# The El Dorado County Clifclis

Newsletter of the El Dorado County Amateur Radio Club

August, 2012, Vol.6, No.8

### In This Issue

### Page 1

President's Message

### Page 2

Tube of the Month

Thailand License Exam

### Page 5

Ham Radio License Testing

Estate Sale

### Page 6

Field Day, 2012

### Page 7

Transmitter Hunt

### **August Meeting** Thursday, August 23 7:15 PM

### **SKYWARN!**

### **California QSO Party**

(We have another dual-band HT for raffle)

### 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!

We are halfway through the summer and starting the peak of the fire season. I hope all of you have had ample time to keep defensible space cleared around your property and that you have found a few cool mornings or evenings to work on your land and keep it fire safe. Greg, KJ6GHL, has provided a frequency list that you can use to keep up on the current fire events in our area. The list is available for download from our club web site at http://edcarc.net/files/ KJ6GHL ScannerList2012.xls . You can use the list to program your scanner with the frequencies. Also many of the new mobile and handheld 2m radios can be programmed to receive frequencies outside of the Ham bands. Just look at instructions for your rig or search on Google.

I haven't made much time to work on any of the HF bands, but I did manage to carve out a little time to work the London 2012 Olympics Special Event station, 2012L. I worked them on 20m phone, about 3:00pm in the afternoon. I haven't heard the Welsh station 2012W, but I might be able to get them during the Paralympic Games, which end September 9<sup>th</sup>.

The majority of my free time has been diverted to antenna project cleanup. I have noticed that the days are starting to get shorter so I want to get my antenna projects done while I have evening daylight. I have also been studying 2m propagation in our Sacramento and San Joaquin Valleys. I have been using the weak signal data mode of Weak Signal Propagation Reporter, WSPR written by K1JT. So far I have had steady contacts with a station over 200 miles away using only 10 watts of output power and a small horizontal antenna. We have also noticed some aircraft scatter signals and a few meteor scatter signals. Some of the group is analyzing some interesting 2m scattering caused by the Wing-tip vortices produced by large commercial aircraft. We have a fairly good feel for when we will get good troposphere ducting conditions in the valley and over the hills into the Bay area. We are looking to get some Sothern California stations on the air so we can study conditions farther South.

Hope the rest your month goes well and I look forward to seeing you all at the meeting this month.

JAY, KEGGLA

### 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 Hz

IRLP Node 7195 and the AG6AU-R Echolink 668182 node are now available for use on the 440 and 6 meter repeaters. 440 AND 6 METERS ARE NOW LINKED

### TUBE OF THE MONTH

Norm, N6JV

Visit the museum at N6JV.com

### **Tube Of The Month**

### 813

With the introduction of tetrode and pentode amplifier tubes, transmitter circuitry was greatly simplified. Fewer driver stages were needed that had been required in the older all triode transmitters. Tubes like the Raytheon RK-20 were intended for ham use and RCA's 803 seemed to fill a military application. The 803 was large but only handled full power below 20 MHz. This was no problem for military transmitters that were mostly used at lower frequencies for security reasons.



In 1938, RCA came out with the 813 and it was highly advertised in amateur publications. It was a 125-watt beam pentode that could be used all the way to 10 meters with low drive requirements. A pair of 813s would handle a legal KW input. The popularity of the new tube in ham rigs wouldn't take off until after WWII. Money was tight in 1938. The new tube fit several military applications. In preparation for the probable war, heavy bombers were being designed like the B-17. The 813 was used in the famous auto tuned ART-13 aircraft transmitter. After the War, the 813 was available to the hams in large numbers and many ham publications featured amplifiers and transmitters using the 813. The ARRL Handbook ran an article featuring single band, parallel 813s for several years. I also had single band 813s, but mine were all push pull. The 813 could also operate as a grounded grid amplifier by jumpering the grids together. The 813 is still a common amplifier tube for the first time builder. The Japanese call it the 4B13 and the Europeans call it the BB2/250E.

## California QSO Party

### ADMIT ONE

Here's Your Ticket To The Most Popular State QSO Party On The Planet!

October 6-7, 2012



### Grab a CA QSO or County For That New Certificate!

LeTW Triple Play USA Counties Award Worked All States Worked All California Counties

Great Prizes & Awards!

Complete Rules & Info:

www.cqp.org

Northern California Contest Club



Excellence in Amateur Radio Contesting

### HAMS CALL IT THE MAGIC BAND! Bob, W1RH

A few months ago, I was with a group of engineers, from the State of California Telecommunications office, at one of our Walnut Grove towers. They were out there to check out the site as a potential repeater location for the CHP. As it turns out, the site checked out well and the CHP now has a system operational at the tower site.

The CHP operates their radio system in what communications techs refer to as "Low-Band", the 2-way radio spectrum between 30 and 54 MHz. Their radios use FM modulation, just as we do when using the 147.825 repeater. The 30-54 MHz part of the radio spectrum is plagued with two big problems - skip and noise – and, for that reason, many radio services have relocated to other parts of the radio spectrum. When the State engineers were here, I asked them if they were going to continue to operate CHP communications in the 40-50 MHz region and the answer was a resounding YES.

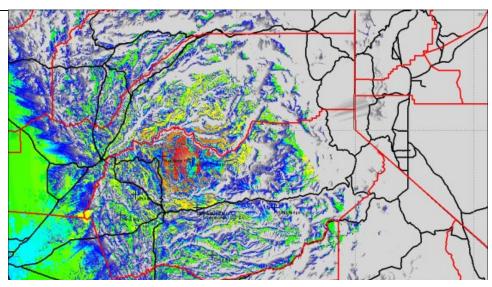
The six meter ham band, which covers 50-54 MHz, is also considered "Low-Band", and users of our six-meter band also have to deal with noise and skip. For us, skip is generally a blessing, but noise is still a problem, but there are ways to deal with it.

### So Why Does the CHP Use Low-Band?

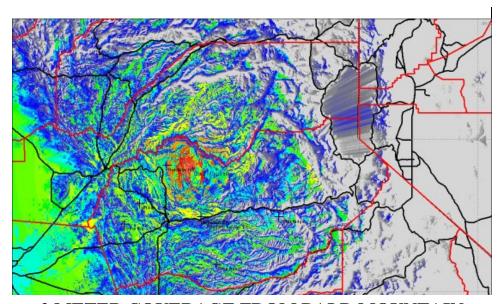
So why does the CHP favor the Low-Band FM for their communications system? Because, as a band for mobile service, there is simply nothing else that compares, especially in mountainous terrain.

On this page are three maps, showing hypothetical coverage from 6 meter, 2 meter, and 440 MHz repeaters operating from Bald Mountain and being received by a mobile station with an antenna 6 feet above ground. Areas in gray indicate no signal received. All other colors indicate various levels of reliable coverage. Notice the amount of gray in the map showing the 440 MHz band? Now, take a look at the 2-meter map. You will

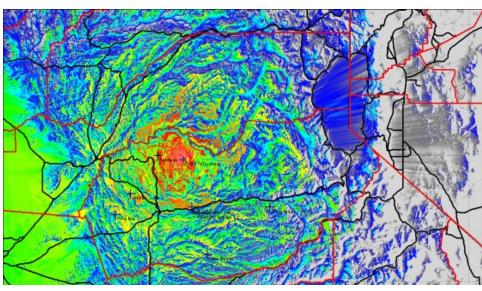
Continued on Page 4



440 MHZ COVERAGE FROM BALD MOUNTAIN



2 METER COVERAGE FROM BALD MOUNTAIN



6 METER COVERAGE FROM BALD MOUNTAIN

notice less gray, but still some noticeable areas showing no signal. Lastly, look at the 6 meter map. You will see very little gray.

That's the magic of the 6-meter band – the ability to penetrate through the hills and valleys.

The maps are very accurate and, indeed, the map showing 6-meter coverage is pretty much the actual coverage area of our 6-meter repeater.

The other day, I was driving from my house to Sacramento, chatting on our 6meter repeater. During my drive, I was joined by a mobile in Jackson, another in Grass Valley, Jeremiah (K6JRN) who was mobile in Fairfield, and Ken (K6KRD) who was driving along Salmon Falls Road. The signal in my car was absolutely noise free all the way into Sacramento, including the area around the Bass Lake Grade, where 2 meters can get quite noisy. All of the mobiles were solid copy. I'll also note that this morning I talked with Jeremiah, who was mobile in Oroville, and the other day I chatted with Harry (W6HFM) who was mobile in Livermore. All of this was via our 6-meter repeater on Bald Mountain.

Low-Band works for mobiles in the hills like no other band!

### OK, if Low-Band Works So Well, Why Don't Other El Dorado County Services Use It?

Good question.

Earlier, I said that Low-Band communications is plagued with problems involving skip and noise. It is also a much longer wavelength than the bands above it.

A ¼ wave whip on 2-meters (communications techs refer to this band as High-Band), is about 19 inches long, and a bit shorter on the frequencies just above 2 meters which are used by El Dorado County Fire and the Sheriff's Department. Many 2-meter hand-held radios use rubber whips that are about that long or shortened just a bit. This makes for a fairly effective antenna for a

hand-held radio, yielding a gain of about 0dB or slightly negative for a shortened whip.

A ¼ wave whip antenna on 6-meters is 54 inches long and even longer at CHP frequencies. This is far too long for a hand-held radio. Any practical length for a hand-held, like under a foot, is very, very inefficient on 6 meters and has with a whopping negative gain. In other words, hand-held radios are next to worthless on 6 meters.

CHP officers operate from the vehicles, however, and seldom use hand-held radios. They are rarely inside buildings or away from their vehicles, and when they are, they will often use a vehicular repeater, allowing them to use a hand-held radio repeated through their mobile radio. The CHP radio system is designed for the most efficient communication from a vehicle and, for that reason, they use Low-Band.

The El Dorado County Sheriff's deputies, as well as our fire fighters, are often away from their vehicles and rely heavily on hand-held radios. With the enormous negative gain of a low-band hand-held whip antenna, this makes low-band very inefficient for reliable communications for services such as local law enforcement and fire. For that reason, the Sheriff's Department uses High-Band in our county, which is a good compromise band, as you can see from the maps. Their hand-held coverage is improved by the use of voting receivers, which are strategically placed around the County, just as we do with our 2-meter system.

## I Get It! 6-Meters is Good for Mobile Coverage! 2-Meters is Good For Hand-Held Coverage!

Our 6-meter repeater penetrates well into the back country, where nothing else will. If you take a drive to Loon Lake, for instance, you can expect absolutely solid 6 meter coverage all the way.

Nothing is perfect, however. The other day, I was chatting on my 6-meter mobile while driving to Don's (KG6YST)

house in Summerset. Coverage was solid for the most part, but did drop out for a short period at the bottom of the Cosumnes River canyon. In general, however, you will find 6-meter mobile coverage to be "arm-chair" copy in most parts of the Western Slope.

### So, How Do I Get On-the-Air From My Car on 6?

Well, you need a radio and an antenna. There are several amateur radios on the market that cover 6 meters. The Alinco DR-06T comes to mind as an affordable mobile radio, which is available for under \$300, and it works well.

There are also some commercial radios out there, available for well under \$100. I actually prefer these radios over the ham versions because the receivers are generally superior. Earlier, I mentioned that noise can be a problem on 6 meters. Ignition noise, from vehicles, can really hurt reception. Most of the commercial radios have excellent noise blankers built in, and that can make all of the difference on this band. Nevertheless Jeremiah and others are using the Alinco and other ham radios on our repeater and they seem to be doing just fine.

Most of the commercial 2-way Low-Band radios on the market will work on 6 meters with minimal conversion - as long as the radio you buy is rated to operate in the 40-50 MHz section of the band. Earlier this year, a group of us in the club took advantage of a deal on some surplus, but brand new, Midland LMR 110 watt mobile radios. They sold for \$90 each. Deals like this are available almost daily, for GE, Motorola, Midland, etc., commercial radios, almost always for under \$100. There is a catch, however. These radios need to be programmed, using an external programmer, and in some cases they need to be peaked up on the 6 meter band. Some are easy to convert, some are difficult to convert, and some can't be converted. You need to know what you're looking for. There are several of our club members who are familiar with the various flavors of commercial radios out there that will work on the 6 meter band, so if you see a cheap radio for sale, don't hesitate to ask one of us before you spend your hard-earned

### HAM RADIO LICENSING TESTING

September 8, 2012

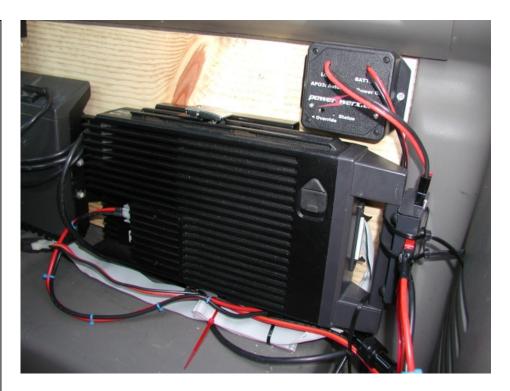
9:00 AM

THE AMERI-CAN LEGION POST 119

4561 GREENSTONE Rd. PLACERVILLE

FEES ARE \$14.00 (Subject to change)

CONTACT: KEN VOGELE, W6KWV 530-642-9523



money.

Regarding antennas, I would recommend a ¼ wave 54 inch whip antenna similar to what you often see on some of the CHP cars. They usually have a spring base and will be mounted on the

side of the vehicle. The other way to go is to purchase a base-loaded whip. For best results, these should be mounted in the center of the roof, preferably permanently mounted but, if you must, use a good heavy duty magnetic mount.

I've included pictures of my installation in my The Midland truck. radio is designed for trunk mount, with an external control head. In my case, the radio is mounted in the back of the cab, and the control head is also mounted behind the driver's seat, in the center of the cab. Since I will rarely change channels, it's a good location for the control head.

If you look just above the radio, you'll see a Powerwerx low voltage disconnect box. One end of this box goes to the car's battery and the other end goes to a Powerpole distribution box. The disconnect box senses when the car voltage



### Continued from Page 5

drops below a certain point, and automatically disconnects power from your radios. This allows you to never turn off your radios in the car. After you shut off



the engine, the Powerwerx box will shut off your radios in a few minutes (user definable). I run a 10 gauge red/white pair from the Powerwerx box, directly to the battery, with a Powerpole in line, under the hood, for a quick disconnect.

For an antenna, I use a base loaded whip mounted in the center of the roof. Thanks to Ken (K6KRD), and Harry (W6HFM) who just happened to drop by



one day to punch some holes in the roof. Really, it doesn't hurt and plugs are readily available for that day when you remove the antennas and sell the vehicle.

I love operating mobile on 6 meters, especially through our club repeater system, which gives users a link to the 440 MHz repeater and links to IRLP and Echolink. Are you ready to try out the Magic Band?

### **USEFUL LINKS**

Harry, W6HFM

NARCC Repeater List http://www.narcc.org/

The NARCC website lists all the Northern California repeaters in two formats, either by geographical area or frequency. Example of our 6 meter repeater:

OUTPUT	INPUT	CALL	LOCATION	SPONSOR	STATUS	NOTES
52.7800	52.2800	AG6AU	Quintette	EDCARC		o107.2elsx I: <u>7195</u> E:668182

#### RadioReference

http://www.radioreference.com/

RadioReference is the world's largest communications data provider featuring a complete frequency database. They have both a free and premium service. The premium costs \$15 for 180 days or \$30 per year and features direct data downloads, personalization, printable PDF reports, advanced database searches, and live audio feed archives.

CalFire - AEU / Camino ECC Fire Example:

Fre- quency	License	• •		Alpha Tag	Description	Mode	Tag
155.90250	<u>WPWF45</u> <u>0</u>	RM	186.2 PL	El- DoCoFDCom m	Command West Slope (Response and Command Net)	FMN	Fire- Tac
154.34000	WNFI481	RM	100.0 PL	LkeVal- leyFPD	Dispatch East Slope	FM	Fire Dis- patch

### Georgetown, Bald Mountain - AG6AU

(06-6616) Views: 8







#### RepeaterBook.com Frequency:

What makes this site different than others? We use admins located in the states and provinces that we cover to collect repeater data and add it to the site. This is not just some outdated and stale repeater directory with copied information from the ARRL. We are constantly refreshing the listings to give you the best data possible from frequency coordinators, our admins, and updates from repeaters

owners and users. We also

52.780-PI: 107.2 Location: Georgetown, Bald Mountain

El Dorado County: California State: Call: AG6AU Use: OPEN O Unknown On-air: Coverage: Wide area.

El Dorado County Amateur Radio Club (EDCARC) Sponsor:

Features: E-power, 4,800'.

Links: Full-time to Lotus, Bakers Mountain (441.7250).

ON - IDLE

668182 AG6AU-R

IRLP:

IDLE for 3 days, 20 hours, 39 minutes, 3 seconds.

Commands:

Nets:

EchoLink:

Web links: edcarc.net Coordination: NARCC

### THE NEXT EL DORADO COUNTY AMATEUR RADIO CLUB FOX HUNT

### HUNT MASTERS—JEREMIAH, K6JRN AND KIRBY, AF6OP

**Hunt Date:** Saturday, September 22

Start Time: 9:00 am until 12:00 pm

Check-In: 8:30-9:00 am on club repeater

**Fox Transmission:** Simplex **146.565** (AG6AU identifier and continuous on variable tone)

**Announcements:** Club Repeater 147.825 -pl 82.5

**Start Location:** Anywhere

**Scoring: TIMED HUNT** - First In Must identify location of transmitter.

**Boundaries:** 10 Mile Radius from Henningson Park in Lotus

Sites with a known signal will be listed on the website.

**Guidelines:** • This Fox Hunt is open to anyone and not only club members.

- The highest scoring EDCARC member will be the one to sponsor the next Fox Hunt.
- The fox transmitter will be at a location that does not require an admission or parking fee. The location shall be in such a place that normal activities of the fox transmitter site would not violate the privacy of nearby residents and would not unnecessarily disrupt the operation of nearby businesses.
- The antenna and transmitter shall be within 1,000 feet of standard passenger car access. Reasonable care must be taken by the Fox to ensure that hunters on foot can safely reach the hidden fox transmitter.
- The fox may use an antenna of any type and polarization as long as the antenna stays in a fixed location and single, fixed position throughout the hunt. The signal power will remain constant throughout the hunt.
- The use of outside assistance, such as getting bearings from operators at other locations is not permitted. However, the use of GPS devices and laptop computers for determining location and for the plotting of bearings <u>IS</u> allowed.
- The fox configuration is a radio, antenna, and power source hidden somewhere in the defined boundaries.

**Equipment Suggestions:** Compass, protractor, straight edge, maps, directional antenna and attenuator

WATCH THE CLUB WEBSITE—WWW.EDCARC.NET—FOR LAST MINUTE DETAILS

Georgetown Fire Chief, Greg Schwab's (KJ6GHL), Top 50 El Dorado County Scanner List Channel Rx Freq 1 AEU LOCL 151.1900 CAL FIRE AEU Local (Dispatch) Camino, CA 2 XED CMND 155.9025 CAL FIRE El Dorado County Command (West Slope) Camino, CA 3 CDF TAC 2 151.1600 CAL FIRE Tactical #2 4 CDF TAC 8 151.3700 CAL FIRE Tactical #8 5 CDF TAC 9 151.3850 CAL FIRE Tactical #9 6 XED EAST 154.4300 El Dorado County West Slope Tactical East of and Including CA-49 7 XED WEST 154.9950 El Dorado County West Slope Tactical West of CA-49 8 ENF FRST 171.5250 USFS-Eldorado NF Fire Net (Fire) Camino, CA 9 R5 AA 167.1500 USFS-Eldorado NF and Tahoe Management Air to Air (Primary) 10 R5 AG-3 167.5000 USFS-Eldorado NF and Tahoe Management Air to Ground (Primary) 11 R5 AG-4 169.1125 USFS-Eldorado NF and Tahoe Management Air to Ground (Secondary) 12 XAM CMND 153.9500 CAL FIRE Amador County Command (West Slope) Camino, CA 13 XAM TAC 154.2500 Amador County Command (West Slope) 14 NEU LCL 151.3250 CAL FIRE AEU Local (Dispatch) Grass Valley, CA 15 XPL CMND 156.2400 CAL FIRE Placer County Command (Formally Ruby) Grass Valley, CA 16 WHITE 1 154.2800 White Fire #1 Fire Tactical (Wideband) 17 VFIRE 22 154.2650 VHF Fire Interoperability Tactical #22 (Narrowband) 18 VFIRE 23 154.2950 VHF Fire Interoperability Tactical #23 (Narrowband) 19 VFIRE 26 154.3025 VHF Fire Interoperability Tactical #26 (Narrowband) 20 CDF CMD1 151.3550 CAL FIRE Command Net #1 21 CDF CMD2 151.2650 CAL FIRE Command Net #2 22 FS TAC1 168.0500 USFS Tactical #1 23 FS TAC2 168.2000 USFS Tactical #2 24 FS TAC3 168.6000 USFS Tactical #3 25 R5 TAC4 166.5500 USFS Region 5 - Tactical #4 26 R5 TAC5 167.1125 USFS Region 5 - Tactical #5 27 R5 TAC6 168.2375 USFS Region 5 - Tactical #6 28 EDSO F1 159.5550 El Dorado Sheriff's Office - Channel #1 (Main) Placerville, CA 29 EDSO F2 159.6900 El Dorado Sheriff's Office - Channel #2 (Extended Ops) Placerville, CA 30 A GUARD 168.6250 Air Guard 31 SAR 155.1600 National VHF Search and Rescue (Land) Interoperability Channel 32 PVL PD 154.9650 City of Placerville Police Department (Main) 33 TAHOE F 154.3400 Tahoe Basin Local Government Fire Net (Lake Valley FPD) 34 CDF AG 151.2200 CAL FIRE Air to Ground (Primary) 35 CDF AA 151.2800 CAL FIRE Air to Air (Primary) 36 EDC A/C 158.9250 El Dorado County Animal Control (Wideband) Placerville, CA

State Department of Fish and Game (Big Hill Repeater)

Sacramento Regional Law Coordination VHF (Wideband)

Amateur Radio Repeater Net (Mt Danaher) - Camino, CA

Aviation - Georgetown Heliport (Dru Barner/Camp Virner)

NOAA-NWS Weather Channel #3 (Monterey Marine)

NOAA-NWS Weather Channel #5 (Big Rock Ridge)

NOAA-NWS Weather Channel #7 (Jackson Butte)

State Interagency Coordination VHF (Wideband)

Amateur Radio Repeater Net - Logtown, CA

NOAA-NWS Weather Channel #1 (Wolfe Mtn)

NOAA-NWS Weather Channel #2 (Mt Diablo)

NOAA-NWS Weather Channel #4 (Yosemite)

NOAA-NWS Weather Channel #6 (Bridgeport)

Aviation - Georgetown Airport

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CA F+G

CALCORD

SAC RG

KA6GWY

AG6AU

AIRPORT

HELIPORT

NOAA WX1

NOAA WX2

NOAA WX3

NOAA WX4

NOAA WX5

NOAA WX6

NOAA WX7

151.4300

156.0750

154.1900

146.8050

147.8250

123.0500

122.9000

162.4000

162.4250

162.4500

162.4750

162.5000

162.5250

162.5500

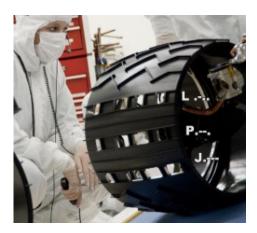
#### MORSE CODE ON MARS

Doug Grant (from www.edn.com) and brought to our attention by Michael Pico, K6MLE

Since everybody else is writing about the Curiosity Rover, I guess I need to write something about Mars—like the fact that there's Morse code up there.

I'm not sure whether this got covered anywhere in the popular media, but the <u>ARRL</u> reported it a while ago.

If you look carefully at the treads on the wheels of the rover vehicle, vou'll notice the predominant, zigzag pattern, but you'll also see a section of tread on each wheel that's patterned with dots and dashes. The official word is that they serve as "visual odometry markers" that tell the mission controllers how far Curiosity has roved and let them verify that the rover's wheels are indeed turning when the rover's telemetry says it is moving. But I think they're just a really, really cool hack that some ham on the development team at the Jet Propulsion Lab in Pasadena couldn't resist. The dots and dashes spell out "JPL" in the surface o n the Red Planet.



Detail of Mars Science Laboratory Curiosity Rover with tread pattern that will leave an impression on the Martian surface spelling "JPL" in Morse Code (-----). Photo courtesy of NASA/JPL.

Yes, Morse code is alive and well. A while back, I had lunch with a professor and some of his grad students. The prof knew I was a ham and told his students that I could actually deode Morse code signals in my head. They were astonished, partly

because they didn't know Morse was still being used anywhere, and partly because a human could copy it without a compouter constants.

Turns out there are a few other examples of Morse code that turn up in unlikely places. The next time you watch a baseball game being played at Fenway Park in Boston, look carefully at the white lines in the scoreboard on the left-field wall. You'll spot some dots and dashes hiding in plain sight in two of the vertical stripes. They spell out "TAY" and JRY," for Thomas A Yawkey and his wife, Jean R Yawkey; the Yawkeys were co-owners of the Red Sox for many years.

There is also a "Morse Code" wine in the shops; the specific varietal is spelled out in dots and dashes on the label. The next time you're shopping for wine, bring along a ham to tell you what it is.

### **FOR SALE**

I have the following radios available for purchase:

2/ea Motorola Radius Mobiles
42-50 Mhz
16 Chan
16 Pin & plug installed
Radio only-No accessories
\$65.00/ea + Fgt from 95310 (est fgt cost \$11.00/ea radio)

2/ea Motorola HT P200LB 42-50 Mhz 6 Chan W/antenna Fair Battery (needs replacement) \$45.00/ea + Fgt from 95310 (est Fgt \$11.00 both radios)

These radios have not been modified for six meters.

Jerry T. WA6AVR Columbia

### ITU Assigns New Prefix for Niue ARRL

On August 3, the ITU updated its Table of International Call Sign Series to re-

flect a call sign change for Niue. The island will now have the entire E6 pre-fix block. Niue -- an island approximately 1500 miles northeast of New Zealand -- is a self-governing island nation that has been in free association with New Zealand since 1974. Prior to the change, the island used ZK2. According to the CIA World Factbook, Niue is about 1.5 times the size of Washington, DC, and has a population of almost 1300 people.

### MOTHER LODE DX/CONTEST CLUB MEETING

#### When:

The August meeting of the Mother Lode DX / Contest Club will be held this Saturday, 25 August, at 11:30AM.

#### Where:

Los Pinos in Cameron Park, CA. Los Pinos is located at 3420 Palmer Drive in Cameron Park.

See the club's website at

### http://www.mldxcc.org/

and click on "meetings" for a map and more information.

#### What:

W1RH will be putting CQP facts and figures up on the screen since this meeting will be all about CQP! Bring yourself, your appetite, and your CQP ideas and join us on Saturday at the new location in Cameron Park. BTW: Los Pinos is good restaurant with a great menu. Take hwy 50 to Cameron Park Drive., north to the 1st traffic light, turn right, and it will be directly on ur right. CU there.......

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

President	Jay Harmor	KE6GLA		jharmor@comcast.net
Vice President	Don Brooks	KG6YST		drbjfb@yahoo.com
Secretary	Dave Cole	KG6YBE		dave_cole@att.net
Treasurer	Loretta Ozment	N6NQH		lwozment@comcast.net
Board Member	John Le Pouvoir	KJ6GHC		
Board Member	Mel Mcllwain	N6MCM		
Board Member	Jordan Heichman	KJ6NHF		
Board Member	Tom O Donnell	N6GVZ		
Repeater Trustee	Bob Hess	W1RH		w1rh@arrl.net
Newsletter Editor	Bob Hess	W1RH	530-350-3843	w1rh@arrl.net
Webmaster	Jay Harmor	KE6GLA		iharmor@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