

The El Dorado County

Newsletter of the El Dorado County Amateur Radio Club

April 2018, Vol.12, No. 4

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Club Information

April Meeting

Thursday, April 26th

7:15 PM

Federated Church, Placerville

Jordan, WC6J, on operating portable with Parks-On-The-Air and the World Wide Flora and Fauna programs.

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 won't be able to join you at the April meeting due to some family commitments but you will be in good hands with Jordan, WC6J running the meeting. I hope some of you win some good prizes in the raffle.

Our club is lucky to have a large repeater network. Most of you are familiar with the 2 meter repeater on 147.825 MHz. The 2 meter repeater has good coverage in our county and surrounding counties due to the transmitter site in Camino and the numerous receivers in the county. The 2 meter repeater works good with both mobiles and handhelds. The 2 meter band propagates well but can have issues if you are in canyons or inside some buildings with a handheld. In addition to the primary repeater in Camino we also have a standalone backup 2 meter repeater that can be used if the primary fails or is undergoing maintenance.

The next repeater is the 70 centimeter repeater on 441.725 MHz. The 70 centimeter repeater is located in Lotus and is linked full time to the 2 meter repeater. What that means is that any conversations taking place on the 2 meter repeater are also heard on the 70 centimeter repeater and vice versa. The 70 centimeter repeater is low power and the antenna is below a ridge to the west so its coverage is good from Rescue and Shingle Springs to the East. It also has very good coverage in the Coloma and Cool areas. The 70 centimeter band is a good band for hand held radios because the shorter antennas are very efficient. The 70 centimeter band also works better in buildings than 2 meters but

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THE AG6AU REPEATERS

YOUR DONATION TO THE REPEATER FUND WILL KEEP US COMMUNICATING!!
IRLP Node 7195 and the AG6AU-R Echolink 668182 node are available for use on the 440 and 2 meter repeaters. Autopatch available on the 6M repeater

BAND	FREQUENCY	PL
6 Meters	52.78 MHz	107.2 Hz
2 Meters (wide area)	147.825 MHz	82.5 Hz
1.25 Meters	224.06 MHz	127.3 Hz
70 Centimeters	441.725 MHz	82.5 Hz
33 Centimeters	927.2375 MHz	127.3 Hz
33 Centimeters	927.2750 MHz	127.3 Hz

the signal is more attenuated by tree leaves.

The next repeater in the group is the 6 meter repeater on 52.780 MHz. This repeater is located on Bald Mountain, East of Georgetown. The 6 meter repeater runs primarily as a stand-alone repeater but is linked to the 70 centimeter and 2 meter repeater during nets and special events. The 6 meter band is a great mobile band and works better than 2 meters and 70 centimeters in mountainous terrain. It is not a good hand held band because the usual supplied hand held antenna is too short. A proper length antenna would be too long and cumbersome for a hand held radio. The 6 Meter band can experience sporadic E propagation during the summer months. What that means is that stations from Washington, Idaho, Colorado, and Arizona could hear and use our 6 meter repeater if sporadic E is present and they have their radios programmed with our repeater information.

Next in the group we have two repeaters on 900 MHz or the 33 centimeter band. One is located on Pine Hill on a frequency of 927.2375 MHz and can't be linked to our other repeaters. It has good coverage of El Dorado Hills, Folsom and Sacramento. The other 33 centimeter repeater is on a frequency of 927.2750 MHz and is located on Bald Mountain. This 33 centimeter repeater can be linked with 2 meters, 70 centimeters and 6 meters during nets and special events. The 33 centimeter band is very line of site propagation and is also attenuated by plant growth but works well in buildings. Gear for 33 centimeters can be hard to come by and usually requires special software to program the radios.

The last repeater in the group is on the 1.25 meter band or 222 MHz and is on a frequency of 224.060 MHz located on Pine Hill. The 1.25 meter repeater is also stand alone and can't be linked to the other repeaters. The coverage is good over El Dorado Hills, Folsom and Sacramento. The propagation for 1.25 meters is just what you would expect somewhere between 2 meters and 70 centimeters. Gear for 1.25 MHz is also more difficult to find but not impossible.

Our club repeaters are open to all licensed amateur radio operators so feel free to use them any time. If you are having a lengthy conversation on a repeater please leave sometime between transmissions for another station to break-in. Another station breaking in is not rude behavior and is common behavior on busy repeater systems. The station breaking in may need to let another station know some important information or the station may need assistance. So, don't be offended if another amateur wants to break in and quickly use the repeater. Station identification: Don't forget to give your call sign every 10 minutes during your conversation and at the end of your QSO. If the other operator forgets it's your job to remind them.

So as your travels take you around this county and surrounding areas this spring and summer don't forget to take a radio with you and try to check-in to the repeater system. You help the Repeater Trustee, Bob W1RH check on the performance of the system and you may just start up an interesting conversation.

Jay, KE6GLA

ITEMS FOR SALE

Heath Kit linear amplifier SB-200 80/40/20/15/10 meters \$400.00

Heath Kit power/SWR meter \$45.00

MFJ-214 tone (cw generator) for tuning amp \$45.00

Motorola MTX 9250 Handheld with charger \$45.00 (need programing cable and software for 900 Mhz)

Contact: **DON BROOKS KG6YST**
530 902-2198

Mirage A-1015-G 50-52 MHz amplifier. 10 Watts in, 150 Watts out \$75

Contact: **BOB HESS W1RH**
w1rh@yahoo.com

REPEATER TIDBITS

Bob, W1RH

Here's a few codes you might want to jot down:

2#111—Punch in this code on 2 meters and the repeater will respond, "RADIO CHECK READY" Key your microphone, say a few words, release the mic, and hear your signal as it is recorded at the repeater.

4#111—Punch in this code on the 440 repeater and the repeater will respond, "RADIO CHECK READY" Key your microphone, say a few words, release the mic, and hear your signal as it is recorded at the repeater.

6#111—Punch in this code on 6 meters and the repeater will respond, "RADIO CHECK READY" Key your microphone, say a few words, release the mic, and hear your signal as it is recorded at the repeater.

2#112—Will play back the date and time on 2 meters.

4#112—Will play back the date and time on 440.

6#112—Will play back the date and time on 6 meters.

61291—Enter this code on 6 meters to link 6 meters to 2/440

61292—Enter this code on 6 meters to un-link 6 meters from 2/440

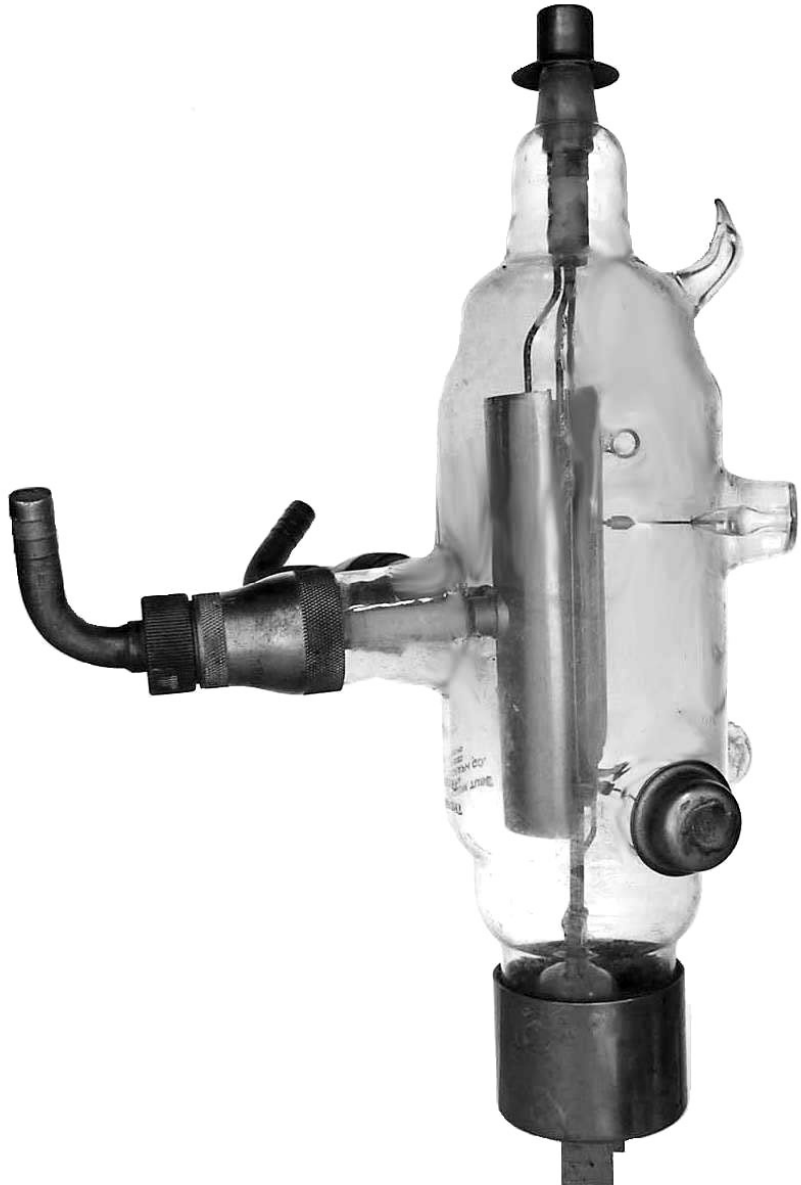
CM-2174

Once while I was at a Silicon Valley swap meet, I found a very strange, water cooled tube of the most unusual construction. Someone commented that they thought Charles Litton had something to do with it. In years to come, the story started to make sense. Charles Litton was a ham who was the head of tube development at Federal Telegraph in the 1920's. The tube business in the late 1920's was highly involved in patent infringement issues with RCA. Heintz & Kauffman with their new glass blower, Bill Eitel, was working on their "Gridless Gammatron" design. Litton was also involved in the development of designs that wouldn't infringe on the RCA held patents. I think all these hams were friends and assisted each other with their common goals.

The designation CM is a Federal Telegraph drawing number and not actually a tube number that would be assigned to a product for sale. The CM-2174 has an internal anode that is hollow and is supported by two water lines that also acted as the electrical terminals. The anode is curved around the grid and filament. This odd shape like the Gamma-

tron plates, were a means to get around the RCA patent for the cylindrical anode that enclosed the grid and filament. In order to not enclose the grid, Litton made his fat anode in a curve of no more than 179 degrees. The tube functioned reasonably well and RCA had no case against it.

When tube production started growing in the early 1930's, Litton formed Litton Engineering and went into making tube making equipment such as glass lathes. Litton was very involved in the WWII expansion of tube manufacturing facilities for Eimac and other builders.



THESE STATIONS WORKED THE GOLD DISCOVERY SPECIAL EVENT

The image displays three promotional cards for amateur radio stations, arranged vertically. The top card features the call sign **KJ4USV** in large, stylized white and yellow letters. Below it, the name **RICHARD C. WILLIS** is written in red, followed by the address **4277 COURTHOUSE RD. VICTORIA, VA 23974 USA** in blue. The background shows a cartoon ham shack with a pig character sitting on the porch. A sign on the porch reads **HAM SHACK**. Technical details at the bottom of the card are **ITU: 8 / CQ: 5 | GRID: FM06TV | LUNENBURG COUNTY**. The middle card features the call sign **KC3IVK** in large orange letters. Below it is the **MOTOR HARLEY-DAVIDSON CYCLES** logo and a Harley-Davidson motorcycle helmet with orange and black stripes. The text **UNITED STATES** is in the top right. At the bottom, it says **TIM HANIWALT • 490 DICK RD • BUTLER, PA 16001**. The bottom card features the call sign **N5KLE** in large yellow letters, with **RUSSELLVILLE, ARKANSAS USA** below it. The background is a view of the Earth from space with a bright sun rising over the horizon. At the bottom, the text **The sun gives life to amateur radio** is written in a cursive font.

DUES

The dues are: Member: \$15.00 / Spouse/Assoc. Member: \$7.50.
There are three ways you can pay your dues and make a repeater donation.

1. Through PayPal. Go here: <http://www.edcarc.net/html/membership.shtml> and scroll down to the PayPal button. There is a slight handling charge.
2. By mail, send a separate check for the dues and repeater donation. Club dues check to be made out to "EDCARC" and repeater donation check to "AG6AU Repeater Fund". You can mail the checks to:

EDCARC
P.O. Box 451
Placerville, CA, 95667

3. In person, bring your checks (see #2) to the next EDCARC meeting. If you have any updates to your personal information, e.g. address (residence or email), phone #'s, etc. then fill out an application form here: http://www.edcarc.net/files/El_Dorado_County_ARC_Membership_App.pdf and either mail it to the address in #2 or bring it to the meeting.

Thanks to everyone for supporting your club!
73, Nancy, KG6PNP, Treasurer

THE EDCARC TUESDAY NIGHT NET
HAVE YOU SAID HI TO NANCY LATELY?
WILL YOU BE CHECK-IN #20?
8:00 PM EVERY TUESDAY

52.78 (107.2)

147.825 (82.5)

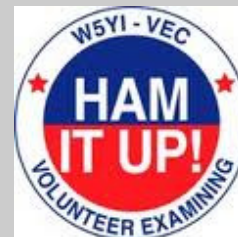
147.975 (82.5) (currently off-line)

441.725 (82.5)

927.27 (127.3)

Or
Echolink

HAM RADIO LICENSING TESTING



MAY 13th, 2018
9:00 AM

THE AMERICAN
LEGION
POST 119

4561 GREENSTONE Rd.
PLACERVILLE, CA 95667

FEES ARE \$14.00
(Subject to change)

CONTACT:
KEN VOGELE, W6KWV
530-642-9523



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Deliver
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Proper
Postage

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

Club Information 2018

President	Jay Harmor	KE6GLA		jharmor@comcast.net
Vice President	Jordan Heichman	WC6J		radon@jordan-h.com
Treasurer	Nancy Harmor	KG6PNP		nanharmor@comcast.net
Secretary	Aaron Tassin	W6CK		
Board Member	Dave Sanders	K6KNS		
Board Member	Don McCallum	AF6ND		
Board Member	Michael Picco	K6MLE		
Board Member	Phil Mosbacher	KK6YYD		
Board Member	Don Brooks	KG6YST		
Repeater Trustee	Bob Hess	W1RH	530-350-3843	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 / 441.725 MHz / 52.78 MHz / 927.275