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QSL of the Month, ARRL Section News

**July Meeting  
Thursday, July 28th  
7:15 PM**

**This month's topic is  
Radio Astronomy**

## Submitting Material to the Circuit

Material may be submitted for publication by sending it directly to the editor. This can be done by US Mail, or via the Internet (preferred). The deadline for each issue is the **Thursday**, one week before the monthly meeting.

by mail  
Bob Hess, W1RH  
5020 Glory View Drive  
Placerville, CA  
95667

## FROM THE PRESIDENT

Greetings, I hope your July has been enjoyable it sure has been moving by fast. It seems like Field Day was a long time ago. Since I'm on the Field Day subject, I would like to take the time again to thank Bill, W6LSW, for organizing the event and ensuring that it ran smoothly. So please thank Bill when you see him.

Our club's next event is a Fox Hunt on August 13<sup>th</sup> starting at 9:30 am. If you need more information look at <http://www.riversideproject.com/indexfox.html> for all the details.

In conjunction with the Fox Hunt I will have another antenna build day at my QTH. This one will be on Sunday, August 7<sup>th</sup>, at 1:30 pm. We will be building a three element Yagi antenna for 2 meters out of a tape measure. It's a good tool for the Fox Hunt and a nice portable antenna for other events.

After the Fox Hunt our next activity will be the support of the Pony Express re-ride and the Kids Expo in Garden Valley. Then, in January, we are planning on running a special event station to celebrate the discovery of Gold, in Coloma, CA.

So we have a few activities lined up over the next few months. I just need some ideas for another club project to work on during the Fall. We've done a few antenna builds so I would like to try some other type of project, for example a field strength meter or radio to sound card interface. Let me know what you think we should work on and I'll start the planning.

I hope to see all of you at the next club meeting and until then enjoy the nice weather we've been having.

73,  
**JAY, K6GGLA**

## THE AG6AU REPEATERS

YOUR \$25 DONATION TO THE REPEATER FUND WILL KEEP US COMMUNICATING!!

BAND	FREQUENCY	PL
6 METERS	52.78 MHz	107.2 Hz
2 METERS	147.825 MHz	82.5 Hz
70 CENTIMETERS	441.725 MHz	82.5

**EDCARC MEETING  
JUNE 25, 2011 (Field Day)**  
Jay, KE6GLA

No Board meeting held.

The meeting was held at the club's Field Day site along the Mormon Emi-



**Mike, K6MLE (Photo by Mark,**

grant Trail. Jay, KE6GLA, called the meeting to order at 5:25pm and thirty people were in attendance. Jay asked the group to join him in the Pledge of Allegiance.

Jay asked the group to introduce themselves and report any license changes. Jeremiah announced that he is now K6JRN, ex KI6WXC. The group congratulated Jeremiah on his new call.

Joyce, K6LUV brought cookies to



**AF6OP on 20M (Photo by KJ6EUO)** share with the group. Everyone enjoyed the cookies.

Jay asked the group to thank Bill, W6LSW and Loretta, N6NQH for their work in organizing Field Day 2011. Everyone gave the team a round of applause.

Bill, explained the reason for the move from site B back to site A. Everyone agreed that it was a good idea.

Loretta gave a Treasurers' report. She reported that we have a balance of \$1,503.07 with no bills outstanding.

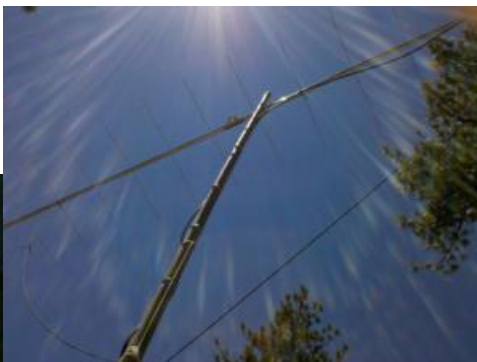
Ken, W6KWV announced that the next VEC session would be July 9<sup>th</sup> at the American Legion Post 119.

Jay announced that the club would be having a Fox-Hunt on August 13<sup>th</sup>. All are invited to participate and should contact Harry, W6HFM for more infor-



**2 Meters (Photo by Mark, KJ6EUO**

mation. Jay will be holding another antenna build day prior to the Fox-Hunt to build T-hunt antennas. The date is TBD.



**Big 2-Meter Beam (Photo by KJ6EUO)**

Jay asked the Field Day group to report



**Ken, Peggy, Don (Photo by Karen Hess)**



**Jay and Nancy (Photo by Karen Hess)**

on their efforts. All reported that they were having fun, making contacts and the weather was good.

Bob, W1RH and Karen held a raffle and few of us walked away winners.

Jay thanked everyone for attending the meeting and closed it at 6:10pm.



**Nancy, Natalie, Dave (Photo by Karen Hess)**

**EDCARC FIELD DAY REPORT**  
Bill, W6LSW

The purpose of this report will be to record the activities of preparation, set up and the results of our 2011 Field Day.

This year we faced a problem that we have not had previously, i.e. the weather. Because of late snow fall, on Mormon Emigrant Trail (MET), travel to our regular FD site would be difficult. Loretta (N6NQH) and I made at least three separate trips out MET to check the road travel conditions. The last trip, 5 days before Field Day, we decided that there would probably be snow clear up to the FD site road and at the site! We were back to looking for alternate sites to hold

Continued on next page



FD Meeting (Photo by Scott, W6SRG)

Field Day!

At the USFS offices we were sent to Recreation Assistant Josh Sjostrom to get a permit. Josh had no knowledge of our previous years of FD activities. After



Michal on 40M (Photo by W6SRG)

several sessions explaining what we were going to do during our Field Day, things began to come together. We did not need a permit unless we had more than 75 in attendance. He informed me about the USFS rules about traveling on roads within the USFS. We can not **drive or park** on any road that does not appear on their official maps. We selected a site at Pilliken Road and MET. Later I found out that the Gothard Family were good friends with Catherine Bounds, a USFS District Ranger and had been educating her about Amateur Radio and what we do out at our Field Day site. This really made the difference in my dealings with the USFS! No wonder Josh became so accommodating!

El Dorado County Circuit

## TUBE OF THE MONTH

Norm, N6JV

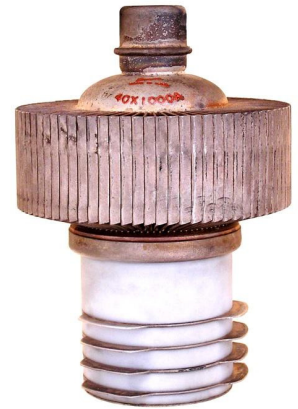
Visit the museum at [N6JV.com](http://N6JV.com)

[From the Mother Load DX/Contest Club Newsletter]

### Tube Of The Month

## 4CX1000A

In 1950, EIMAC started a development project to make a relatively small high power tube using ceramic insulation. The Germans had managed to produce some ceramic insulated tubes. They were trying to meet a vague specification from the U.S. military. The first step was to learn how to make the ceramic seal to the metal. A series of experimental tubes were made to test sealing techniques. The X-504 (1951) was a re-packaged 450T triode with stacked ceramic spacers. The X-521A was similar but had overlapping or coaxial construction that gave a better seal. The drive requirements of the triode were too high for the proposed application, so a new series of tetrode X tubes was started. The X-593 (1957) had a



4CX1000A

breechblock socket system that was more rugged and compact. The socket was designated the X-667 and its development paralleled that of the tube's.



X593R

External anodes had been in use since 1945, but a more efficient forced air anode using many thin radiating plates proved adequate. The intended use of this new tube was for SSB that was beginning to be popular with the military and a few (rich) hams. The control grid could only handle 1-watt maximum in AB1. The tube produced full output with zero drive.

The 4CX1000A would produce 1630-watt output up to 110

MHz. I believe that the Collins 30S1 was the first amplifier designed to use the tube. The SK-800 was the socket and the eventually was made several versions. In time, they made more efficient anodes and sold the 4CX1500B that used the same socket. During the testing of the new tube, the anode worked as predicted, but they accidentally also invented a new siren. The tube could be heard all over the factory.

The use of ceramics has changed the modern manufacture of transmitting tubes. EIMAC no longer makes any tube with glass insulation.



X521A

**Continued from Page 3  
Field Day Report**



**Nice Compact Station (Photo by W6SRG)**

On the Friday before FD, Loretta and I met with Dave Cole and Jay Harmor & family at the Pilliken Road site where we began to set up for FD. When Loretta and I placed our road FD signs, we decided to drive on up and see just how far the snow had melted. We were very surprised to find that in the 5 or so days since we checked the road to our regular FD site, the snow had melted! The snow at the FD site was also gone! We drove back to the Pilliken Site and told Jay & Dave what we found. Someone commented that they would rather have FD at our regular site. A vote was taken and the majority agreed. The road sign was modified to indicate that FD would be at our regular site. We packed up every-



**Deluxe Accommodations! (Photo, W6SRG)**

thing and left the Pilliken Road site! At our regular FD site, I sat back and watched everyone choose their spots. Most have been there enough times to know the places to set up. Kirby, AF6OP, had made arrangements to borrow H a r r y ' s ( W 6 H F M ) Shooter that would put lines in the trees to hold antennas.



**Mark, KJ6EUO (Photo by Karen Hess)**

Kirby's son Mike did a great job of using the shooter. Several antennas were placed very high this year. Jeremiah Norell, K6JRN, was a great help to me during FD. Michael Picco, K6MLE, made numerous attempts to make a Satellite contact, but for the first time in many years, he was unable to make any this year.

Mark Ashurt, KJ6EUO, made 25 voice contacts on 2M, but due to problems with his computer, we were unable to get a copy of his contacts. Our teams got the following PHONE contacts: Kirby's station: 20M = 423, 80M = 96; Dave Cole's station: 10M = 16, 15M = 35; Jay's station: 40M = 259; and Don's station: 6M = 33. Michal, WA6RZ, got 40 contacts on 4 CW

bands. Every one at Field Day this year pitched in and did an outstanding job. Even though we had a lot road blocks this year, everything turned out extremely well. I am pleased with the efforts of

all our Hams and visitors at our FD 2011.



**Trees & Antennas (Photo by W6SRG)**

**ITEMS FOR THIS MONTH'S RAFFLE**

This month's raffle will be at the meeting at the Field Day site. All items to were selected with Field Day in mind.

- 100 feet of 12 volt wire
- Multimeter
- Tube of NoOx
- Power Poles
- Starbucks Card (2)

**EDCARC ELMERS**

**Contesting / Tower Permits**

Bob Hess W1RH

**Working DX**

Michal Warzecha WA6RZ

**Soldering**

Dave Cole KG6YBE

**VHF Contesting/Satellite**

Jay Harmor KE6GLA

Want to join this list? Contact Bob, W1RH

**EL DORADO COUNTY ARC MEMBERSHIP**

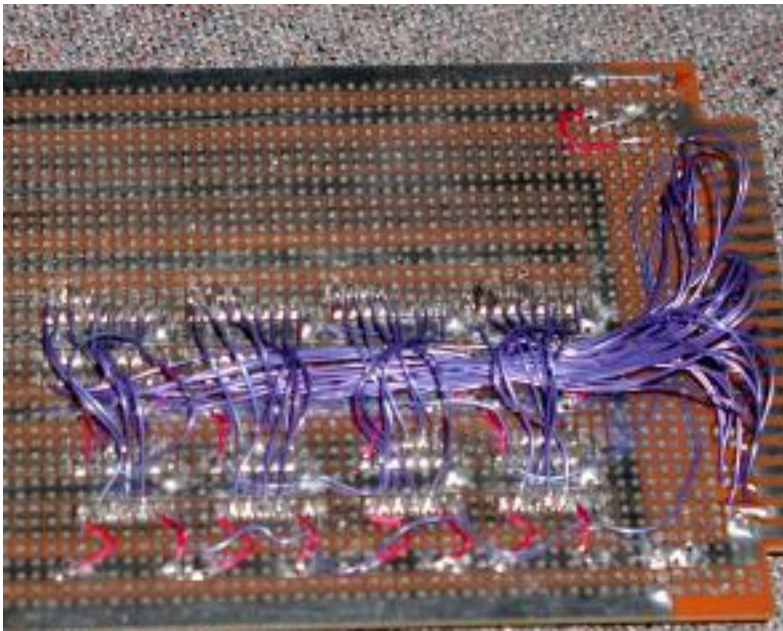
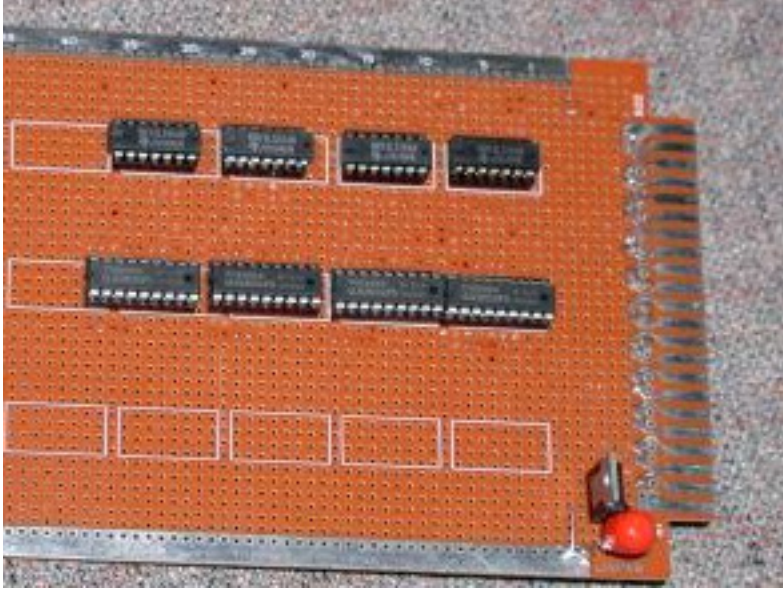
Current membership rates are \$15.00 per member and \$7.50 for each additional family member.

A donation to our repeater system, in addition to your 2010 dues, will give us the funds to properly maintain the repeater and improve coverage.

## REPEATER UPDATE

Bob, W1RH

Our new 2 meter repeater system will include a new receiver voting (comparator) box and a new controller. The controller has a serial output allowing on/off control of 32 items. To use this option, a serial to parallel converter had to be built. Michael, K6MLE, built this card for us. Look at all of those wires! We hope to have it all operational in a few months. Thanks Michael!!!



Gate Bridge, run across the bridge and back; and then back to the running start/finish line.

There were six radio operators afloat. One each on:

Ferry  
Sweep Boat  
Lead Boat  
East Flank  
West Flank  
Kayak Boat  
Medical Boat

The other positions were:

Command  
Net Relay/Aid Station  
Finish 1, 2, and 3  
Bicycle Sweet 1 and 2

I was new and was one of the finish line operators.

We assembled at 0615 hours. But I began the day at 0445 hours and was driving over the Golden Gate Bridge by 0545 hours. Talk-in was on the Mt Diablo radio club repeater 147.060. We switched to simplex for the event 147.555.

The weather did not cooperate. The fog was worrisome. We watched more and more the bridge disappear as the fog sank nearer the water. The event director can cancel due to weather (fog).



**Dennis at the Alcatraz Challenge**

The fog continued to yo-yo down and up and down the bridge super structure. After the ferry and all the boats were loaded and underway the decision was made to begin the race off Fort Mason rather than near Alcatraz. Everyone would still receive a t-shirt that said Alcatraz Challenge.

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## THE ALCATRAZ CHALLENGE

Dennis, KI6GSJ

Alcatraz Penitentiary is infamous. Escape from Alcatraz sounds more infamous. At EMCOM2011 a seminar by that name caught my attention. By the end of the one hour seminar I had volunteered to provide radio support for the

event.

Each year, actually a few times each year, hundreds of swimmers jump from a ferry near Alcatraz Island and swim ashore at Crissy Field. In this event, Alcatraz Challenge, after the swimmers come ashore, they or relay team members run to the south end of the Golden

**Continued from Page 5**

Shortly after 0815 hours the swim commander announced that the swimmers had entered the water. The event was underway. The loud speaker relayed the start information to staff, supports, and family waiting at Crissy Field. I snugged up the zipper on my wool sweater.

Three swimmers were pulled from the water ending the event for them. They were given a courtesy boat ride to the finish line where all their gear had been assembled.

Most of the radio activity on the water was on marine radio frequencies, and I was not tuned to monitor it. On simplex there were discussions about how particular swimmers were doing. Everyone was vigilant for boats which might endanger the swimmers in the water.

By this time I had wangled a cup of coffee from the aid station.

In just thirty-two minutes the first swimmer came ashore. She swam without a wetsuit no more less. Many other swimmers did wear wetsuits. Eventually more and more swimmers left the frigid water and marched triumphant to the changing areas. The last swimmer finished in about one-hour. I had to admire that kind of determination.

By now the loud speaker was drowning (no pun intended) out my HT. When I moved down the beach where it was quieter, I was away from the event activity.

Shortly after the last runner had left the transition area we learned that two swimmer's bib numbers had not been accounted for. There were two ham radio bicycle sweeps patrolling the running course. After some anxious moments the numbers and their owners were found running on the bridge, safe and sound.

We remained on duty until the last runner had finished the course. The crowd grew smaller and the loud speaker finally shut down.

As we walked back to our cars we had made two new friends. Furthermore we had contributed to a team effort that made the event possible and kept the swimmers and runners safe.

El Dorado County Circuit

# HAM RADIO LICENSING TEST

**September 10, 2011**

**American Legion Post  
119 Building**

**4561 Greenstone RD  
Placerville, CA 95667**

**STARTING  
AT  
9:00 AM**

**Test fee \$14.00  
Subject to change**

**CONTACT  
KEN, W6KWV  
642-9523**

**NOTE THE NEW  
LOCATION!!!**

## EDCARC Weekly Net

Is held Tuesday evenings at

8:00pm

AG6AU repeater

147.825

CTCSS/PL tone of 82.5

FOR SALE

Yaesu VX8R HT with extra battery, AA cell holder, home and mobile charger, Bluetooth installed with Yaesu Bluetooth headset, GPS speaker



mic, USB programming cable and software. I'm asking \$250 obo. Call me at (916) 337-6043, catch me on the club repeater, or see me at the meeting.

Matt  
W6MAZ  
mmaszczak@gmail.com

## Join the EDCARC Reflector!

**It's Easy!  
Just go to**

[www.edcarc.com](http://www.edcarc.com)

**Click on**

**Club Contact Information**

**Look for**



**Click on it!**

## ARRL SACRAMENTO VALLEY SECTION (SV) NEWS [EXCERPTS]

Ronald D. Murdock, W6KJ

If you would like to see changes to the 2 meter band plan for Northern California please let me know. I can't do anything except start the process. If you would like to have everything stay the same, let me know that too.

North Hills Radio Club is holding a ham radio open house at their August 16 meeting. North Hills Radio Club "What is Amateur Radio Night" August 16, 2011 7:30 PM. More information can be found at [www.k6is.org/](http://www.k6is.org/).

ARRL Code Proficiency Run sent in your own backyard. 'Well... almost. The next west coast ARRL CP Run will be August 10th at 9PM (local time) sent by Jim K9JM in Grass Valley on both 3590KHz and 7047.5KHz, code speed runs from 10 to 40 WPM. Running KWs on both bands providing hopefully a good signal to improve your copy and chances for getting your next level of code proficiency certification. One minute of copy and payment mailed to ARRL HQ will net you a certificate you'll be proud to display. KNOW Code.' Thanks to Jim, K9JM.

Bill, KG6BAJ, our Nevada-Sierra EC reports: 'Nevada-Sierra County ARES is still in need of radio operators for the 2011 Agony Bike Ride near Loyalton, CA. This year's Agony Bike Ride will be held from 1:00 pm Friday, July 29th to 1:00 pm Saturday, July 30th, 2011. The ride is a 24-hour endurance bicycle ride that could have from 50 to 100 riders participating. As the ride is a fund-raising event for Christian Encounter Ministries, each rider rides as many miles as possible during the 24-hour event. They raise money based on how far they ride. Some riders will ride until midnight, sleep and resume in the morning; others will press on through the night in hopes of riding the entire 24 hours. We still need radio operators to cover the Vinton, and Beckworth stations. Information can be found at: <http://www.n1oes.org/events/agonny/> Anyone who can help is asked to please contact Bill Lewis, KG6BAJ, via email at [ec@n1oes.org](mailto:ec@n1oes.org).

## QSL OF THE MONTH

Bob, W1RH

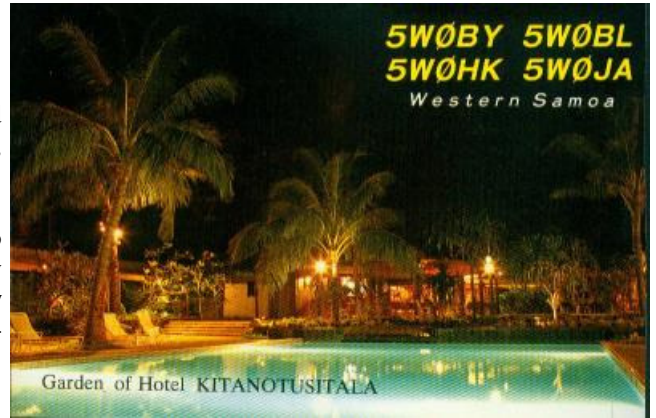
This month's card comes to us from Frank, W6DHN.

Now, if you want to go on a d Expedition, why not do it in style? How about a hotel in Western Samoa?

That's just what a large group of Japanese hams did in September, 1994.

Frank (then N6DHN) worked Sam, 5W0BL, on sideband and received a 55 signal report. You would immediately think that Frank probably worked these guys on 20 meter SSB, but that was not the case. This contact was made via the AO-13 satellite, Mode B! What a great DX contact!

Western Samoa, now known as the Independent State of Samoa, is considered a DXCC country. It's also an IOTA island, OC-97.



New Zealand occupied the German protectorate of Western Samoa at the outbreak of World War I in 1914. It continued to administer the islands as a mandate and then as a trust territory until 1962, when the islands became the first Polynesian nation to reestablish independence in the 20th century. The country dropped the "Western" from its name in 1997. (CIA Factbook)

*To have your favorite QSL card featured in the Circuit, just email me an electronic copy or trust me with a hard copy and I will scan it and return it to you in same the condition I received it.*

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El Dorado County Amateur Radio Club  
PO Box 451  
Placerville, CA 95667

**Club Information 2011**

President	Jay Harmor	KE6GLA		jharmor@comcast.net
Vice President	Don Brooks	KG6YST		drbjfb@yahoo.com
Secretary	Matt Maszcak	W6MAZ		mmaszczak@gmail.com
Treasurer	Loretta Ozment	N6NQH		lwozment@comcast.net
Board Member	Kirby Hallenbeck	AF6OP		lsailorman@comcast.net
Board Member	Dave Cole	KG6YBE		dave_cole@att.net
Board Member	Mark Ashurst	KJ6EUO		me@markashurst.com
Board Member	Carolyn Wylie	KJ6ABN		wylie3201@yahoo.com
Repeater Trustee	Bob Hess	W1RH		w1rh@arrl.net
Newsletter Editor	Bob Hess	W1RH	530-350-3843	w1rh@arrl.net
Webmaster	Jay Harmor	KE6GLA		jharmor@comcast.net

- ◆ Meeting: Club meetings are normally held on the 4th Thursday of each month (except for June and November), 7:15 PM, at the Federated Church, 1031 Thompson Way, Placerville
- ◆ Club Nets: Tuesday evenings, 8:00 PM, on the AG6AU repeater, 147.825 MHz
- ◆ Mailing Address: El Dorado County ARC, P.O. Box 451, Placerville, CA 95667
- ◆ Club Web Site: <http://www.edcarc.net>