown: Brian KK6QIW**



Set aside Saturday, March 21, 2015 and get your GEEK ready, PAARA is touring the Computer History Museum. We are being offered a docent guided tour of the museum including a private demonstration of the IBM 1401. The docent tour will last about two hours, then self guided for as long as you want. There is also a gift shop.

<u>Where:</u>	<u>When:</u>
Computer History Museum 1401 N. Shoreline Blvd Mountain View CA94043	Saturday, March 21 at 10 AM  There is ample parking available at the museum

Tour price will be \$10 per person. I will be taking payments. Cash or check only please. Reserve your spot for a great tour.

More information to be posted on the PAARA web site as it becomes available.



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Station Trustee K6OTA.....	Ron Chester, W6AZ	
Property Manager .....	Gerry Tucker, N6NV	
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Raffle Coordinator.....	Jim Rice, K6AK	650-851-2274
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Photographer .....	Bill Young, K6VVO	
	jdjsinger@sbcglobal.net	

**VE Exams**

3rd Saturday each month, 10:30AM, 145.23- PL=100Hz  
 Redwood City Main Library, Community Conference Room  
 1044 Middlefield Road, Redwood City, CA  
 Contact: <http://amateur-radio.org> or 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-October, 6am-2pm  
 Howard M. Krawetz, N6HM 650-856-9761  
 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.k6va.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://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 1<sup>st</sup> 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 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)

**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 2<sup>nd</sup> Mon each month @ 7:30 PM.  
 Contact: <http://www.gsl.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](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 3<sup>rd</sup> Wednesday of every month.  
 Contact: <http://wvara.org>, Bill Ashby N6FFC, 408-267-3118, [N6FFC@Juno.com](mailto:N6FFC@Juno.com), or [N6FFC@ARRL.NET](mailto:N6FFC@ARRL.NET)

**American Red Cross,  
 Santa Clara Valley Chapter**

Contact: <http://santacalaravalley.redcross.org> or Scott Hensley KB6UOO, (408) 967 7924  
[fshensley@Novell.com](mailto:fshensley@Novell.com)



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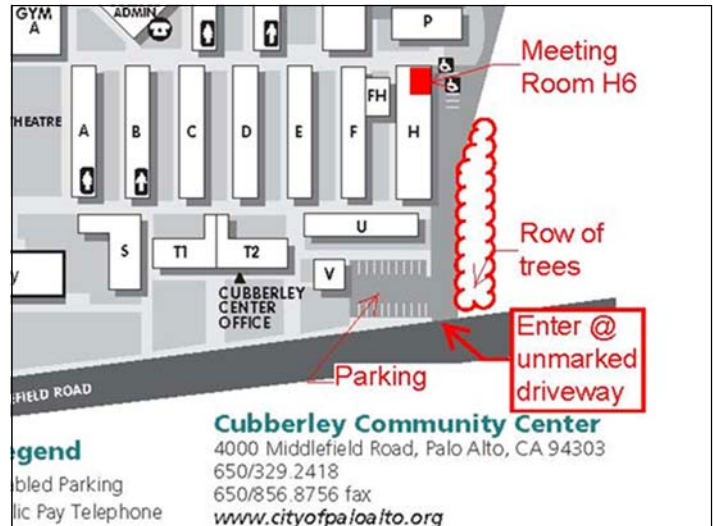
If you would like to  
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**Doug Teter, KG6LWE.**

## 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 <sup>st</sup>	Joel KD6W
2 <sup>nd</sup>	Doug - KG6LWE
3 <sup>rd</sup>	Jack - N1VSL
4 <sup>th</sup>	Marty - W6NEV
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.



**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 \$20.00 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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<p><b>RADIO IN THE PARK</b></p> <p>9:30am - 12:30pm                  Check Back In the Spring</p> <p><b>QTH:</b>                  Agnews Historic Park                  4030 Lafayette St.                  Santa Clara, CA 95050</p> <p>N 37° 23.549                  W 121° 57.297</p>	<p>Ilse Beck, E. A. , KI6IBM</p> <p>BeckBusiness Services</p> <p>441 N. Central Avenue, #9                  Campbell, CA 95008</p> <p>Enrolled Agent                  Income Tax                  Bookkeeping/Payroll                  Elder Care                  Consultations                  Billing and A/R</p> <p>Phone/FAX: 408-267-8234                  Email: ilsebeck@jps.net</p>
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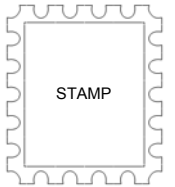
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