



## Cathay July 2013

[www.cathayradio.org](http://www.cathayradio.org)

*revised 7/13/2013*

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**Mission:** The Cathay Amateur Radio Club is basically an active social club of Ham Radio Operators and their spouses. We support local community requests for HAM emergency communications. Several of us are trained in CPR/ First Aid and are involved with community disaster preparedness.

**Monday Night Net Time:** 9 PM Local Time/PST, Frequencies: 146.67MHz -600KHz PL85.4 and 442.70 +5MHz PL 173.8. The repeaters are linked only during the CARC Monday night net. The CARC Monday night net is the best way to find out the latest club news. All check-ins are welcome.

## Message from the President: George Chong, W6BUR

Hello CARC Members and Friends,

I wish to thank everybody that came to the annual CARC field day and pot luck luncheon at my home on Saturday June 22, 2013.

For the record, here is the list of all the folks who I recall attended the CARC get together:

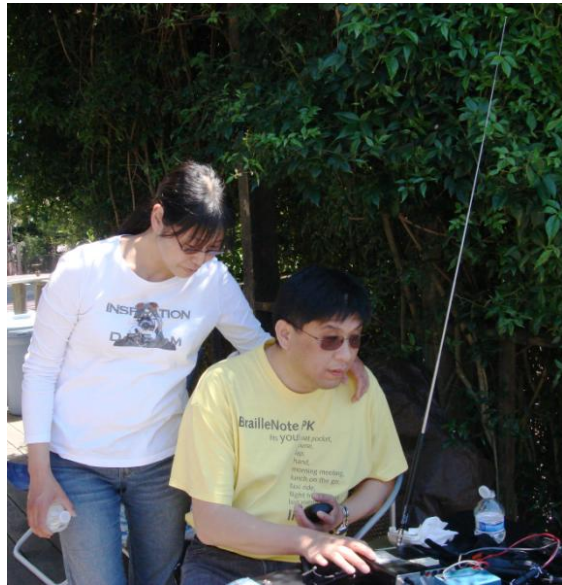
George W6BUR, Hetty WB6SHU, grandson Ryan Chong KJ6WGS, Gary KN6LV & Chris KE6FOX Gin, Eric N6FZD & Keiko Gin (Gary's brother-also a ham & sister-in-law), Maria Gin W6SIJ (Gary's mom), Gil Gin KJ6HKD, Bob Torio K6OPD, Dave NC6D & Judy Chan, Yili KG6TP & Cindy Liang and daughter, John Tim W6QNT, Rodney Yee KJ6DZI, Grant Gaugher KJ6WGT, Cy Moy - WB6TCF, Bill Chin - KC6POF

Everybody generously brought lots of delicious food such that people were able to bring back home a variety of different dishes.

As an added bonus several of us made it over to the ORCA Field Day setup at Sequoia Arena in Oakland.



Left to right: Bob Torio-K6OPD, Cy Moy-WB6TCF, Gil Gin-KJ6HKD, John Tim-W6QNT and Grant Gaugher-KJ6WGT



Judy and David Chan- NC6D making radio contact on the 40 meter band



Bill Chin - KC6POF reading aloud a technical article to Maria Gin - W6SIJ



Left to right: Gary - KN6LV, Maria Gin - W6SIJ (Gary's mom), ris Gin - KE6FOX (Gary's xyl), Keiko Gin (Eric's xyl) and Eric Gin N6FZD (Gary's brother).





George Cheong - W6BUR



Grant Gaugher - KJ6WGT



Rod Yee- KJ6DZI & Bill Chin-KC6POF

## **ORCA Field Day**

As I mentioned earlier after our CARC Field Day and Luncheon, several of us (Bob Torio-K6OPD, Cy Moy-WB6TCF, Gil Gin-KJ6HKD, George – W6BUR, Ryan - KJ6WGS and Rodney – KJ6DZI and Cy Moy - WB6TCF ) headed over to the ORAC Field Day held at Sequoia Arena. A few pictures taken at the ORCA event are as follows:



One of three ORCA Communications Shack Setups



Several Orca members having some tri-tip dinner



Ryan and George observing the 2 meter / 440 Mhz communications. Liz Brashers – KI6JJR, Bob Firehock – KE6IUE



The Kenwood Radio Gear used for the 2 meter / 440 Mhz.



Ryan Chong- KJ6WGS receiving CW guidance from Peter Strauss - KO6R





Ryan Chong- KJ6WGS (George Chong's Grandson) making his very first CW contact on the 40 meter / 7 MHz band during the ORCA Field Day, June 22, 2013.

A very memorable and proud moment for both Ryan and George Chong.

This was made more special since Ryan only learned Morse Code from his grandfather; George Cheong a day before the Field Day!



Left to right: Albert Mossman - KG6VMA and unnamed co-operator



Radio Operator: Eric Gomes – AK6Y



From left to right the following ORAC Club Members:  
Gil Gin - KJ6HKD, John Hargraves - K6ZTF and Mike Calvillo – KB9EWP





Tom Tazelaar -KG6MAC (ORCA President who cooked up a wonderful Tri-Tip dinner for field day) and Gil Gin – KJ6HKD (ORCA Safety Officer)



Varon Smith - WS6V (Public Information Officer)



ORCA members settling down to dinner.



One of several antenna setups.





Bob Torio-K6OPD, Gil Gin-KJ6HKD and Eric Gomes – AK6Y

## **Public Service Announcements**

There are several upcoming events that may be of special interest to our CARC members.

- Auxiliary Communications Service (ACS) has some very interesting informational events planned. Verizon Wireless will demonstrate some of their specialized communications hardware to be used during emergencies. This event will take place during ACS regularly scheduled meeting at 7pm Tuesday July 16, 2013
- The California Historical Radio Society is hosting their annual fund raising event on Saturday 10am, July 20th 2013. KRE building that houses CHRS collection is no longer for sale to the CHRS.

## **Featured Tech Article:**

It has been superseded with the **Technical Session** announcement. The Technical Session is a combination HAM party event and technical presentation

Ed will be hosting the Technical HAM Session at his home in Sunnyvale on Saturday August 10, 2013. The Technical presenter will be Ron Quan-KI6AZB. Free lunch will be provided and a raffle will be held for very impressive prizes. Further details are within the **Technical HAM Session** portion of this newsletter.

## **CARC Final Wrap Up Message:**

Chat sub s'em to all you CARC members!

- George W6BUR.



# Public Service Announcements

## HAM CRAM / HAM Licensing

For upcoming HAM Licensing locations please refer to:

<http://www.arrl.org/find-an-amateur-radio-license-exam-session>

## Bart Lee – K6VK

CHRS' annual fund raising event is **Saturday, July 20th 2013**. Gate opens at 9 AM. Program starts at 10. It's a full day of radio fun. **CHRS' annual fund raising event** is our biggest event of the year. This is the annual event that brings the Broadcast Legends together with the California Historical Radio Society and its' Bay Area Radio Museum and Bay Area Radio Hall Of Fame for a full day of radio fun.

We gather at the historic KRE radio station building at the foot of Ashby Avenue in Berkeley, home of the CHRS Radio Museum and Bay Area radio Hall of Fame. The gates open at 9 AM with vintage 78s played from our 1950s radio control room.

The show starts at 10 AM. Again this year, our Master of Ceremonies will be the very popular Morning News Man, KCBS' Stan Bunger. We begin with our live auction of vintage radios, ham gear, test equipment and other classic electronics. The auction will be divided into 3 sections. This year our Special Guest auctioneer will be former KFOG News Director and current KGO Evening News Man, Peter Finch. We have started building the auction catalog. We plan to have the usual 180 to 200 lots. **CLICK HERE TO VIEW THE AUCTION CATALOG**. Check back often as new items are added.

Are you ready for a live radio show? Well, The Broadcast Legends Old Time Radio Players will present, "The Lone Ranger's Origin". This program originally aired on June 30th, 1948. Don't miss this presentation as we learn how the legend of the Lone Ranger began. And as always the Legends will present a newscast from past, which let's us see how good, or bad, we have it today.

If you enjoy vintage live jazz music, we have that too. We will proudly present the Joyful Noise Jazz Band. They specialize in jazz music of the 1920s, '30s, and 1940s jazz in the style of Lu Watters. Lu Watters was very a popular jazz musician who played and recorded at KRE in the '40s.

We will announce the inductees for the 2013 Class of the Bay Area Radio Hall Of Fame. Don't forget to vote for your favorites. Just go to [www.BayAreaRadio.org](http://www.BayAreaRadio.org) to cast your vote.

If that's not enough, we will have a salute to the 40th anniversary of American Graffiti, featuring the cars used in the movie. In 1972 George Lucas used the KRE building to film the Richard Dreyfuss and Wolfman Jack scenes for the movie, which was released in 1973.

But wait... there's more! We offer a great barbeque lunch, beverages and the CHRS bake sale. Announcement of the CHRS Volunteer of the Year. A big hit is our Antique Electronics Flea Market. Discover Ham Radio with W6CF. We have celebrity interviews, tours of the CHRS Museum and Radio Hall of Fame, a raffle for some great prizes and some special surprises.

This whole day devoted to all things radio is just a \$5 donation at the gate. Please bring your friends and family. Children under 12, free. For more information and the auction catalog, please visit [www.CaliforniaHistoricalRadio.com](http://www.CaliforniaHistoricalRadio.com) or call Steve Kushman at (415) 821-7671 or (415) 203-2747.

### **Attention all HAM, it is California Historical Radio Society Mayday!!**

The California Historical Radio Society (CHRS) and its amateur radio station W6CF is caught up in its landlord's bankruptcy (Inner Cities Broadcasting).

TODAY'S UPDATE – July, 2013 –

### **KVTO-AM is Sold – How This Effects CHRS & The KRE Purchase**

The KRE PURCHASE – The following prepared statement by the CHRS Board of Directors was presented during the CHRS General meeting, June 1st at KRE:

“We have been informed that KVTO has been sold. Early indications are that the successful bidder is not inclined to sell the building to CHRS at this time. The investor toured the building with a commercial real estate agent May 28th and has implied that they intend to assess the best use of the property and the building in the coming months. This is an unexpected turn of events. CHRS is setting up a meeting with the new owner to discuss our future at 601 Ashby. We will keep you informed.”

To our valued Members, friends and supporters of The California Historical Radio Society, The Bay Area Radio Museum, The Bay Area Radio Hall of Fame and The Society Of Wireless Pioneers:

A wise man named Paul Bourbin, who saved CHRS from extinction many years ago, has told us for a long time, “you have to own it.” He is referring to the building and land that houses a museum. How correct Paul is and what a lesson we are now learning. Well we tried, and at this moment in time the chances of us owning this property are slim. This may change. For the last year we have been operating and making decisions



based on the best information we have been given. The circumstances that would have allowed us to buy KRE at this time were completely out of CHRS' control.

Are we disappointed, of course. Are we giving up on securing a permanent home for CHRS, of course NOT. It has been a privilege and a rare opportunity that not many groups have had to be headquartered in a historic building, rent free for almost 10 years. Until we have a meeting with the new owner, we do not know how much longer we will be at 601 Ashby. While we may be there for a long time, we just don't know for sure right now. What we do know, is how important it is to protect and preserve our museum collection. These artifacts are the heart of what CHRS is about. We do know how important it is to have a secure and safe place for the Maxwell Library, the CHRS and SOWP Archives. A place where discarded radios are made to come alive again. A place to gather and exchange ideas and information. A place for W6CF to operate. A place to teach and learn about radio's history and its' importance in the Bay Area. And a place to celebrate the luminaries who make up the Bay Area Radio Hall Of Fame.

The new owner may yet offer to allow us to stay beyond our current license which ends this September. However, we must look to the long run, be prepared, and begin an earnest search for our own permanent home. To this end we have a new Board of Director's Sub-committee comprised of Directors Philip Monego and Tom Bonomo with assistance from Dennis Monticelli. This committee's task is to scout out possible future locations for the CHRS Headquarters and Museum. It is vitally important for CHRS to secure a permanent location to continue our activities relating to radio preservation and history. Many of you may have ideas or connections for a new location. If you do please email them to Tom Bonomo or Philip Monego.

Our dream location is in the Central Bay Area. Our dream building is historic, single story, 6,000 to 12,000 or more square feet and is secure. Our dream parking lot will fit 100 or more cars. Our budget now is almost \$690,000+, unless someone wants to donate a property to CHRS for a nice tax write off. We can not lose momentum in our fundraising efforts and our constant pursuit of historical preservation. We have been assured by our 3 members who have made \$100K pledges and others, that they have confidence in CHRS' ability to find a permanent home, so their pledges will remain. We hope this holds true for all reading this.

This past year has been quite an experience for CHRS. You all have shown overwhelming support and confidence in our efforts to raise funds for a permanent location devoted to radio. CHRS would not be the fine organization it is today without your support. The door is not closing right now. But, if and when does close, another one will open giving CHRS limitless possibilities for a bright future.

Now we must focus on Radio Day By The Bay 2013 and make this July 20th's event, the best ever!

I'm always available and do appreciate your comments.

Best Regards, Steve Kushman

(415) 203-2747

[kushseal@flash.net](mailto:kushseal@flash.net)

[REMEMBER – You can pledge now, but you need not send any funds until we need them. CLICK HERE TO PLEDGE.](#)

TODAY'S UPDATE – June 5th– We started with \$93,000 in our Museum Fund last June, and today we have 263 donations and pledges totaling \$689,290! THANK YOU! Our goal is \$750,000+. Holy Cow, we have already raised nearly three quarters of a million dollars! It's downhill from here. We have done so well, please dig deeper and make this happen! We should be able to raise the rest with your help and support.

EVEN THOUGH WE ARE NEARING OUR GOAL, OUR FUND RAISING MUST CONTINUE. WE ARE AWARE THAT SOME OF YOU MAY NOT BE ABLE TO FULFILL YOUR PLEDGES, SO OTHERS MUST STEP UP AND DONATE FOR THE FIRST TIME OR INCREASE THEIR PLEDGES AND DONATIONS. WE ALSO HAVE INSURANCE, OPERATING COSTS AND FUTURE EXPANSION PLANS FOR KRE TO CONSIDER. PLEASE PLEDGE NOW. WE HAVE AMAZED THOSE OUTSIDE OF CHRS FOR OUR ABILITY TO RAISE A GREAT DEAL OF MONEY IN A VERY SHORT TIME. YOUR SUPPORT AND THE THE SUPPORT OF OTHER ORGANIZATIONS HAS BEEN TREMENDOUS. WE WILL BE ABLE TO DO THIS, WITH YOUR HELP.

SUPER DONORS – The list keeps growing. You can be part of it! EVERY pledge and donation means a great deal to CHRS. But it is worth noting several pledges / donations that are really helping us to reach our goal:

- **Mike & Barbara Adams – \$5,000**
- **Jack Bethards – \$5,000**
- **Bert Buss – \$5,000**
- **Elmo & Kim Giovanetti – \$5,000**
- **Eugene & Marianne Haller – \$5,000**
- **Steve & Janice Kushman – \$5,000**
- **Chip Lim – \$5,000**



- **Robert & Reina Swart – \$5,000**
- **Verne Anderson – \$10,000**
- **Judy Mears & Bart Lee – \$10,000**
- **Larry & Joan Drees – \$16,600**
- **Norm Howard Lehfeldt – \$15,000**
- **Tom & Julie Bonomo – \$25,000**
- **Tom Nelson – \$25,000 + \$25,000**
- **George Patterson – \$25,000**
- **Gilles Vrignaud – \$25,000**
- **Norman Leal – \$75,000**
- **Philip Monego – \$100,000**
- **Scott Robinson – \$100,000**
- **John Staples – \$100,000**

Thank You! The response to our cause has been phenomenal! CHRS / BARM Members and Friends have done a terrific job so far, but we're not done yet. We've done something in a very short time that other organizations can only dream about. We have been getting pledges and donations from all over the country. In addition to our Super Donors, (see above), some noteworthy pledges have come in from:

- The CHRS Central Valley Chapter – \$3750
- The Alabama Historical Radio Society – \$1000
- The SF Bay Area SBE Chapter 40 – \$1000
- The Sacramento SBE Chapter 43 – \$1000
- The Mt. Diablo Amateur Radio Club – \$1000
- The Art Deco Society of California – \$500
- The Delaware Valley Historic Radio Club – \$1000
- The Iowa Antique Radio Club and Historical Society – \$500
- The Tube Collectors Association, Inc. – \$1000
- The Oakland Radio Communication Association – \$250

We are grateful to each and every person and organization supporting our efforts. Everyone who

donates will have their name on a plaque in our CHRS building. Please remember to mention our plight to friends, family and people you meet. You never know where our angels may come from. Speaking of angels, people have been asking if Mr. George Lucas has offered to help. So far... no. Can anyone reach out to him? Please do. [CLICK HERE TO PLEDGE](#)

For additional information see: <http://www.californiahistoricalradio.com/>

### **Auxiliary Communications Service (ACS)**

The Auxiliary Communications Service (ACS) was organized by the San Francisco Office of Emergency Services (OES) following the 1989 Loma Prieta Earthquake to support the communications needs of the City and County of San Francisco when responding to emergencies and special events.

The Auxiliary Communications Service holds General Meetings on the third Tuesday of each month at the San Francisco Emergency Operations Center, 1011 Turk Street (between Gough Street and Laguna Street), from 1900 hours to 2100 hours local time. All interested persons are welcome to attend.

The ACS Net begins at 1930 hours (7:30 p.m.) local time each Thursday evening, on the WA6GG repeater at 442.050 MHz, positive offset, tone 127.3 Hz. The purpose of this net is to practice Net Control skills, practice checking in with deployment status in a formal net, and to share information regarding upcoming ACS events. Guests are welcome to check in. ACS Members should perform Net Control duty on a regular basis. On the second Thursday of each month, the net will be conducted on the output frequency of the WA6GG repeater, 442.050 MHz no offset, tone 127.3 Hz, simplex.

For more information, please attend an ACS meeting or check in on a net, or call 415-558-2717.

Upcoming meetings: Tuesday 7pm, July 16, 2013 Verizon Presentation  
Tuesday 7pm, Aug 20, 2013 TBD

July 16, 2013 Verizon Wireless will discuss their plans to keep their system up during a major disaster such as earthquake and show off some equipment.

**Gilbert Gin (KJ6HKD)**

Free Disaster Preparedness Classes In Oakland:  
<http://www.oaklandnet.com/fire/core/index2.html>

CORE is a free training program for individuals, neighborhood groups and community-based organizations in Oakland. The underlying premise is that a major disaster will overwhelm first responders, leaving many citizens on their own for the first 72 hours or longer after the emergency.

If you have questions about the recertification process, you may contact the CORE Coordinator at 510-238-6351 or [core@oaklandnet.com](mailto:core@oaklandnet.com).

**Free Disaster Preparedness Classes In San Francisco – NERT Taught by San Francisco Fire Department**

RSVP to [sffdnert@sfgov.org](mailto:sffdnert@sfgov.org) or call 415-970-2024 to register.  
Visit [www.sfgov.org/sffdnert](http://www.sfgov.org/sffdnert) to learn more about the training, other locations, and register on line.

Upcoming Special NERT Events.

**July**

13th: NERT Leadership College. All NERT grads welcome. 8:30am-4:30pm, SFFD DOT\* Learn how NERT works and how to organize a neighborhood group. Leadership is for new coordinators, current coordinators and any NERT graduates interested in being an integral part of their neighborhood team leadership. Register: <http://www.eventbrite.com/event/6349356095>

**August**

3rd: Intro to Ham Communications Team (HCT) 101, 8:30 a.m. - 3:30 p.m., SFFD DOT\* New or interested HAM operators beginner course (no license required) HAM operators that want disaster communication instruction are welcome after lunch. Registration: not yet open

6th: Hands on Ham Radio Basics: HCT 300 & 301, 6:30pm-9:00pm, SFFD DOT\* Get to know your radio. Basic how to instruction: turning on, tuning in, changing batteries etc (Amateur Radio license required) Registration: not yet open

7th: Ham Emergency Messaging for the non-hobbyists (hobbyists allowed), HCT 303,



6:30pm-9:00pm, SFFD DOT\* Learn and practice creating emergency messages (an important skill for ALL NERTS) and practice talking on the radio. Overcome your hesitation and just do it. Registration: not yet open

8th: Advanced Ham Radio for "dummies" Ham Communications Team (HCT) 400 Hands on training, 6:30pm-9:00pm, SFFD DOT\* Bring your radio and practice, practice, practice: buttons, antennas and tones etc.  
(Amateur Radio license required) Registration: not yet open

\* SFFD DOT is the Division of Training @ [19th Street/Folsom](#). (enter through yard on 19th and park along back wall) Division of Training classroom is in the 1-story building directly next to the Fire Station on the corner

### **San Francisco Police Department: Auxiliary Law Enforcement Response Team(ALERT)**

The Auxiliary Law Enforcement Response Team (ALERT) is a citizen disaster preparedness program designed. The ALERT program is for volunteers 16 years of age or older, who live, work, or attend high school in San Francisco.

Graduates of the San Francisco Police Activities League (P.A.L) Law Enforcement Cadet Academy are also eligible to join.

ALERT volunteers will first complete the Fire Department's Neighborhood Emergency Response Team (NERT) ([www.sfgov.org/sfnert](http://www.sfgov.org/sfnert)) training and then graduate into an 8 hour Police Department course specifically designed for ALERT team members.

ALERT members will work closely with full-time and/or Reserve Police Officers in the event they are deployed after a disaster. The Basic ALERT volunteer will have no law enforcement powers other than those available to all citizens.

### **Upcoming ALERT Training**

The third ALERT training class has been scheduled for **Saturday, September 28, 2013**. The class will be held at the San Francisco Police Academy, in the parking lot bungalow, from 8am-5pm (one hour lunch break).

IMPORTANT- All participants must complete the background interview process in order to be eligible to attend the ALERT training class.

Eligible ALERT participants may register for the June 22nd training class by contacting the ALERT Program Coordinator, Mark Hernandez, at [sfpdalert@sfgov.org](mailto:sfpdalert@sfgov.org), or by telephone at 415-401-4615. To register by email send your request to

sfpdalert@sfgov.org with your NAME and PHONE NUMBER.

**ALERT Information Meeting:**

An informational meeting will be held at the San Francisco Police Academy, located at 350 Amber Drive, Parking lot bungalows, on **Thursday, August 22nd, 2013, at 7pm**. All members of the public are welcome. Interested individuals will have their questions about the program answered at the meeting.

For more information on the San Francisco Police Department ALERT Program, email us at sfpdalert@sfgov.org, or call Sergeant Mark Hernandez (SFPD, Ret.), SFPD ALERT Program Coordinator, at (415) 401-4615.

For additional information on the web please refer to:

<http://sf-police.org/index.aspx?page=4019>

## **Tech Session in Sunnyvale Saturday August 10<sup>th</sup>. (Includes Free Lunch)**

**Time:** Saturday August 10th – 12 noon – 3PM

**Subject:** *Software Define Radios You Can Build – Ron Quan KI6AZB*

**Place:** 1163 Quince Ave. Sunnyvale, 408-245-8210 monitor 146.52 MHz

**Cost:** *FREE to Cathay Members and Guest - Raffle Tickets: \$5 each*

**Optional:** *Bring a dessert to share.*

**Directions:** *If you are coming from the DeAnza Flea Market, just head North on Stelling Rd. DeAnza College is on the corner of Stevens Creek and Stelling Rd. Go 2 miles, past Homestead Road, past Fremont Ave. (Stelling Rd. will change names to Hollenbeck Ave. after you cross Homestead Rd.) After Fremont Ave, watch for the first signal light which is Torrington, make a left. Go one block and you will run into Quince Ave. We are at 1163 Quince Ave. I will monitor 146.52 MHz if anyone gets lost. If you need precise directions from where you are coming from, go to [www.googlemaps.com](http://www.googlemaps.com). They seem to give the best directions or give me (Ed Fong) a call on the phone.*



Photo of Ed Fong, Host of the Tech Session

This Tech Session is after the DeAnza Swap meet. Rather than head directly home or to HRO from the swap meet, come on by and have a great lunch and meet new friends.



Lunch will consist of lasagna, pizza, salad, drinks, and chips. Bring a desert to share. Why pay for lunch after the swap meet and then to HRO's? Drop by, save your money and have lunch and still have plenty of time to go to HRO.

This year's speaker will be Ron Quan, KI6AZB – The author of “*Build Your Own Transistor Radios* – copyright 2013, McGraw Hill”. Here is your chance to meet the author in person and ask him all kinds of questions about radios. He is the world's leading radio expert. Below is Ron's book review that appeared in the July 2013 issue of QST.

New Books		Reviewed by Rick Lindquist, WW1ME
<p><b>Build Your Own Transistor Radios</b></p> <p>Ronald Quan, KI6AZB</p> <p>The title of this superb learn-by-doing manual recalled my first transistor portable, a little six transistor job that almost fit in your hand (I still have it!). But Ronald Quan's book, subtitled <i>A Hobbyist's Guide to High-Performance and Low-Powered Radio Circuits</i>, covers a great deal more territory. Quan, who obviously knows his stuff and has the credentials to boot, starts with four receiver designs — TRF, regenerative, superheterodyne and reflex — as the building blocks for essentially all radio receivers (he neglects the direct-conversion design popular with QRPers), then expands into a far wider world of experimentation and do-it-yourself construction. Readers who are at sea regarding receiver basics or who need a refresher will find this a terrific tutorial! Chapters include parts lists (Quan encourages scouring the junk box or cannibalizing old radios), block diagrams and complete schematics for various receiver</p>		<p>projects you can build on vector board.</p> <p>The most intriguing chapters delve into design aspects that may pique the curiosity of many radio amateurs, such as inductorless, single-transistor superhet, and low-power (ie, current draw measured in microamps) radios. Perhaps most useful to the modern ham are those sections dealing with software designed radios. Quan introduces SDRs at the conclusion of those chapters aimed at the hobbyist and experimenter. He details a couple of receiver front-end circuits, including one for 40 meters, that can use <i>Winrad</i> or similar software to handle the digital aspects and to demonstrate how SDRs function.</p> <p>The remaining 10 chapters discuss signals and circuits and explore more advanced principles and concepts, employing a fair amount of algebra and trigonometry to explicate these. Quan allows he may be too “math-centric,” and the eyes of the non-engineer may glaze over at such discussions as “Finite Pulse-Width Signals” and</p> <p>“Consequences of an Imperfect 90-Degree Phase Shifter on Reducing the Image Signal” (the latter nearly <i>entirely</i> mathematical). This is not to suggest that readers with lesser electronics or mathematics backgrounds won't find these later chapters valuable. Quan also reveals the secrets of oscillator, mixer, amplifier (including op amp) and IF circuits, and at several points discusses how these relate to SDR concepts. Each chapter is replete with extensive references for those interested in further investigating specific topics.</p> <p>Overall, this extremely well written and comprehensively illustrated guide and reference deserves a place on the inquisitive radio amateur's bookshelf. As the author says, “Learning electronics...is a lifelong process. [W]e all become to some degree self-taught...”</p> <p><i>McGraw-Hill Companies Inc (TAB), New York/Chicago/San Francisco, 2013. ISBN: 978-0071799706, softcover, 7.2 x 9.1 in, 496 pp. Available from ARRL (<a href="http://www.arrl.org/shop/">www.arrl.org/shop/</a>) Build-Your-Own-Transistor-Radios-McGraw-Hill), Order No 1367, softcover, \$50; Amazon.com, softcover, \$32.77, Kindle edition, \$26.13.</i></p>

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Ron will give an overview presentation of Software Defined Radios (SDR). As most of you know, this is a new architecture that uses your computer to do a good portion of the work. He will have a live demonstration of a SDR radio he built for 40 meters and the one he built for the AM broadcast band.

According to Ron, you can build the 40 Meter version yourself in an afternoon. The radio works with free downloaded software such as “Winrad” that runs off your PC.

No more filters to buy, no more paying for fancy hardware. Let your computer do most of the work.

The modes are endless. Detect SSB, CW with any bandwidth (no filters to buy), see the entire band with a software spectrum analyzer. All this for under \$25, not including the cost of the computer. Don't miss this great talk.

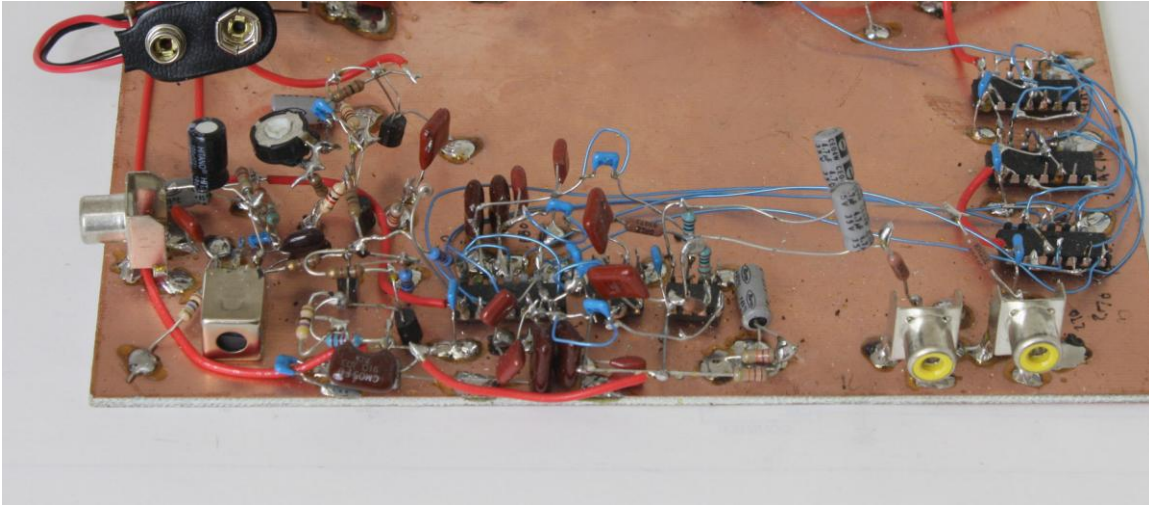


Photo of Ron's hand built 40 meter band SDR

Note: The variable frequency oscillator was replaced by a simple crystal oscillator used in conjunction with a computer handling the required 192 kHz sampling.

**Raffle Prizes** - We will have two raffle prizes this year. Tickets are \$5

**First Prize** will be the ever so popular **16GB Kindle Fire** tablet computer. This is one of the fastest tablets around with a proprietary absolutely gorgeous 7 inch 1280 x 800 display with a built in polarizing antiglare filter. These little things are amazing. Google has done a really good job with the Android operating system and Amazon has done a superb job on the hardware.

These tablets do everything the Apple IPAD can do except they cannot run some of the proprietary Apple apps such as "Facetime". However; the Kindle Fire runs Amazon apps that the Apple IPAD cannot run. Eric Schmitt at Google has done an excellent job on the Android OS that the Kindle Fire is running under the covers.

Both CARC members: Bob Lai (KM6QP) and Nelson Doon (AD6XZ) informed me that there are dozens of ham radio apps available for the Kindle Fire.

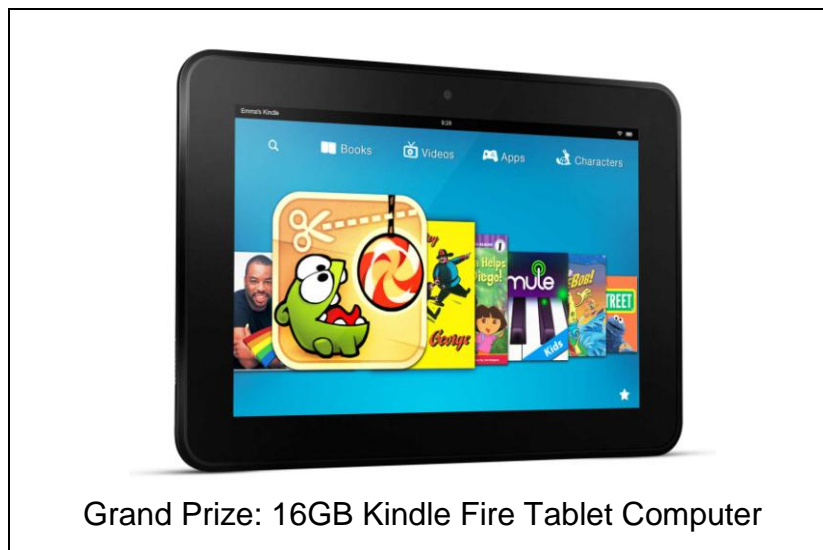
The Kindle Fire has a great camera for Skype picture phone and great audio to boot (works great with external speakers). With the Kindle Fire, you can answer your emails, watch YouTube videos or your favorite TV show, surf the web, eBay, etc. These little

tablet devices are no longer mere toys. You take them anywhere with you since they weigh less than a pound.

Here are the Kindle Fire's general specifications:

- 1.2 GHz dual core processor with TM Power VR 3D video
- Free unlimited cloud storage for Amazon content
- 16GB of built in Flash and expandable with external SD card (up to 32GB)
- Supports all video formats – MEG, MP4, 3GP, etc.
- Network – 802.11b/g/n MIMO
- USB 2.0
- Over 11 hours of reading, surfing, video,etc. , MIMO
- 2400mAh LiOn battery
- Total weight - 13.9oz.

I think this surpasses any of my boyhood dreams of a handheld device.



**2<sup>nd</sup> prize** will be the ever so popular **Baofeng UV5**. There are more Baofeng UV5R's sold today than any other radio on the market. Why not? Its performance matches the best of them and yet the price is 1/3 of the cost of the mainstream manufacturers. Let me mention that the battery – it just seems to last forever on a single charge.

- Dual band VHF/UHF (full transmit capability 130-230 MHz, 420-520 MHz), separate receiver chip for FM broadcast
- 5 watts output – VHF and 4 watts at UHF
- Programming software
- Dedicated FM Broadcast receiver chip (even detects stereo with headphone and a slight modification).
- 128 memory channels



- Built-in LED flashlight
- Complete with 1700 MaH LiOn battery
- Antenna
- Smart drop in Charger
- Belt clip
- Earphone microphone



2<sup>nd</sup> Raffle Prize: BaoFeng UV-5R