

Cathay May 2014

www.cathayradio.org

revised 5/4/2014

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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.

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;

I wish to call to your attention two important Public Service Announcements:

Public Service Announcements Intro

Among the several events upcoming events that may be of special interest to our CARC members are as follows:

- Request for Alameda CERT & Ham Radio Volunteers, Michael John Torrey - KF6YRG. CERT and Ham Radio Volunteers are needed to provide support for the Alameda July 4, 2014 parade. Sign up must be completed **by May 15, 2014**.

If you are interested in helping, please contact:

Veronica Hallam @ vhallam@alamedaca.gov or by phone at 510-337-2121.

- Cancer Society Relay Fund Raiser - CARC member, Skip Weiss - KG6SCE is requesting volunteers for communications support during an upcoming Cancer Society Relay Fund Raiser.

For additional information on the fore-mention events, please read the “Public Service Announcement” section of this newsletter.

Featured Tech Article Intro

With all the recent earthquake activity, I think you will find the “Feature Tech Article” both relevant and timely. This month’s article is about an ingenious device that makes you wonder: “Why didn’t I think of that”. This new device is called: GravityLight, it generates 0.1 to 0.2 watts to power up a LED lantern.

The GravityLight was invented by Martin Riddiford and Jim Reeves with the goal in mind to provide inexpensive lighting (under \$10.00) in developing countries. This was technologically made possible by the ever-increasing efficiency of LED lights.

The device is powered by a weighted bag that uses gravity to spin an electric motor which in turns powers an LED lantern. It takes only a few seconds to lift the weighted bag containing 22-28 pounds of rocks, books, or other material and upon its descent powers the GravityLight device to provide 25-30 minutes of light. Simply raising the weight again allows it to be used over and over again without further running costs.

However; any HAM folks worth their salt could easily see the value of this lighting device in times of a disaster or at a remote campsite. Commercial availability of the GravityLight is planned for the second quarter of 2014.

Please enjoy reading the Tech Article Section of this newsletter for additional information on the GravityLight device.

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 California Historical Radio Society (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 purchase of its future home at 2152 Central Avenue, Alameda – The New CHRS ‘Radio Central’

On April 23rd 2014 CHRS took possession of the historic building at 2152 Central Avenue in Alameda CA. It will now be known as CHRS ‘Radio Central’ and is now the Permanent home of the California Historical Radio Society and its’ programs, the Bay Area Radio Hall Of Fame and the Society Of Wireless Pioneers.

CONGRATULATIONS AND HAPPY 40TH BIRTHDAY CHRS! - Our favorite Historical Radio Society has done something that most non-profits only dream about... We have raised enough money to buy a permanent home!

As of today, **OUR CASH TOTAL BUILDING FUND DONATIONS** = \$1,048,700, spread across 447 donations! We need \$1.16 Million.

This building is 114 years old and in some areas shows its’ age. We have some roofing issues, asbestos issues, minor termite damage and one tiny moldy closet. Don’t be scared, this building has great bones and all these problems can be corrected. We have a Boys Room and Girls Room with many more stalls than we will ever need and a bunch of 24” sinks. We need to turn these rooms into adult ADA bathrooms. It’s all doable. It just takes lots of money. Oh yes... We also have to build a Museum.

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, May 20, 2014
Tuesday 7pm, June 17, 2014
Tuesday 7pm, July 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.

May

- 10th: Intro to NERT Communications Team (NCT) 101-103, 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](#)
- 14th: NERT Communications 201: Messaging 6:30pm-9:30pm, SFFD DOT*
Improve your communications and messaging skills. Learn how to write a short, effective emergency message using scene size-up. A valuable skill for every NERT. Emergency messages include five key elements: Identify, Location, Condition, Action, and Needs—become familiar with I.L.C.A.N. Class open to all NERT Grads! (No Ham license or radio required to attend.)
[Register](#)
- 20th: NERT Communications 301-303: Hands-on buttons & knobs & antennas, 6:30pm-9:30pm, SFFD DOT*
Get hands on help with using your radio. Assistance will be provided with programming, changing frequencies, setting tones etc. J-pole? We'll cover that and mag-mounts and more. You must have completed pre-requisite: NCT101 or have approval to take this class
[Register](#)
- 21st: NERT Communications 401: Hands on message passing and Scribing, 6:30pm-9:30pm, SFFD DOT*
Talk, talk, talk, listen, listen, listen, write, write, write. Practice sending and receiving radio messages. Improve your communications and messaging skills. A valuable skill for NERTs. Ham license required.
[Register](#)
- 22nd: NERT Communications 501: NET Control for NERT staging area, 6:30pm-9:30pm, SFFD DOT*
Learn Net Control procedures and avoid "cross-talk" in a Staging Area. A Ham Operator, acting as Net Control, regulates the flow of radio traffic coming from multiple NERT Field Teams into a Staging Area. This is a skill that must be learned and practiced. Join us for this new addition to the NERT Communications training. Ham License required. Join us for this new addition to the NERT communications training.
Prerequisites: NCT 101-401
[Register](#)
- 28th: NERT Coordinators and Leaders Meeting. 6:30pm-8:30pm, SFFD DOT*
[Register](#)

June

5th: NERT Communications 601: Social Media and NERT, 6:30pm-9:30pm, SFFD DOT*

[Register](#)

7th: Leaders Workshop: N is for Neighborhood, Location TBD, 8:30am-12:30pm

Fun focus on NERT Leadership in your neighborhood

Registration not yet open

18th: ICS Forms workshop. All NERT grads welcome. 7:00p-8:30pm, SFFD DOT*

Review each NERT ICS Form. The forms are crucial for safety and accountability.

[Register](#)

21st: Staging area drill, 8:30am-12:30pm, SFFD DOT*

Put your neighborhood command center ICS to practice

[Register](#)

29th: SF PRIDE Parade

[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.

SFPD ALERT Training

The next ALERT training classes have been scheduled for **Saturday, May 3rd, 2014 and Saturday, August 9th 2014**. The classes 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 a training class by contacting the ALERT Program Coordinator, Mark Hernandez, at sfpdalert@sfgov.org, or by telephone at 415-401-4615.

SFPD ALERT Training Drill

All active/trained ALERT members are asked to join us for our next training drill, scheduled for **Saturday, July 12^h, 2014**. The drill will be held in the Police Academy (350 Amber Drive) parking lot from 9am-12pm. Details will be emailed to active ALERT members, prior to the date of the exercise. Participation is not required, but strongly encouraged.

PUBLIC INFORMATIONAL MEETING

An informational meeting will be held at the San Francisco Police Academy, located at 350 Amber Drive, Parking lot bungalows, on **Thursday, June 5th, 2014**, 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>

From CARC Member Michael John Torrey, KF6YRG

Alameda CERT & Ham Radio Volunteers for the Mayors 4th of July Parade 2014

What: Need for volunteer Alameda CERT members to assist with Traffic Control/Barricade/Maintain Street Closure, Public Contact with emphasis on providing direction.

When: July 4, 2014 from approx. 6:00 am - 1:00 pm

Where: Along the parade lineup area and at the end of the parade route

Who: Alameda CERT Volunteers (35-40 participants)

The Alameda Police Department and the Parade Committee have again asked for the Alameda CERT Group to help with the July 4th Parade this year. Due to the high profile nature of these types of events and the threats made against similar events recently they need additional personnel to help out to make it a safe event for all.

The roles they've asked to fill are the same as last year, just more of them. There are several areas that we are focusing on. You can volunteer for any of them depending on your availability and skill sets.

If you're interested, **please respond no later than Monday May 15th, 2014 at 1700 hrs.** I will send you a detailed list of what functions they are asking to fill. All of the functions are within our scope of CERT practice.

Your CERT vest and ID are required when participating. We request that you commit to working the entire event, but if you can only work a partial shift we might be able to accommodate you as well with some relief.

If you are interested in helping, please contact Veronica Hallam @ vhallam@alamedaca.gov or by phone at 510-337-2121.

Thanks in advance for your continued volunteer support for the City of Alameda CERT Program. We look forward to hearing from you.

Sincerely,
Captain Michael DeGrano
Asst. Fire Marshal for Disaster Preparedness & Fire Prevention / CERT Program
Manager Alameda Fire Department, 510-337-2131

From CARC Member Skip Weiss, KG6SCE

Event: Relay for Life / Daly City - A 24 Hour Cancer Society Relay Fund Raiser

Time: Starting at 10:00 am Sat June 21 and ending at 10:00 am Sun June 22, 2014

Location: Westmoor High School Sport Stadium
131 Westmoor Ave, Daly City, CA 94015
Entrance at corner of Del Prado Dr. & Mariposa Ave

Additional Information:

http://main.acsevents.org/site/TR?sid=128433&type=fr_informational&pg=informational&fr_id=56642

To Sign Up:

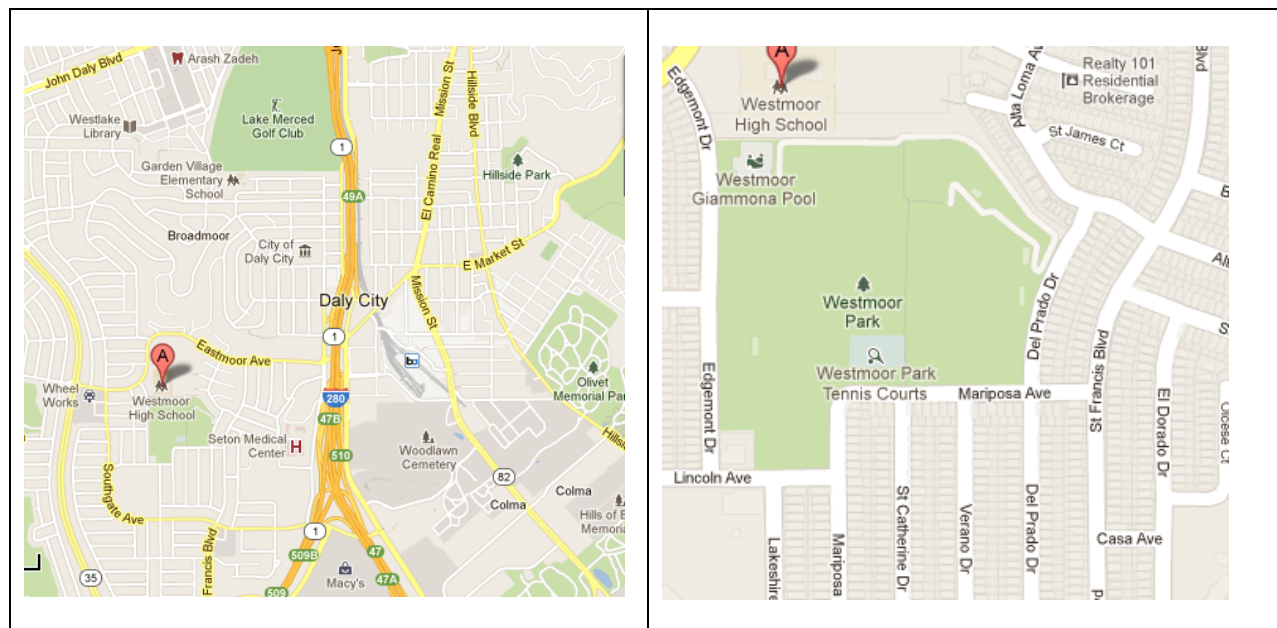
http://main.acsevents.org/site/TR/RelayForLife/RFLCY14CA?pg=informational&fr_id=56642&type=fr_informational&sid=189572

HAM volunteers are needed to help with directing cars, public safety and HAM radio communications support.

Please contact Skip Weiss, KG6SC via email for further details and assignments.

- Email address: "Skip Weiss" calgrizzly@earthlink.net
- Subject Line: Relay for Life/HELP

Skip (KG6SCE) and his VFW are supporting this worthwhile event. Map of Westmoor High School Location is shown below (entrance located at the intersection of Mariposa Avenue & Del Prado Drive):



The Relay Event is:

- Organized, overnight community fundraising walk
- Teams of people camp out around a track
- Food, games and activities provide entertainment and build camaraderie
- Family friendly environment for the entire community

The scheduled activities are:

Opening Ceremony: 10:00 am Saturday, June 21, 2014

The Opening Ceremony brings everyone together for a high-energy event kickoff to celebrate the lives of those who have battled cancer, to inspire hope by sharing recent accomplishments and progress, and to remind everyone that while we are winning this battle, fighting cancer is a year-round priority.

Survivors & Caregivers Lap: 10:30am Saturday, June 21, 2014

During the Survivors & Caregivers Lap, upbeat music plays as all cancer survivors and caregivers at the event take the first lap around the track cheered on by the other participants who line the track, celebrating their victory over cancer and their fight to end cancer!

Luminaria Ceremony: 9:00pm Saturday, June 21, 2014

The Luminaria Ceremony is a time to remember people we have lost to cancer, to support people who currently have cancer, and to honor people who have fought cancer in the past. The power of this ceremony lies in providing an opportunity for people to work through grief and find hope.


Fight Back: 9:30am (Sunday, June 21, 2014)

The Fight Back Ceremony symbolizes the emotional commitment we each make to the fight against cancer. The action we take represents what we are willing to do for ourselves, for our loved ones, and for our community to fight cancer year-round and to commit to saving lives.

Closing Ceremony: 10:00am (Sunday, June 21, 2014)

The Closing Ceremony is a time to remember the lives of those lost and to Celebrate that each of us has committed, through our participation in a Relay event, to fight back against this disease over the next year.

What is Relay for Life?

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- 1 Relayars are welcomed in the **OPENING CEREMONY**.
 - 2 Relay starts with the **SURVIVOR LAP**, when survivors walk to celebrate their victory over cancer.
 - 3 The **CAREGIVER LAP** recognizes those who have given care to cancer patients.
 - 4 All of the Relay teams are invited to walk together during the **OPENING LAP**.
 - 5 Luminaria bags and candles are lit during the **LUMINARIA CEREMONY** to honor loved ones who have passed or are fighting the disease.
 - 6 **INDIVIDUAL WALKING** is observed throughout the night with **FAMILY GAMES, ACTIVITIES, and ENTERTAINMENT**.
 - 7 The **FIGHT BACK CEREMONY** helps close the event. Relayars take a final lap and pledge to take action and spread awareness of cancer research, treatments, and prevention.

Featured Tech Article:

GravityLight: lighting for developing countries.

We have developed a realistic alternative to Kerosene lamps by harnessing the power of gravity. We need your help to make it happen.

Design – London, United Kingdom

<http://www.indiegogo.com/projects/gravitylight-lighting-for-developing-countries>

GravityLight is a revolutionary new approach to storing energy and creating illumination.

It takes only 3 seconds to lift the weight which powers GravityLight, creating 30 minutes of light on its descent. For free.

Following the initial inspiration of using gravity, and years of perspiration, we have refined the design and it is now ready for production.

We need your help to fund the tooling, manufacture and distribution of at least 1000 gravity powered lights. We will gift them to villagers in both Africa and India to use regularly.

The follow-up research will tell us how well the lights met their needs, and enable us to refine the design for a more efficient MK2 version.

Once we have proved the design, we will be looking to link with NGOs and partners to distribute it as widely as possible.

When mass produced the target cost for this light is less than \$5.

Editors Update: Funding goal has been reach and production has started.

Why GravityLight?

Did you know that there are currently over 1.5 billion people in the World who have no reliable access to mains electricity? These people rely, instead, on biomass fuels (mostly kerosene) for lighting once the sun goes down.



Lift the weight and let gravity do the rest.

The World Bank estimates that, as a result, 780 million women and children inhale smoke which is equivalent to smoking 2 packets of cigarettes every day. 60% of adult, female lung-cancer victims in developing nations are non-smokers.

The fumes also cause eye infections and cataracts, but burning kerosene is also more immediately dangerous: 2.5 million people a year, in India alone, suffer severe burns from overturned kerosene lamps.

Burning Kerosene also comes with a financial burden: kerosene for lighting ALONE can consume 10 to 20% of a household's income. This burden traps people in a permanent state of subsistence living, buying cup fills of fuel for their daily needs, as and when they can.

The burning of Kerosene for lighting also produces 244 million tons of Carbon Dioxide annually.



final prototype with ballast bag and bits.

GravityLight vs Solar powered lighting.

A commonly held view is that solar powered lighting is the answer to these problems in the developing world. However a number of conflicting factors combine to complicate matters.

Solar panels produce electricity only when the sun shines, so the energy needs to be stored in a battery to produce the light when it becomes dark. The amount of energy stored is dependent on the size of the panel, the size of the battery, and how much (if any) sun has shone.

However; batteries, panels and lights are expensive, and beyond the reach of people with no savings. Solar lighting projects continue to provide lighting for thousands of people in the developing world, but the spread is slow because the cost is too high for individuals, so they need to be bought and installed by communities instead.



LED bulbs do not attract mosquitos like conventional bulbs

Lower cost self-contained lamps are becoming more widely available, but batteries are the weak link, because they are expensive and deteriorate through use and over time.

Very often, when buying a low cost solar lamp with an inbuilt rechargeable battery, a full third of what you're paying for is the battery, and you will need to replace it every few years. Assuming you can get a new battery... The capacity is often reduced to save money which limits the use time, after which there is no light.

With GravityLight, however, it only takes a few seconds to lift the weight, which creates enough energy for half an hour of light, whenever it is needed. It has no batteries to run out, replace or dispose of. It is completely clean and green.

Because there are no running costs after the initial low cost purchase, it has the potential to lift people out of poverty, allowing them to use the money they have saved to buy more powerful solar lighting systems in the future.

Where will you use yours?



Hang it in the shed or make it into a great porch light, you can clip on a hanging basket or anything weighing about 20lbs.



No batteries to drain or replace.

Credentials

We are Martin Riddiford and Jim Reeves, London based designers who have spent 4 years developing GravityLight as an off-line project.

We work for therefore.com, which has over 20 years of experience in designing and developing hand held computing and communication products for a host of pioneers including Psion, Toshiba, NEC, TomTom, Inmarsat, ICO, Sepura, Racal Acoustics, Voller Energy, FreePlay and SolarAid.

We're using a tried and tested manufacturer who has the right expertise to make GravityLight. We have some links to partner organizations in Africa and need to do the same for India. If you're part of an organization and would like to get involved then please contact us. We are particularly looking for contacts in South America.

Visit our skunk-works website here www.deciwatt.org. Our movie soundtrack kindly created by Belinda from [the bush the tree and me](http://thebushthetreeandme.com). Check out John Keane's great [Solar For Africa](http://solarforafrica.com) blog.

FAQ

Can it charge my mobile or ipad?

No. Please visit the [deciwatt](http://deciwatt.com) page for a discussion on this subject.

How long does the GravityLight work for per lift?

The duration and power level/brightness are adjustable between just over 30 minutes and about 18 minutes (depending on what the bag is filled with). The light output on the video is generally at the higher power level.

How much light does GravityLight put out?

GravityLight is designed to be a replacement for a kerosene lamp. GravityLight's output is better than a kerosene lamp.

I can help with your trial, how should I get in touch?

Please email info@gravitylight.org with your details and a description of how you may be able to help. We are very keen to hear from all those interested to help with the trial, wherever there is a need. Please bear with us and will be in touch as soon as things calm down a little to discuss / arrange.