



Cathay January 2014

www.cathayradio.org

President: George Chong, W6BUR **email:** W6BUR@comcast.net

Vice President North: Leonard Tom, NX6E **email:** nx6e@hotmail.com

Vice President South: Bill Fong, W6BBA - **email:** w6bba@arrl.net

Secretary/Membership: Rodney Yee, KJ6DZI - **email:** rodyee2000@yahoo.com

Editor: Rodney Yee, KJ6DZI - **email:** rodyee2000@yahoo.com

Treasurer: Vince Chinn aka Mingie, W6EE - **email:** vince@vincechinncpa.com

Web Master: Edison Fong – WB6/QN - **email:** edison_fong@hotmail.com

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.

Update: Link to repeater 442.70 is currently not active until further notice.

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;

A Happy Chinese New Year to you all.



2014 is the **Year of the Horse**, which begins on Friday, January 31, 2014.

If you were born in 1942, 1954, 1966, 1978, 1990, and 2002 you are a Horse person.

Yes, it is time to think about celebrating Chinese New Year which will take place on Friday, January 31, 2014 and will herald in the year of the Wood Horse.

People born in the **Year of the Horse** (1942, 1954, 1966, 1978, 1990, and 2002) have a pleasant, amiable, easy going disposition which guarantees popularity and a large following of friends. Blessed with good humor and geniality, they are extremely comfortable to get along with for they have the knack of instantly putting people at their ease.

Hard working, resourceful and self-confident, Horses approach all things enthusiastically. Quick-witted and mentally alert, they are quick to catch on and efficient in all their undertakings. Because of this ability, this dexterous and incisive mind of theirs, they can make accurate judgments and sound decisions instantaneously. They are particularly skilled at handling money, very often in business dealings following their hunches. When it comes to intuition they have a sixth sense that is quite uncanny.

The Horse is cut out to be in politics, a career which could bring great personal satisfaction with the opportunity to grind his own axe. He could be a winner here, for he has the facility to sway the crowd.

CARC Chinese New Year Luncheon

Let's us, CARC members come together and celebrate the Chinese New Year with a luncheon, from 10:30 am – 1 pm on Saturday, February 15, 2014. It will be held at KOMÉ Restaurant in Daly City.

Edison Fong is planning on some awesome raffle prizes, so you don't want to miss out on this event. The list of raffle prizes will appear in next month's newsletter (February 2014). We want to give Ed time to secure the raffle prizes before we list them.

I wish to express my many thanks to Ed for taking on this huge task on behalf of the CARC.

Further luncheon details and signup information are contained in the latter part of this newsletter.

Additional CARC News

Ed Fong's (WB6IQN) Christmas Party held on December 14, 2013 was a huge success. There were lots of good food and good company. Ed wrote up a very nice summary and provided us with some fabulous pictures.

Featured Tech Article

This is another ingenious method for coming up with alternate fuels. Please enjoy reading it.

CARC Final Wrap-up News

.

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

LATEST ON CHRS BUILDING PURCHASE...

The following statement was read at Radio Day By The Bay and is the latest information we have at this time about CHRS' future at 601 Ashby:

“As you know, we have been fundraising for the last year with the goal of purchasing this building and land for CHRS' permanent home. We were supposed to buy the building and land from the new owner of KVTO as it emerged from bankruptcy. But, KVTO has now been sold to a company who is not inclined to sell CHRS the building and land.

We can safely report that our license to occupy KRE will be honored to its completion until December 31st of this year. We are not being asked to leave anytime soon and there is a possibility that we may be asked to remain beyond that date.

So, as much as we love it here, a museum needs a permanent home. We have already started an active search. We realize that we may be leaving a historical place, but the reality is that we need a permanent place for the CHRS collection, Maxwell and SOWP archives and Radio Hall of Fame.

The fund raising momentum is still with us. All of the major donors to the KRE purchase fund have assured us that their pledges will remain in place to purchase a permanent new home for CHRS.”

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, Feb 18, 2014
Tuesday 7pm, Mar 18, 2014
Tuesday 7pm, Apr 15, 2014

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.

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

RSVP to sffdnert@sfgov.org or call 415-970-2024 to register.

Visit www.sfgov.org/sffdnert to learn more about the training, other locations, and register on line. Upcoming Special NERT Events:

January 2014

20th: MLK Freedom Parade Assistance, South of Market, 8am-4pm

24th: NEN Awards - City Hall, 6:00pm-8:00pm Join us in honoring the NERT Leadership Award Winner. Pre-Registration Required. Volunteers are needed to provide support to the event and to staff an outreach table
Assignment Details will be provided prior to the event.
Pre-Registration Required by January 16.

25th: NERT sponsored Ham Cram. Get your amateur radio license in one day. (\$30)
St. Mary's Event Center, 1111 Gough St @ Geary
Register: BAERS

28th: NERT Triage Drill. SFFD DOT* 6:00pm to 9:30pm.
Register as "Triage Rescuer" (NERT Grads Only) 6:00pm or
"Triage Victim" (Non-NERTs) 5:30pm
[Register](#)

February

1st: Intro to Ham Communications Team (HCT) 101, 8:30 a.m. - 3:30 p.m., SFFD DOT*
Newly licensed or planning on getting your own HAM call sign? This introductory class has something for everyone—from HAM radios to cables to antennas and more. No HAM License required to attend. NERT Field Teams will communicate to NERT Staging Areas using HAM radios. Any HAM operators wanting disaster communication instruction are welcome after lunch. [Register](#)

4th: NERT Communications: Messaging 6:30pm-9:30pm, SFFD DOT*
Size-up and creating a good message is one of the most important aspects of good communications. This class will cover good message writing and required content. [Register](#)

* 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) 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

ALERT training class will be held at the San Francisco Police Academy, in the parking lot bungalow, from 8am-5pm (one hour lunch break). A new class is schedule as follows:

- **Saturday, January 18th, 2014**

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 **January 18th, 2014** training class by contacting the ALERT Program Coordinator, Mark Hernandez, at 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.

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>

Wrap up of Annual Christmas 2013 Party by Edison Fong

Hey, what a great party that was? Our annual Christmas party was hit. I am sorry that I didn't get around to meeting and talking to everyone at the party. I figured we had about 60+ people that came and went throughout the evening.

My daughters Mei-lin and Violet with friends Katherine and Alexandria meticulously made the ginger bread house the day before.

It was just great to see old friends and have great food. Talk about the food? Wow!!! Wilma (wife of Mayor Dean Chew and daughter of Cathay member Judson Chew W6WTY) cook up some lasagna with this fantastic cheese bread, very tasty. Also one of the neighbors brought some type of Italian Risotto made into balls. It was delicious, not to mention all those desserts.

Alexandria Hutchins baked some fantastic apple pies. It was certainly my annual treat. You can look at the pictures and see the variety of foods we had.

We had a group that has been joining us at our events. I think the guy that spear heads it is Marcel Stieber AI6MS who works at Lab126. He's a Cal Poly graduate in communications and he brings his friends and we all have a great time. I also had some of my graduate students from UC Santa Cruz come by and exposed them to ham radio.

We also had Dr. Bob Poleta attend the party. Poleta was on the team that developed the planar bipolar transistor at Fairchild Semiconductor with Gordon Moore and Robert Noyce. I believe he is one of the last living members.

Each licensed ham attending the party got a raffle ticket for no charge. It's our way of saying "thanks" for supporting us. The prize was dual band Baofeng UV5R. Marcel Stieber AI6MS won that.

No one noticed that the Christmas tree was being powered by the Pocket Generator by Vector Electronics. See the photos. What a cute little gem this is? It has a gel cell with a 50 watt inverter and a 12v cigarette adapter. All in a little package that you put in your emergency kit. This is going to be one of the raffle prizes for the New Year's luncheon.



That's Jeff Hutchins (WB6BVD), chief structural engineer – Ginger Bread House Division.



Ginger Bread contractors – Alexandria, Mei-li (KJ6QXM), Violet, and Katherine



After the destruction. It's a tough job but somebody has to do it!



These were cute twins from the neighborhood. Potential hams?



Judson Chu - W6WTY with his daughter in law Wilma



Bob Yee – W6VVQ, contemplates: “How in the heck did I eat all that wonderful food?”



Ed Fong presenting raffle winner, Marcel Steiber AI6MS his new Baofeng UV5



Left to right: Dr. Bob Poleta with Prof. George Vendelin. Bob was one of the original patent holders of the planar IC process at Fairchild. He was on the team with Robert Noyce and Gordon Moore. He hired Andy Grove. Bob was also one of the founders of Signetics Corp. Of course we all know Prof. Vendelin and his famous textbook that most of us used in college if you studied microwave.



Ed's family Christmas tree trimmed out. Note the Christmas lights powered by the Vector Pocket Generator on the bottom right.



This is a close up view of the Vector Pocket Generator. Complete with 50 watt inverter and 12v output.

2014 CARC Annual Chinese New Year Luncheon

As for those of you that were able to attend the CARC luncheon last year, we enjoyed seeing each other and yakking it up. As word spread about our successful CARC luncheon get together, those who did not make it told us "We will be there for the next one". This year it will also be a great opportunity to meet up with our newest club members.

The time and Date: 10:30 AM - 1:00 AM Saturday February 15, 2014.

Location: KOME Japanese Seafood and Grill
1901 Junipero Serra Blvd., #A
Daly City, CA 94104
650-992-8600

Parking: There is free parking in the adjacent five story garage structure.

Cost: Special CARC Adult cost will be \$22.00 per adult.

Seniors over age 60 pay \$21.00

Children Pricing:

Age 3-5: \$7.00

Age 6-8: \$9.50

Age 9-11: \$13.00

These Saturday prices includes: tax (9%), 15% tip, and reserved seating along with free refills of soda and tea.

Please note that beer/wine/sake is not included with the price of the luncheon. If you order beverages not covered, you are responsible for paying the additional charges.

For more info please see: www.komebuffet.com (The link appears to be currently down).

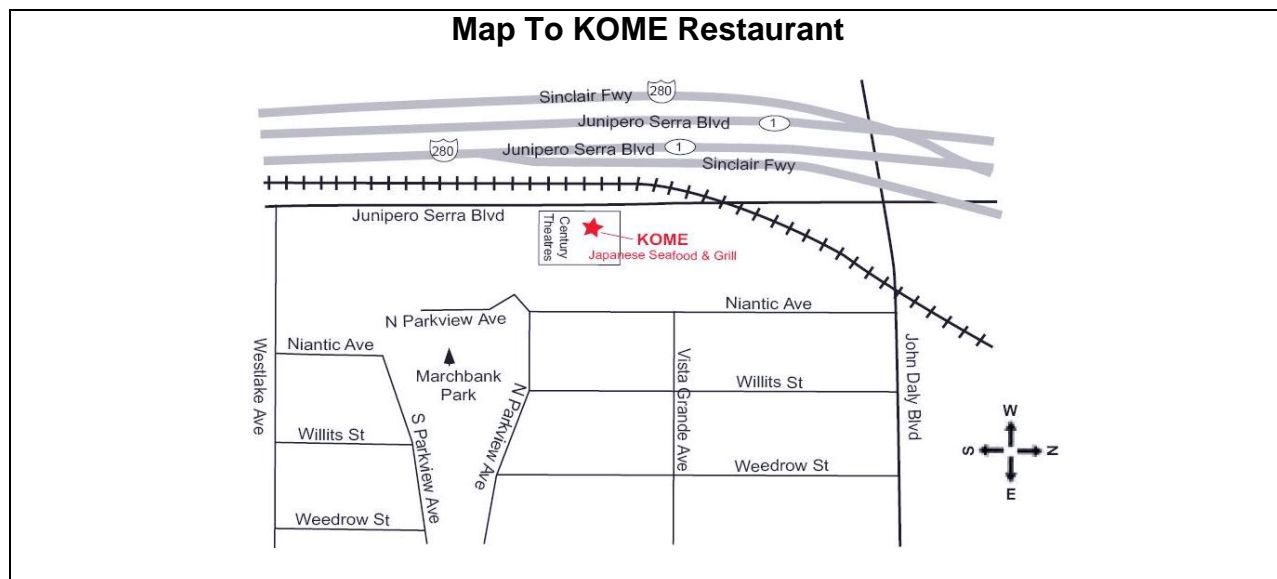
Money will be collected at the start of the luncheon, so please have exact change ready! Please put on name tags that will be provided.

Please email Bill Chin (bill.kc6pof@comcast.net) if you are planning to attend the luncheon. Bill has graciously agreed to help us out during this function. We need your name and the names of your guests to make the necessary names tags that you will be required to wear during the luncheon.

Driving Directions:

- * If coming from Hwy 280 Northbound, take the John Daly Blvd/Junipero Serra Blvd exit and continue north on Junipero Serra Blvd and side drive past the Century Theater ticket office.
After a series of small restaurants on the right hand side there is a 5 story parking garage, the entrance will be about 50 feet past KOME restaurant entrance doors.
- * If coming from Hwy 280 Southbound, take the John Daly Blvd/Junipero Serra Blvd exit. After crossing the traffic signal light intersection, in about 500 feet, turn left into the 5 story parking garage structure entrance.

Please refer to the KOME restaurant location map that follows below:



We have reserved the back area room at the KOME restaurant for use of the Cathay Amateur Radio Club. **At the restaurant door please identify yourself as being with the CARC and a KOME hostess will escort you to the back room.** Please check in with both Vince Chinn aka Mingie W6EE and Hetty WB6SHU so they can check your name off the attendee list and collect the money to pay the restaurant bill. Hetty WB6SHU will make sure those senior citizens will get their dollar discount. Be aware that the early bird gets the worm, no feeding after 1PM; I hope we won't have to be booted out, hah-hah!

KOME restaurant is an all you can eat Asian buffet style dining offering a large choice of foods. KOME restaurant is where we held our previous Cathay Radio Club Chinese New Year Luncheon and it was a big hit with all the attendees. There is free parking at the adjacent 5 story parking structure. The Daly City Bart train stop is 2 blocks away.

Since KOME restaurant opens its door at 10:30 AM we need to have most of our people "camp" early (kidding) at the door to situate our "hold" of a spot (within the glass partition) at the rear room. **Another reason to arrive early is that the luncheon time (10:30 am-1pm) will quickly slip away while you are getting caught up with the latest news among our fellow club members.** The back room is fairly large is able to accommodate 150 guest. I doubt that our CARC members and friends would completely fill it, so feel free to invite additional guests.

The dining tables as I seem to recall were sort of like outdoor picnic types with individual chairs for seating. One other hint: If you are a great eater and love food, try not to choose any tables where the opposite end is against a wall. I found that it was really hard to maneuver quickly for more goodies!

Your Hosts:

George Chong (W6BUR)
w6bur@comcast.net

Mingie Chinn (W6EE)
vince@vincechinncpa.com

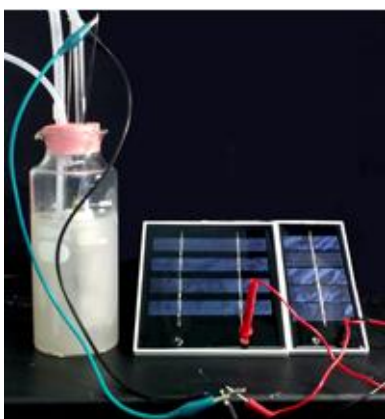
Volunteer - Bill Chin
(KC6POF)
bill.kc6pof@comcast.net

Featured Tech Article

UCLA Engineering Researchers use Electricity to Generate Alternative Fuel

<http://www.engineer.ucla.edu/newsroom/featured-news/archive/2012/ucla-engineering-researchers-use-electricity-to-generate-alternative-fuel>

by Wileen Wong Kromhout - March 29, 2012



Producing fuel from CO₂ and sunlight

Imagine being able to use electricity to power your car — even if it's not an electric vehicle.

Researchers at the UCLA Henry Samueli School of Engineering and Applied Science have for the first time demonstrated a method for converting carbon dioxide into liquid fuel isobutanol using electricity.

Today, electrical energy generated by various methods is still difficult to store efficiently. Chemical batteries, hydraulic pumping and water splitting suffer from low energy-density storage or incompatibility with current transportation infrastructure.

In a study published March 30 in the journal *Science*, James Liao, UCLA's Ralph M. Parsons Foundation Chair in Chemical Engineering, and his team report a method for storing electrical energy as chemical energy in higher alcohols, which can be used as liquid transportation fuels.

"The current way to store electricity is with lithium ion batteries, in which the density is low, but when you store it in liquid fuel, the density could actually be very high," Liao said. "In addition, we have the potential to use electricity as transportation fuel without needing to change current infrastructure."

Liao and his team genetically engineered a lithoautotrophic microorganism known as *Ralstonia eutropha* H16 to produce isobutanol and 3-methyl-1-butanol in an electro-bioreactor using carbon dioxide as the sole carbon source and electricity as the sole energy input.

Photosynthesis is the process of converting light energy to chemical energy and storing it in the bonds of sugar. There are two parts to photosynthesis — a light reaction and a

dark reaction. The light reaction converts light energy to chemical energy and must take place in the light. The dark reaction, which converts CO₂ to sugar, doesn't directly need light to occur.

"We've been able to separate the light reaction from the dark reaction and instead of using biological photosynthesis, we are using solar panels to convert the sunlight to electrical energy, then to a chemical intermediate, and using that to power carbon dioxide fixation to produce the fuel," Liao said. "This method could be more efficient than the biological system."

Liao explained that with biological systems, the plants used require large areas of agricultural land. However, because Liao's method does not require the light and dark reactions to take place together, solar panels, for example, can be built in the desert or on rooftops.

Theoretically, the hydrogen generated by solar electricity can drive CO₂ conversion in lithoautotrophic microorganisms engineered to synthesize high-energy density liquid fuels. But the low solubility, low mass-transfer rate and the safety issues surrounding hydrogen limit the efficiency and scalability of such processes. Instead Liao's team found formic acid to be a favorable substitute and efficient energy carrier.

"Instead of using hydrogen, we use formic acid as the intermediary," Liao said. "We use electricity to generate formic acid and then use the formic acid to power the CO₂ fixation in bacteria in the dark to produce isobutanol and higher alcohols."

The electrochemical formate production and the biological CO₂ fixation and higher alcohol synthesis now open up the possibility of electricity-driven bioconversion of CO₂ to a variety of chemicals. In addition, the transformation of formate into liquid fuel will also play an important role in the biomass refinery process, according to Liao.

"We've demonstrated the principle, and now we think we can scale up," he said. "That's our next step."

The study was funded by a grant from the U.S. Department of Energy's Advanced Research Projects Agency–Energy (ARPA–E).