

MAY 2010

THE MONTHLY NEWSLETTER of the SANTA CRUZ COUNTY AMATEUR RADIO CLUB

# SHORT SKIP



## Field Day Plans

The SCCARC will collaborate with the San Lorenzo Valley Radio Club again this year. The coordinator is Rich Seifert KE1B.

The focus this year is not on achieving the highest score possible. Instead, we intend to make it easy and fun for non-hams to get a taste of our hobby, and to provide as much "contest" experience as possible for new hams, particularly Technicians with no HF experience.

Rich will present the plans at the May 21 meeting of SCCARC, but the outline is as follows:

Friday, June 25, 11 a.m to sundown: Setup

Saturday, June 26, sunrise to 11 a.m.: Finish Setup

Saturday, June 26, 11 a.m to Sunday, June 27, 11 a.m.: Field Day operation

Sunday, June 27, 11 a.m. to 2 p.m.: Tear-down and cleanup

The location is same as for the past two years, the CalFire Training Center on Empire Grade.

Field Day operation will be class 2A. We expect to have

-One HF CW station (80/40/20/15/10 m)

-One HF SSB station (75/20/15/10 m)

-One "Get On The Air" (GOTA) station (40 m SSB) for non-hams and newbies

-One VHF/UHF station

-One satellite station

All area hams are invited to participate, whether or not they are members of the SCCARC or SLVARC clubs. The public is invited to visit on Saturday afternoon. Visitors will be given a chance to operate under the supervision of a licensed ham.

## Dead Zones and the Vacation Set

Jeff's comments [on the K6BJ reflector... reprinted at end of Harry Lubcke's story] about magic crystals reminded me of an early article about propagation in the San Lorenzo Valley. This one appeared in the Nov 1922 issue of Radio News magazine. It may be more pertinent to your DX limitations, Jeff.

—Wayne, KB6KN

Dead Zones and the Vacation Set by Harry Lubcke describes experiments conducted in Big Basin. He writes:

"A portable set provides an excellent means of testing the receiving properties of various locations, and one can obtain first hand information about the little known phenomena commonly termed "pockets.

Quite an extensive test was conducted in the Big Basin, California lasting over a period of several days, by Mr. J. Wallace and the Writer.

The Big Basin is a nickname applied to the California Redwood Park, which is located in the midst of the Santa Cruz Mountains, about 12 miles from the Pacific Ocean. This is about 80 miles from San Francisco air line. The elevation is about 1,200' and a rim of mountains surrounds the camp. Which is about 2000' high. Most of the ground is covered with towering redwoods and is quite densely wooded. The trees in the vicinity of the test were nearly 350' high.

The accompanying map shows approximately the positions of the various places mentioned.

A single wire aerial was erected between two trees about 150' apart and approximately 20' high. The apparatus used consisted of two variometers, using a special hook-up with a range of 100 to 400 meters, and a standard spider-web set of three coils. These were connected to the tube, A battery, B

battery, etc., in the usual manner.

A large variety of detector tubes were available, namely a radiotron, Western Electric V.T., and an electron relay. A radiotron amplifier was also used as a detector.

The set was put URL in an effort to copy news and sports from San Francisco, as well as for experimental purposes. During the period of the test, which lasted from Saturday to Thursday, June 24 to 29, not one radiophone station was heard. The air was absolutely quiet and not even a crash of static was audible. The only station logged was an arc which came in so faintly that its call could not be ascertained. This was heard on Wednesday night about 5:30 o'clock.

This proved conclusively that the set was located in a pocket or dead zone. The results were partly anticipated before the test was started because the Santa Cruz Mountains have a reputation for being very effective barriers to radio waves in the town of Santa Cruz, which is located on the opposite side of the mountains from San Francisco. Amateurs have repeatedly copied Los Angeles stations easier than San Francisco, although it is more that four times the distance. It is the opinion of the writer that the mountains contains a large amount of iron ore, because on the sides of the mountains in some places a reddish color can be seen, indicating the presence of iron oxide.

The apparatus was the property of Mr. J. Wallace, engineer for the Pacific Telephone and Telegraph Co. The instruments were in units, facilitating easy connection and a broad choice of hook-ups. Of all the tubes used, the Western Electric proved to be superior and it was the tube on which the only station was heard.

The ranger was skeptical about our being able to receive in that locality, as several

Continued page 3, col.1

**CLUB MEETING FRIDAY MAY 21, 7:30PM**

# Greetings from Beijing

## - or- A discovery of remote communication with EchoLink

By Don Taylor K6GHA

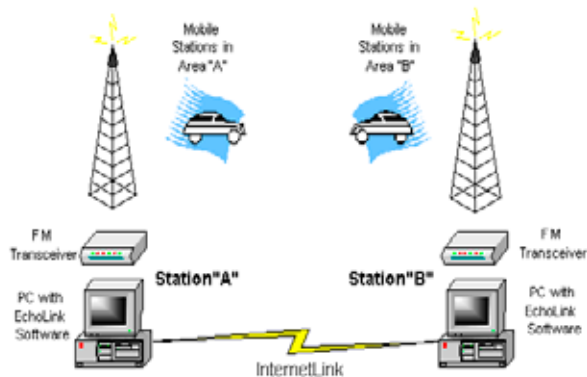
Prior to a recent trip to Beijing, China, I found myself wondering how I could keep in touch with friends and family from abroad. Of course, the simple answers would be the telephone, email or other such communication path. However, I wanted to try something a little different. Let me back track a few months to an incident on the K6BJ repeater that led me to the current events.

In the beginning

Late last year I was working in my office and monitoring K6BJ when I heard something I hadn't heard before... "Connecting with EchoLink... <call sign here> connected". Then someone from Sydney Australia came on the air and boldly started calling out for someone with a 2EA prefix, and asked if they were listening. To my surprise a nice QSO ensued about friends and family visiting the Monterey Bay Area. At the end of the chat, again... Hmm... "EchoLink disconnected". What just happened? I was curious about this EchoLink, so I began my electronic learning by surfing the internet.

So what is this EchoLink thing anyway?

As described in Wikipedia "EchoLink is a computer based Amateur Radio system that allows [radio amateurs](#) to communicate with one another using [Voice over IP](#) (VoIP) technology on the [internet](#) for at least part of the path between them. It was designed by Jonathan Taylor, a radio amateur with [callsign](#) K1RFD." <http://en.wikipedia.org/wiki/Echolink>



A simple way to look at the EchoLink connection is as if you were using a radio (instead of a PC). You can connect a few ways:

- Directly from one radio operator to another

- From a radio operator, through a repeater,
- to another operator
- Or through connected repeaters (as pictured)

Not judging, or entering the debate as to if using EchoLink is "real radio" (since one part of the communication may be done entirely on PC), I thought it would be fun to use it on an upcoming trip. Following the instructions for registering and downloading all the appropriate applications to my PC from [http://www.echolink.org/register\\_data.jsp](http://www.echolink.org/register_data.jsp), I started up EchoLink. But, alas, my first attempt was thwarted. I work mostly from behind a firewall, and I do not have the necessary "open ports" to use my laptop as an EchoLink device. Reading the manuals helped to identify a variety of network problems that were out of my control, and allow me to make the next steps in getting around the issues, connected, and on the air.

(Note: Each new user of EchoLink must provide proof of license before access is granted. This is to ensure that only licensed Amateurs have access to the system, and to ensure that each user is using a valid callsign that he or she is authorized to use.)

So, what other options did I have?

How could I figure out a way around network limitations? How much technology is too much technology? And why did I decide to get involved in this all consuming hobby anyway?!? ;-)

In my case, iPod Touch to the rescue! Yes, I now almost believe there is an 'App' for most everything. So I searched for one on the iTunes store using the word 'EchoLink'. It returned an app, better yet it was free from <http://itunes.apple.com/us/app/echolink/id350688562?mt=8>! In minutes I had the application downloaded and installed. Using a headset with a mic (not needed with an iPhone), and a few more minutes, and I was connected and on the air.

So, now back to Beijing

I sat viewing the Beijing Skyline at an early morning breakfast in a high-rise.

Picking up my iPod Touch, I hit a few keys and connected to the K6BJ repeater. Even before having a chance to call out to Santa Cruz, I had two people coming back to my automated logon asking about where I was



and how things were going. The rest of the story was as simply as a radio rag chew, from half a world away.

In Conclusion

Does it work? Is it simple? Will I use it? Is it fun?

To all of these questions my answer is YES!!

Does it replace my radio? Is it my primary communication option? Will it work everywhere? Will it work in an emergency? To all of these questions my answer is 'NO' or 'Maybe not'. But, then again, I don't expect it to. If your desire is for you to connect and keep in touch, then EchoLink might work for you.

You need to be aware that EchoLink service to a repeater is limited to the connections serviced by a given repeater. If the server has only one connection, and you are using the ONLY EchoLink connection, you are tying up that resource. As with all good radio operators, be courteous of your connections and show good practices when using a limited resource. Use the tools embedded in the EchoLink application that give you a view of what is available.

What's next? EchoLink 100 (see the video below).

For more on EchoLink try:

- EchoLink <http://www.echolink.org/>
- EchoLink repeater maps <http://www.echolinkmap.org/>
- EchoLink for the iPod <http://itunes.apple.com/us/app/echolink/id350688562?mt=8>
- EchoLink and EchoLink 100(Video) <http://www.youtube.com/watch?v=gTe3eH19ngs>

## Dead Zone continued

other radiophones, as he called them, had failed to bring in anything. A tree would have been tried as an antenna, but the ranger was against it, as it is a state park and the public is forbidden to mutilate the wild growth in any way. No doubt a 350' redwood tree would have made a splendid antenna, but we decided it would be better to spend our money in further experimenting than to pay it in the form of a fine for misdemeanor.

For the sake of anyone wishing to exploit the field further, the twin-variometer hookup is shown in Fig. 2; although this type of set operates only about 100 to 400 meters, is very efficient due to the absence of switches, high resistance contacts and dead-end losses."

Jeff AE6KS, comments from the K6BJ reflector.

It has come to my attention that my inability to effectively work DX stations might not be due to my baling wire antenna, Romex feed line, broken HF radios, or obnoxious operating style. It's quite possible that someone buried some Orgonite near my QTH, which is interfering by converting my negative energy (RF) into positive energy (good weather, positive attitude, good karma, etc).

<<http://www.orgonite.info>>

We have found that tactical deployment of Orgonite (e.g., "gifting") by throwing, hiding or burying it near sources of electromagnetic radiation or other pollution or in polluted areas, such as near cellphone/TV/radio towers, power plants, in lakes, rivers and ocean harbors, has a powerful and noticeable effect on the area. The skies get clearer and return to the deep blue color you remember from your childhood, complete with normal puffy white clouds. (etc...)

Orgonite stones are apparently made by encapsulating quartz crystals or amorphous quartz in casting resin, resulting in the required RF neutralizing strange shapes. While I have yet to find any Orgonite in the yard, the digging and exercise seems to have produced some positive energy. Anyway, if you notice that your equipment or location is not working as expected, or your cell phone reception is less than stellar, search for buried Orgonite crystals like these:

<<http://www.google.com/images?q=orgonite>>

<<http://www.orgonecrystals.com>>



By Art Lee WF6P

## CHATTER

My XYL Donna, AB6XJ, and I always enjoy reading AE6KS Jeff Liebermann's written word. He always manages to slip in a random sliver of wit, enough to keep one interested in the topic. Often, in his description of repairs to club equipment, repeaters, antennas, computers, etc., I get the feeling that he is our own fabled, Peter And The Dike. On the serious side, his recent color pics on the club Reflector (Re: K6BJ-2m Repeater Maintenance and Repair Log of Mar 14th) were outstanding views of our equipment. Great photography (an IPOD or telephone camera?) and step-by-step comments as to what went wrong, how things were corrected, and helpful hints for fixers and users. He is always generous with his time and especially, high praise for help he receives from fellow club members.

I recently received a nice email from Suelene Petersen, K6CPA. What a neat call sign. Of course, she is a practitioner of



CAKE Crumbs 2010-04-10

When Ron W6WO is away at least some of the mice do play. Tom KW6S, Kerry K6RRY, Vic AE6ID, Frank K6BDK, and David WS2I showed up at Gigi's on Saturday April 10.

KW6S is building a classic tube transmitter from the 1996 ARRL Handbook. The Handbooks are not on line but the ARRL will supply photocopies of specific articles, no charge.

Discussion of evil ground loops and how they can bite you in unexpected ways, not just hum, the pin-1 problem, etc. KW6S reported an SB-220 T/R relay chatter problem that came down to a poorly-designed ground circuit.

The CX250 tube was used in aircraft radars in the 1950s and is still popular today - a tribute to Eimac. A mint Collins R-390 receiver recently sold on eBay for \$7K. Does anybody

accounting skills. She passed her Extra class license exam and is also an ARRL VE for the San Lorenzo Valley club. She loves to give encouragement to hams studying and testing to upgrade their tickets. I told her of my experiences when I was attempting to get my ticket in 1945/6. While attending Hayward High school Radio Shop classes and studying to be a ham, a couple of us visited the home of a nearby ham. We got a chance to get on the air to talk to another ham in Alameda. The Alameda ham invited us to visit him. He was proud of and showed us his neat ground arrangement. He had pipes submerged in the salty water beneath his Bay Farm Island home (hard to forget something like that!). This led to still another ham, a radio announcer at KGO in San Francisco. He invited us to visit the commercial broadcast studio in the Palace Hotel. We rode the streetcar to Oakland, then the A train to San Francisco, walked up to the hotel on Market Street. It was a great trip. For those of you who were around in those days, Ken Ackerman was that announcer.

I was sad when I read of the passing of one of my former Cabrillo College ET students, Pastor William (Bill) Crouser. I remember that he had been a Navy Chaplain, a part of the Armed Forces we both shared. Bill was active in ARES. Funeral services were held on May 1st.

want to buy a radio altimeter? KW6S has more than fifty of them. K6RRY suggested a DX-pedition to Tom's legendary warehouse in Fresno.

Other topics: How to jump-start an airplane (very carefully); monster Anderson Power-poles; using FETS to balance the charging current for a series string of batteries; solid-state replacements for tubes; 1966 pneumatic computers; what really happened when the unmanned shuttle crashed into MIR. -- WS2I, scribe

## WAGUBE, SK

I am sad to report that WA6UBE, Elaine nee "Trish" is now S/K.

She was a long time emergency radio person for the government on the other side of the hill. Others may remember her as the "military vehicle" lady, or as a range master for the Santa Clara County gun range.

Now she'll be at work making sure that we have good propagation for whatever emergencies/disasters may befall this area.

God-speed Elaine.

—72 de Donald, AE6RF

## SCCARC Board - 2010

<b>President</b>	Bruce Hawkins	AC6DN	689-9923
<b>Vice President</b>	Greta Steinbruner	KI6NTL	325-9482
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	Cap Pennell	KE6AFE	429-1290
	Jeff Watson	W6NA	
<b>K6BJ Trustee</b>	Allen Fugelseth	WB6RWU	475-8846

## MONTEREY BAY REPEATER ACTIVITY

Santa Cruz County	K6BJ 146.790- PL 94.8 Santa Cruz (linked to KI6EH) KI6EH 147.945- PL 94.8 Watsonville (linked to K6BJ) K6BJ 440.925+ PL 123.0 Santa Cruz (not linked) • SCCARC Net Monday 7:30 PM 146.79- /147.945- /147.180+ linked • SCCARC 10 Meter Net Monday 7:00 PM 28.308 MHz USB
ARES Net	SC County Wide ARES Tuesday 7:30 PM on 147.180+ PL 94.8 and 443.600+ PL 110.9 linked
San Lorenzo Valley	WR6AOK 147.120+ PL 94.8 Ben Lomond • SLV Net Thursday 7:30 PM
Loma Prieta	AB6VS 440.550+ / AE6KE 146.835- PL 94.8 (linked for net) • LP ARES / LPARC Net Tuesday 7:15 PM
Monterey	K6LY 146.97- PL 94.8 / 444.700+ PL123 (linked for net) Monterey • Monterey Co. ARES Net Wednesday 7:30 PM K6LY 146.970- (PL 94.8) • NPSARC Net Wednesday at 8 PM on K6LY/R
LPRC	WR6ABD 146.640- PL 162.2 / 442.900+ PL 162.2 (winsystem.org) • LPRC Net Tuesday 8:00 PM 146.640-(PL 162.2) • Amateur Radio Newsline broadcast Tuesday

• Santa Clara Valley Section Traffic NET Tuesday 9:00PM 146.640- (PL 162.2)

**FOR MORE INFO SEE: <http://www.k6bj.org/freq.html>**

## SCCARC Calendar of Events

ARES Meeting (prior to club meeting)	Friday	May 21
SCCARC Meeting	Friday	May 21
Cake Meetings	Sat	May 8, 22
Board Meeting	Thursday	May 27
Short Skip articles due	Mon	Jun 7
SCCARC Meeting	Friday	Jun 18
Field Day	Sat-Sun	Jun 26-27

## MONTHLY MEETINGS.

The SCCARC Meets at 7:30 PM, on the **THIRD FRIDAY** of the each month (except December). Meetings are at Dominican Hospital, Education Center, 1555 Soquel Drive, Santa Cruz.

## NET CONTROL SCHEDULE

(Subject to Change)

5/17	Phil KE6UWH
5/24	Chris KG6DOZ
5/31	Tom K6TG
6/7	Byron KI6NUL
6/14	Greta KI6NTL

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Free to members.

**Santa Cruz County Amateur Radio Club, Inc.**

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Writer: Ron Skelton, W6WO

## License Exams, Watsonville, Saturday June 12th, 1-5pm

The entry-level Technician Class question pool will change at the end of June. The old study booklets will be out of date by then, and I hope nobody will have to buy a new study booklet (for use after June). Anybody studying

the exam questions (up to now) will want to pass their Tech exam before Field Day this year, before the end of June! If you know someone who will show up to take the exam in Watsonville on the afternoon of June 12, please notify Suellene W6CPA or Matt KI6LTS.

You can search for other ham exam sessions within 50 miles of your Zip Code at <http://www.arrl.org/find-an-amateur-radio-license-exam-session/>

Saturday June 12th, 1-5PM The Church of Jesus Christ of Latter-Day Saints. 255 Holm Road, Watsonville, CA 95076

831-536-4437 Technician, General, and Extra exams \$15



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