

# SCOPE

A newsletter by and for the  
Palomar Amateur Radio Club  
of San Diego, California.

Correctly name this publicly accessible ham-radio related site pictured below and be the second winner of our Mystery Photo Contest! First person to contact W5NYV in person or on the air with the correct answer wins the contest. Email doesn't count this time around! Ellen N6UWW won the first round by correctly identifying the toilet at HRO.



NN3V writes,

"At November's club meeting, a couple of announcements were made regarding upcoming hamfests in Palm Springs and Yuma .

The Yuma hamfest has grown by leaps and bounds in the past three years since it was started. This coming year they will have major vendors (Yaesu, Icom, and Kenwood) on site along with all the other amenities usually expected at a ham gathering.

The link to the Yuma hamfest webpage is:  
<http://www.yumahamfest.org/>

The event takes place on February 18 & 19, 2011.

It might be worth running an announcement in the January and February PARC newsletters about the hamfest.

It is a great way to enjoy the Amateur Radio hobby."

## Save the Date

**Club Meeting**  
**5 January 2011**

Mysteries of mathematical models revealed!  
Antenna Modeling by  
W5NYV.

**Board Meeting**  
**12 January 2011**

Palomar Amateur Radio  
Club board meeting at  
7:00pm

**Club Event**  
**2 January 2011**

Kids Day at Double  
Peak Park. Please help  
volunteer and participate  
in this enjoyable event.

## Club Membership for December Edition

New Members: N6VF, KO6KV, KJ6FYZ, WD6DDY, KI6AOK, KI-6YFN, and three members reinstated their membership. Welcome back.

We now have some new members from the Oceanside area this month. The CERT group from Oceanside has encouraged their members to obtain their Amateur Radio Licenses. This is quite common, as they (CERT) recognize the value of being able to communicate, even if the phones are out of commission. And, they also recognize the value of having amateur repeaters up and running. So, they have encouraged their members to support PARC with their cash (IE memberships). This action is truly appreciated. While the repeaters are "open" the upkeep, power, water, taxes, etc. are not free for your club.

It is the club memberships that keep the machines on the air!

The renewal reminder for our members receiving the SCOPE by Web is helping. As a courtesy reminder, we print the calls of expired members for two issues. Hopefully the x-members will see it on the web, and respond with the usual \$20 check - to the Post Office Box.

Those on our list this time are: N6BMR, K7WCC, AF6SH, KJ6CKB, KF6GOF, and W6CD. We really do need and appreciate renewals.

AI  
W6GNI

## PALOMAR ENGINEERS

Box 462222, Escondido, CA 92046

### TOROID CORES

Palomar stocks a wide variety of cores and beads. Our RFI Tip Sheet is free on request.

Our RFI kit keeps RF out of your telephones, TVs, stereo, etc. **Model RFI-4**  
**\$35 +tax+\$8 to ship.**

### BALUN KITS

Ferrites slip over coax. Shrink tubing holds them in place. Works from 3.5-60 MHz  
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**Model BA-58** (for RG58, RG8X & similar cables up to 1/4" dia.) \$8.50+tax+\$8 S&H/order

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See catalog at [www.Palomar-Engineers.com](http://www.Palomar-Engineers.com)

Please check our complete ads in **QST**, **CQ**, and **WorldRadio** magazines.

October Fold & Staple Crew  
W6GNI AI & Kathy  
WA5ACE Sonny  
KI6LLC Roni

## Palm Springs Hamfest 2011

The Desert RATS invite you to attend "Palm Springs Hamfest 2011" on January 29. We would like your help in making this years event surpass the 600 attendee mark! That would beat last years event!

Our Swap Meet was a big draw last year as well, with over 40 vendors selling their wares. There is room for more so bring your stuff (no fee charged to sellers means better prices for you!) We have a consignment table with experienced Hams selling for you if you want us to sell your gear for a small fee. We almost sold out last year.

Lest I forget, we have a gourmet food service at a bargain price. Raffles every hour. Our event is all about great deals in these tough times.

This year we'll have ICOM, Yaesu, HRO, DX Store, Byonics, RF Stuff, AMSAT, ARRL, Alpine Antennas and 15 more. The list is getting longer.

Come join us for a fun Day with some great buying opportunities! It is worth the drive! Meet Gordon West, Clint Bradford "the Satellite Guy", Leo Meyers and all the ARRL guys from our Division.

<http://desertrats.am>

Where else can you have a full day of entertainment, food & raffle ticket for a 10 dollar bill, a tank of gas and maybe come home with a prize and free samples? Not even at Walmart or Costco will you get a better deal!

# Advertisements are free for members

Have items that need to find a new home? Advertise here! Send your ads to [scope@palomararc.org](mailto:scope@palomararc.org)

## For Sale



Complete Kenwood TS-130S rig including TS-130S with MC-30S handheld microphone, YK-88C 500Hz crystal filter, operator and service manuals; PS-30S DC power supply with operator manual; VF-120 remote VFO with interconnect cable and operator manual (in Japanese); and SP-120 external speaker with operator manual. Known issues: TS-130S needs dial lamps replaced and the S-meter needs to be adjusted; VFO-120 needs dial lamps replaced and dial needs to be recalibrated. \$350. Contact Bob Felton, K7WLX, at 760-598-7459 or [k7wlx@arri.net](mailto:k7wlx@arri.net).

## For Sale

Item	Price
YAESU FT-1000	\$2,500.00
Kenwood TS-950 S	2,500.00
FT-2500 M	350.00
Kenwood SWR/PWR Meter, Model SW-2000	50.00
TR-7330 2 M	150.00
Astro PS7 A	25.00
Cubic Astro -150 A-10-80M Transceiver	250.00
Ten-Tec Centurion amp 1kw	1,500.00
Ten-Tec Titan amp 1kw	2,500.00
FLUKE Meter Model 77	65.00
SHURE Microphone Push to talk Model 444	30.00
3-500 tubes	100.00 ea.

Contact: R. F. Krist, W6KTE, (760) 724-2786

## For Sale

Crank-up tower, 4 sections (collapsed length=12' 9" ), triangular- 18" bottom to 10" top. 3' top bolt on tapered section with rotor head and thrust bearing installed + 6' of pipe above the taper. Base plate 22" x 22" with 3 studs to set tower on. Lifting winch had a motor at one time but now gone, leaving a spline shaft sticking out of the worn gear box to which a handle or motor can be grafted. Located in Poway, weight 400+/- lbs for tower alone and 150+/- lbs for the top piece, base plate and winch - \$250. Gary 858-748-6076 [wb6gsn@gmail.com](mailto:wb6gsn@gmail.com)

**For Sale:** HUSTLER 6BTV High Performance HF Vertical Antenna system, 80/75/40/30/20/15/10 m, complete with 250ft spool 14 ga wire and all precut radials, SS Tilt base and SS Radial plate. Used one year. Bought new at \$400, will sell for \$200. Contact: Rich Ortloff KE6DUG 760-861-1406

**For Sale:** 6BTV Vertical Antenna. Crank up Tower with rotor and 3 El Yagi. Must be taken down and removed. Call Lee, (760) 726-1097

25 November, 2010  
PARC Board,

I have the output section working the modulator repaired and thanks to help from John W6XM, the controller is now working. The intercom input keys the repeater, we have power out, the VSB filter was dissembled and reworked and now has 2 dB instead of 6dB insertion loss. Transmitter amplifier has been repackaged with a switching power supply and the club now has a surplus 50 Amp Astron rack mount power supply.

Let me know if anyone else wants to participate in this project this weekend.

Art,  
KC6UQH

Mike K6MRP  
and John  
W6XM at the  
repeater site.  
Photo by Art  
KC6UQH.



28 November, 2010  
PARC Board,

Today the ATV repeater was reinstalled and operates as a standalone repeater only.

Inputs are:

146.415 PL79.5 Voice intercom  
915 MHz FM Video, Audio Sub-Carrier  
5.8 MHz.  
2441.5 MHz FM Video, Audio Sub-  
Carrier 6 MHz.

Output:

1241.25 VSB Carrier NTSC Standard.

Attached Photos show repeater, Received picture from 2.4415 GHz transmitter with the camera pointed at the top of the repeater. Pictures of the repeater itself.

Helping with the reinstall are John W6XM and Mike K6MRP

Temperature 36 Degrees F and sprinkling of Snow from the night before.

Art,  
KC6UQH

# HAM RADIO OUTLET

Jose XE2SJB  
Jerry N5MCJ  
Joe N6SIX

H  
R  
O

**KENWOOD**  
**rf CONCEPTS**  
**DIAMOND**  
**US TOWERS**  
**KANTRONICS**  
**YAESU, MFJ, ICOM**  
**BENCHER, Inc.**  
**HUSTLER**  
**COMET**  
**AMERITRON**

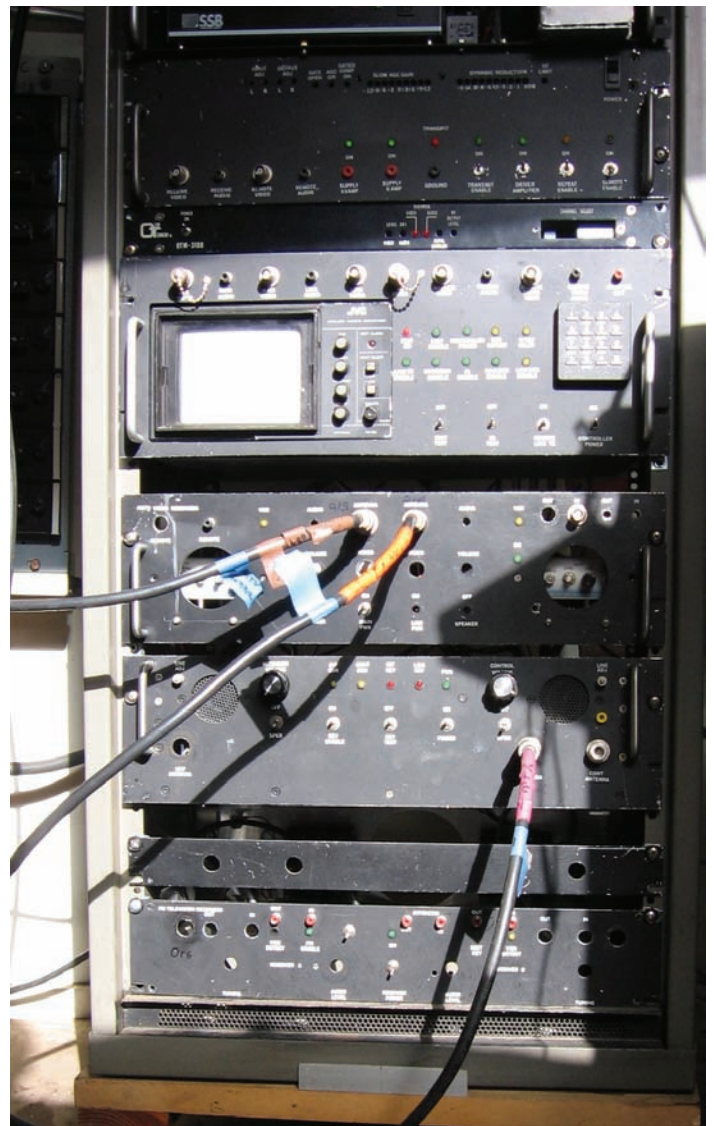
**Astron,**  
**AEA,**  
**OUTBACKER**  
**Larsen Antennas**  
**TEN-TEC**  
**Hy-gain, Tri-EX,**  
**Cushcraft And Others**  
**too**  
**Numerous to**  
**Mention!**

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**Directions:** On 163, take **Clairemont Mesa Blvd.** off ramp to East. Stay in right-hand lane. Turn right at stoplight. As you are turning right you can see our beams in this shopping center. Travel 100 yds. On Kearny Villa Rd. and U-turn back to shopping area and HRO sign. Be sure to see our equipment in action on **real** antennas!





#### **ATV Coordination Restored!**

*The Southern California Repeater and Remote Base Association (SCRRBA), frequency coordinators for the 10 M, 6M, 70CM and up Amateur Radio Service bands, has reviewed your filing for coordination, hereby grants your frequency coordination of your repeater as listed below:*

1. Location: Palomar Mtn., PARC bldg., Lat 33-19 N., Lon. 116-51 W.
2. System Type: Open ATV Repeater.
3. System Call: W6NWG
4. Frequency inputs: 2241.5 MHz FM  
915.0 MHz FM
5. Frequency output: 1241.25 MHz VSB
6. Emission: 16M0C3F, 30 watts, 10 dBd omni antenna, verical polarization
7. Tone access: 15734 Hz horizontal sync
8. Licensee: W6NWG, Club License, Expires: 01-29-2016  
Michelle D. Thompson, W5NYV, trustee  
Palomar Amateur Radio Club

*Photos by Art KC6UQH*



# November Minutes

The meeting was called to order at 7:25 by Dennis Baca KD6TUJ at the home of K2RP.

President Dennis Baca KD6TUJ  
Vice President Ron Pollack K2RP  
Secretary Gary Kent W6GDK  
Director #1 Paul Williamson KB5MU  
Membership Al Donlevy W6GNI  
Scope Editor Michelle Thompson W5NYV.

Treasurer's Report No report this month

Secretary's Report- Minutes of the October meeting were presented by W6GDK. Motion to approve by KB5MU, second by W5NYV. Approved

General Meeting: December is the election of officers and annual social. January will be Michelle on antenna modeling. February is the club birthday.

Officers and Nominations: Still need nominees for secretary and treasurer

Membership Report: Current membership is 277.

Repeater Site/Technical Report: No activity this month. Weather station at the QTH of W5NYV on Mt. Palomar is now active.

NEW business:

SANDARC has decided that a business phone number is sufficient for VE coordinator contacts. The second exam each month is still with the ARRL VEC at this time.

San Marcos ARC would like to use our repeater for a club net. Motion by K2RP to grant permission for a 2 month trial period until January 1, 2011 at which point there will need to be a discussion of compensation to PARC. Net controls must be PARC members per our standard policy. The repeater to be used will be 146.73 on Thursday at 7 PM, to be concluded by 7:45 PM. Second by W6GDK. Approved.

Youth Radio Day will be January 2, 2011. KJ6B-WX would like to have a sort of operating day at Double Peak Park. Speaking of Operating Day, we will hold the second iteration of Operating Day on November 14 from 8 to dark at Double Peak Park in San Marcos. KC6YSO will set up a 120 foot antenna for 80 meters and will operate the Sunday morning net. ICOM is providing Band Plan and Grid Map handouts.

Field Day Site – Ranch Del Oro south of Oceanside Blvd. It is a combination of a city park and elementary school playground.

Motion to adjourn at 9:13 PM by W6GDK, second by W6GNI. Approved. Next meeting will again be at home of Ron Pollack K2RP on December 8 starting at 7PM.

Submitted by Gary Kent W6GDK



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# Building an Emergency Antenna for 2 meters

by Dennis KD6TUJ

I had been looking at antenna construction articles across the years and seemed to keep coming back to an antenna project set up by Bob Hejl W2IK.

You can find it at

[http://w2ik.com/W2IK\\_ANTENNAS.html](http://w2ik.com/W2IK_ANTENNAS.html)

It is a self-contained 2 meter antenna that extends to over 16 feet, in a tubular container under 48 inches. That makes it UPS shippable. Kind of a neat project. It can make a great CERT project also.

Parts are a nominal cost to make only one. There are advantages to multiples as sale lengths of pvc are 10 feet. When going to the store(s) I had a hard time finding CPVC, so I tried PVC for sizing and found out the size was different. I bought the PVC along with the other supplies. Later, while going to ACE for different items, I happened upon CVPC and fittings. Nice find, since I really needed the correct items. Following the directions by only reading them did not always make sense, but once used with construction they did make sense. Total time with ample time to screw around was less than 4 hours. Some of the time was used to let the epoxy set.

One of the hardest things to do is to take a new item and cut it to a smaller size. If your needs do not require shipping, the size could be adjusted to the full length of the pool pole or as necessary to fit the storage/transport area you are going to use. Of course, making a J-pole is easy and there are many ways. In this case we used 300 ohm flat ribbon TV lead. (You can still find this if you look.) Interesting how it was made to separate into two pieces for storage. Soldering onto the screw was not hard as there is a cut across the head to solder in. The nut was harder as there is no groove to lay the lead in. Next time I will make a cut with a file across two adjacent sides of the nut to wrap and solder. When getting to the end where the 259 barrel connector is epoxyed in place, it was a little hard to follow until I worked the pieces together as directed. I don't know why, but the tuning seems to be broad.

Using the antenna at the November Operating Day was easy to set up. And easy to break. The top section that connects with the nut had the wire lead come off. It was too hard to solder it together, so I jammed it next to the side of the nut in the CPVC. A very tight fit that worked.

Dennis  
KD6TUJ

# EchoLink Nodes

By Bernie Lafreniere, N6FN

The EchoLink system is interesting in that users can link to remote nodes either by using EchoLink software on their computer or by keying DTMF commands directly from their transceiver. Using DTMF commands from a transceiver requires communication with either an EchoLink equipped repeater or a Simplex Link.

When within operating range of an EchoLink equipped repeater or Simplex node, you can use a transceiver to key a string of DTMF command tones to connect to distant nodes. DTMF command codes and the number (address) of the node that you wish to contact can be found by using the EchoLink software or by looking them up on the repeater sponsor's club or individual's web page. Node numbers can also be found on the EchoLink Link Status web page, by selecting the Link Status sidebar button on the EchoLink website's home page. <http://www.echolink.org/>

## EchoLink Node Types

Contacts can be made from computers and DTMF equipped transceivers to four different node types:

Individual Users on computers	N6XXX
RF Simplex Links	N6XXX-L
Repeaters	N6XXX-R
Conference Servers	*N6XXX*
	or *NAME*

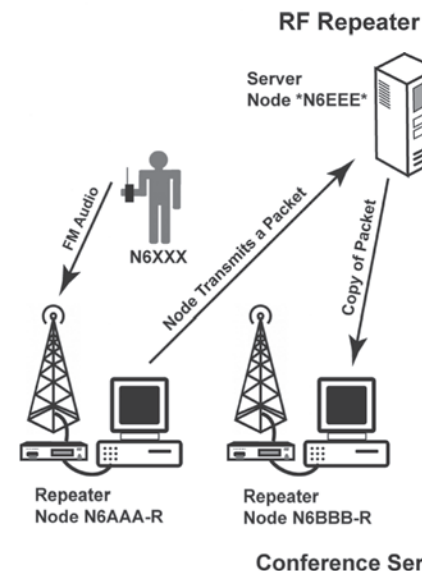
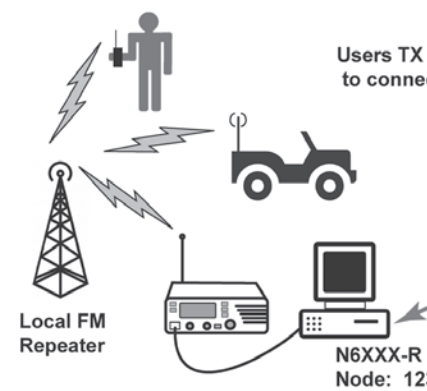
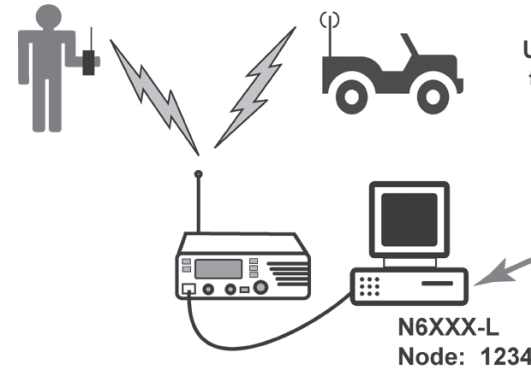
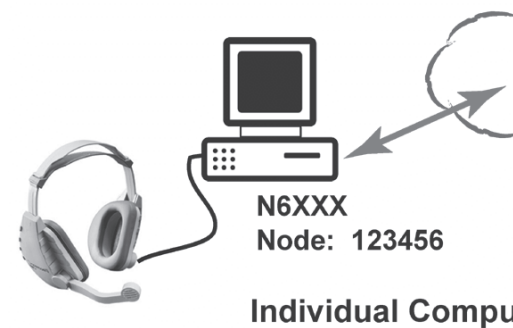
Each type of node has a uniquely formatted call sign or name. Individual computer users use their basic call sign. Other types of nodes have a suffix appended to the call sign, indicating the type of node: -L for a Simplex Link, -R for a repeater, or in the case of a Conference Server, a call sign or server name bracketed on both sides with an asterisk. In addition to the call sign, which is generally the call sign of the sponsoring individual or club, each node is assigned a unique node number, which can vary from four to six digits.

## Individual User Nodes

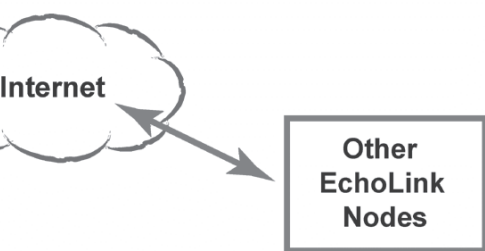
Once individual users have installed and configured the EchoLink software, whenever they are connected to the Internet and running the EchoLink program, they are visible as an active EchoLink node capable of initiating and receiving node connections. Individual users are identified by a node number and by their call sign, with no suffix attached.

## RF Simplex Link Nodes

Individual users can create an RF Simplex Link by interfacing a transceiver, tuned to a simplex frequency, to the microphone and speaker jacks of their computer's sound card. Even if you do not

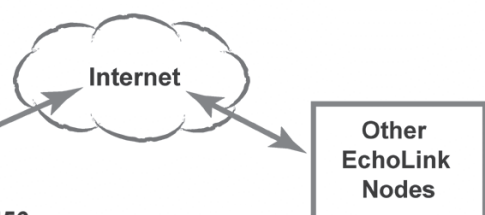






## Enter User Node to EchoLink

Users TX DTMF commands  
to connect to other nodes

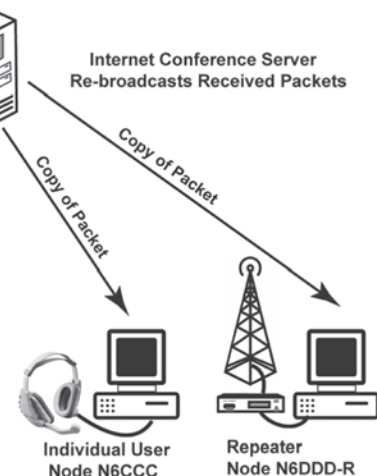


## Simplex Link Node

DTMF commands  
to connect to other nodes



## Node



## Repeater Operation

create your own Simplex Link, you can still access stations using other people's Simplex Links.

Stations within range of a simplex transceiver can access the EchoLink network, establishing node connections as desired by transmitting DTMF command strings. Once the link has been established, other stations within range of the simplex transceiver will also be able to communicate with the distant node.

Simplex Links are identified by the user's call sign followed by the -L suffix, and by a unique node number assigned during validation of the -L call sign.

## RF Repeater Nodes

Repeater Nodes generally are created by interfacing a transceiver tuned to an existing repeater to the microphone and speaker jacks of a computer's sound card. In this way a transceiver and Internet connected computer can be used to link a normal FM repeater to the EchoLink network.

Repeater nodes are identified by their node number, and by the sponsor or club's call sign followed by the -R suffix. Stations within range of the repeater can access the EchoLink network, establishing node connections as desired. Once a link has been established, other stations within range of the same repeater are also be able to communicate with the distant node.

## Conference Servers

EchoLink nodes configured as Conference Servers connect multiple users together, as if they were connected to a single conventional repeater. All types of EchoLink nodes can connect to conference servers: repeaters, individual users, simplex links and other conference servers. An Internet resident Conference Server receives audio packets from a transmitting station's local repeater and re-broadcasts them to all connected nodes. Participants in a conference can all hear each other, and typically take turns transmitting in round-table fashion.

Conference servers are identified by a node number, and by either the sponsor or club's call sign bounded on both sides with an asterisk \*N6XXX\*, or by an arbitrary textual name, also bound on both sides by an asterisk \*NAME\*.

Next month we will explore using transceiver's to make EchoLink QSOs. For those who can't wait to learn more, visit <http://www.echolink.org/>

## The Adventures of Tom and Sue- Up the Creek Without a Paddle!

As the golden sun sinks over the lake in the west, I sit here with keyboard in hand to chronicle our latest adventure.

This week was our 34th wedding anniversary, last Saturday to be exact, so we decided to celebrate. To that end, we selected to do an item from our "Bucket List". We had already completed and crossed off some items from the list, specifically riding the zip-lines through the forest. That will appear in chapter 3, not yet written. For today's adventure we decided to do something for which this area in Oregon is noted, white water rafting on the wild Rogue River!

Today, Wednesday, is one of our days off from our duties as Camp Hosts, and the weather has been quite hot for the last couple of days. Monday we had to go into Medford to take care of some business and it was 103 degrees F. We couldn't wait to get back up to our 5,152 foot elevation at the campground. Since the river is said to be quite chilly, it seemed like an excellent time to do it. Midweek is not too busy and we had thoroughly investigated the available opportunities. There are numerous businesses in the area that rent canoes, kayaks, and larger inflatable rafts. We selected one in Shady Cove, Oregon based on several factors, not the least of which was the selection of equipment they had available and the prices. We have been in the market for an inflatable kayak for some time and have narrowed our preferred choice to 2 or 3 different models. One of them was the Tributary Tomcat Tandem made by Aire, an American company in Idaho that is the most highly rated of all the manufacturers we have found. The business we selected has that particular model available for rent. Although we have extensive experience on the water in sailboats and powerboats, and some experience in canoes, we are pretty much kayak novices. I spent a couple of weeks one summer paddling all over Lake Tahoe in a kayak for several hours everyday, but that was when I was a teenager. I've never touched one since then, - - until today! We thought it a good idea to try one out before we invested our money. After all, we had made our model choice based only on the company literature and customer reviews found on the Internet.

The Tributary kayak is a two-person inflatable kayak with 4 separate air chambers and is fairly rigid when fully inflated. It has a fairly solid inflatable floor under your feet and seemed ideal. The price is \$40 for an independent trip. We awakened early this morning, had coffee, and left around 8:30 for the 50 mile drive to Shady Cove. We arrived

shortly after ten thirty following a stop for breakfast and a stop at Subway sandwich shop to pick up something to take for lunch. We were ready to go! We had our lunch, four cans of soda, and the proper attire. Getting wet is always part of a white water rafting adventure so we dressed accordingly in shorts and tee shirts.

We checked in for our reservation with Rogue River Rafting Company, paid our fee, signed the form releasing them from all liability, and promising to wear the provided life jackets at all times. We were issued the usual double-ended kayak paddle and the kayak that we had selected. Off we went! The company transported us in a van, towing the kayak behind on a trailer, a little over ten miles up the river to the launch point. The road followed the river and we watched it as we went by. There were several areas of mild rapids with noticeable white water where the river flow passed over shallow, rocky areas. "Cool", we thought! This looks like it's going to be fun! The rapids on rivers used for this sport are rated from class 1 through class 5 with class 1 being only an area with swift running water and no rapids to speak of, and class 5 being those where you're playing the game called "you bet your life"! The Rogue River has all 5 classes but the area we were going to be traversing has only class 1 and class 2. The employee driving the van coached us along the way, admonishing us only to keep the kayak pointed downriver, not to let it get broadside to the current flow. We had unlimited time to float down the river the ten miles to a launch ramp across the street from where we rented the kayak. This was to be our exit point. There were several places where we could pull into shore and beach the kayak if we wanted to stop and have lunch.

We waited our turn at the launch point as there were at least half a dozen other groups doing the same thing. They ranged from single individuals in one-person kayaks to large inflatable rafts that held as many as 8 people. There were some people in completely round rafts with no maneuverability at all. These are commonly used to tow behind a boat on the lake. We put our gear in the kayak, secured it with straps, got in and pushed off from the shore. We were on our way!

The first half-mile or so was OK. It was fairly smooth, swift running deep water. I don't know the actual speed of the current in miles per hour, but we were impressed with how fast the banks of the river seemed to pass by. We found the inflatable kayak somewhat difficult to control as far as keeping it going in a straight line. The current had a tremendous affect on it, but we managed.

*continued page 13*

# The Desert Radio Amateur Transmitting Society of Palm Springs Invites YOU!

The Desert RATS & PS DX Club are inviting you and your groups members to attend "Palm Springs Hamfest 2011" on January 29.

We would like your help in making this years event surpass the 600 attendee mark to beat last years event!

Could you please forward the attached information sheet by e-mail to all your members... perhaps mention it on your NET... publish it in your Newsletter...list it on your Events Calendar...link our site on yours and mention it at your next couple of meetings! Helping us get the word out would really be great! The mild desert weather is perfect at that time of year. Make it a club outing! On air NETS are already a -buzz tell your pals.

Our Swap Meet was a big draw last year as well, with over 40 vendors selling their wares. There is room for more so bring your stuff (no fee charged to sellers means better prices for you!) We have a consignment table with experienced Hams selling for you if you want us to sell your gear for a small fee. We almost sold out last year.

Lest I forget, we have a gourmet food service at a bargain price. Raffles every hour. Our event as all about great deals in these tough times.

This year we'll have ICOM, Yaesu, HRO, DX Store, Byonics, RF Stuff, AMSAT, ARRL, Alpine Antennas and more. The list is getting longer!

Check our website for up to date announcements at <http://desertrats.am>

We will also be participating in Winter Field Day and having a Special Events Station that day.

Come join us for a fun Day with some great buying opportunities! It is worth the drive! Meet Gordon West, Clint Bradford "the Satellite Guy", Leo Meyers and all the ARRL guys from our Division.

I look forward to seeing you at our 2nd annual ARRL Sanctioned Palm Springs Hamfest January 29, 2011

73 ....Peter VE7REZ /w6  
760-318-0186  
Twitter name : hamradio

## SWAT!

Six-meter Wildass Antenna Team



### SWAT Members as of November 2010

**Captain Cynthia KJ6HCT**  
**Colonel Rob KJ6RET**  
**Empress Michelle W5NYV**  
**Tentative Titan Mark Raptis KF6WTN**  
<your name and title and call here!>

### Free Antenna Modelling Software To get you started

Download free version of Expert MININEC Classic by following the link at <http://www.emsci.com/>

Free version of EZNEC (limited to 20 segments) available at <http://www.eznec.com/>

Have a Mac? Try the free cocoaNEC 2.0 <http://homepage.mac.com/chen/w7ay/cocoaNEC/Contents/Downloads.html>

Or, embrace your inner geek and run raw NEC. It's free. Read more about it at <http://www.nec2.org/>



# Adventures With Echolink

by special guest writer David W9HQ

In my ongoing quest to upgrade our family communication network (and avoid the cell phone trap) I have recently gotten an EchoLink node going at my QTH. This will allow me to call back to the house when I'm out on the road, especially when I take business trips up to the Twin Cities.

For hardware, I'm using a garbage-picked Toshiba laptop; most of the keycaps are popped off of it, so somebody dropped it into the dumpster. I got it up and going using an external keyboard, but now I don't really need the keyboard at all. More on that later. A homebrewed sound card interface and 2 meter transceiver completes the package.

I've set up the node in my shack for the moment, running to a simple copper pipe J-pole up on my roof. This has let me play around with different hardware and software configurations without too much stress. The Linksys router you see there is a WRT54G-TM running the extremely cool Tomato firmware (actually, it's running the Tomato VPN firmware because I hope to have a personal VPN connection going soon.) This was the result of one more excellent bit of advice from Chris, KF9OP. I was going to buy a dedicated wireless card for the laptop, but he suggested spending just a bit more and getting a router that can be flashed with new software to do any number of sophisticated wireless tasks. Great idea. I picked up a few of them for pretty cheap off of EBay. One is configured as my main Internet wireless access point, with gain antennas on it so the signal is available throughout the whole house. But then I've connected another, configured to operate as part of a Wireless Distribution System (WDS), to the computer running EchoLink.

It needs to be wireless because ultimately, when I have all the bugs worked out, the whole shebang is going up on my silo. The rig, computer, router, and power supply will sit just under the dome and I'll extend a mast above the dome with a nice 2 meter gain vertical on top. Then I should really get out like gangbusters. I've also got a gain vertical for 2.4 GHz that will be connected to the router, to boost the wireless path back to the house.

Since it's going to be at the top of the silo, I don't really want to have to climb up there every time I want to tweak a setting on the computer. So I installed the TightVNC server on the laptop. It allows me quick and easy remote access to that PC from my shack. In fact, there's even a TightVNC client for Puppy Linux, so I can access the laptop running Windows and EchoLink from my Linux machines. Now how cool is that?

I have not used the EchoLink much for family communications, although I have a business trip in the

near future that should be a nice time to try it out. But I have had some delightful QSOs from hams who have just decided to "drop in". One afternoon I chatted with a student at the Milwaukee School of Engineering, connecting through their W9HHX node. Then later that evening, Al (W6AAX) called from Simi Valley, CA. He has family in the area and was wondering about the ham radio activity here.

And about fifteen minutes after I signed off with Al, Daryl (N5SCA) called from Lampasas, TX. It turns out he grew up in the La Crosse, WI area and was, again, wondering about ham radio activity in the area prior to a trek to a family reunion here later this year. Again, we had a nice chat and hopefully will be able to meet when he visits the area.



Then we hit our first set of white water! This was more difficult. We found it impossible to keep the kayak pointed in the direction we wanted. As we passed out of the area of deep, swift running, but smooth water into the area where the water flow was more constricted, the currents and eddies became more varied and unpredictable. Areas of relatively moderate flow would meet areas where the water was moving much more swiftly. If the bow of the boat encountered one of these areas first, no problem. If the swift water met the stern first, it would turn and try to pass the bow, rotating the kayak sometimes 180 degrees and occasionally turning it completely around. No amount of paddling seemed to have very much effect. Needless to say, we were quite uncomfortable and apprehensive about this, but we got it straightened out and headed in the right direction and we passed through this first series of rapids unscathed.

We learned how to control it a bit better and after another patch of relatively smooth water we encountered another area of white water. We negotiated this area OK too and were able to maintain somewhat better directional control than we did the first time although we still got turned around a bit. This was followed by more smooth water and then by more rapids. The same alternating pattern repeated several times. Each time we seemed better able to maintain control. We learned to read the water ahead by watching the breaking waves and steering as best we could to the calmer portions. We were never entirely successful however and by watching the other craft on the river, it was apparent that we weren't the only ones!

We proceeded on this way for the next couple of miles until one time while, trying to seek out the calmer water, we ended up aground in shallow water on a bank of rocks, pebbles actually, that were kind of like a sand bar. We were hard aground and weren't going anywhere. Our two fat butts weighed the boat down enough that we couldn't paddle off or push ourselves off the rocks. Someone had to get out. I was sitting in the stern so Sue got out and grabbed the painter at the bow to pull us off the rocks. She was standing in ankle deep water so it's no wonder we went aground. She was able to move it a bit but I determined that I also would have to get out before we could move it back to deeper water. Just about then, she was able to pull it off so that we were once again afloat.

After Sue got back in, (should I say, "re-embarked"), we were off again downriver. After an-

other series of alternating smooth and rough water and more directional control problems, we saw an area ahead that appeared to be much more challenging than heretofore encountered. We could see no area that appeared to be smoother than any other so we had no choice but to just go for it! We tried keeping the kayak near the center of the river to avoid the excessive turbulence found in more shallow areas. Once again the kayak had a mind of it's own and spun around twice until we were broadside to the current flow! We were headed downstream sideways at a high rate of speed! We paddled for all we were worth but before we could get pointed back downriver or before we passed that series of rapids, the leading edge struck a submerged rock, which effectively brought it to a halt! The trailing side, pushed by the rushing water rose up and over the side that stopped moving, dumping both of us in the water! Here we were, in the middle of the Rogue River, up to our necks in swiftly raging water, holding on to the sides of the kayak for dear life! I was holding onto the boat with one hand while holding onto the paddle with the other!

The stuff we had in the kayak was all strapped in so no worries there. We had two insulated vinyl bags. One is the size of a small lunch bag. It held 4 cans of soda and an ice brick. The other held the Subway sandwich and another ice brick. No big deal. The third item we had was a sport bag containing a couple of towels in case we got wet, (DUH! Water splashed over the side into the kayak frequently), Sue's camera and cell phone along with the keys to the Jeep! My hat washed off and Sue grabbed it. My glasses are somewhere on the bottom of the river. I had a removable section of my wallet containing only a driver's license and one credit card in my pocket. It washed out of the pocket and started floating downriver! Sue saw it and made a grab for it, letting go of the kayak in the process! Bad idea! The next thing we knew she was about 20 feet downriver and going fast!! I was holding onto the kayak and headed for more rocks! I managed to get myself back into the kayak as it and I were floating along. Just by chance, the area I floated into had several shallow rocks and the kayak was once again hard aground and not moving.

**To be continued!**



# YL DXpedition Inaugural Meeting

YL DXpedition website  
<http://www.yldxpeditons.com/>

Caribbean Contest Club  
<http://asgard.kent.edu/ccc/>





## Palomar Amateur Radio Club Photo Gallery Update

by Paul KB5MU

I've been working on revamping the collection of photographs on the club's web page. Instead of a mishmash of different presentations and links to off-site collections, all the photos are now displayed in a unified photo gallery driven by the free software package Zenphoto.

You can find the new photo gallery under "Look at Us" on the club's web page.

<http://www.PalomarARC.org>

You can participate in the new photo gallery, and I hope you will. As always, everybody who takes photos at club events (or other activities involving club members) is encouraged to submit photos to the gallery. I can set you up with an account authorized to post pictures directly to the gallery. If you don't want to deal with learning how to do that (it's easy, though!) you can still send me photos by email, or post them elsewhere and send me a link, or even hand me a CD at a club meeting.

Old photos are welcome, too. It'd be fun to fill in some of the club's history in the photo gallery. I can help you get your photos or slides scanned in so we can post them for everybody to enjoy.

Everybody can also participate by posting comments to the photos in the gallery. Every individual photo page has a comment form at the bottom. If you can help to identify people in a photo, or provide some context for understanding what's happening in the photo, or ask a question about a photo, please feel free to add a comment.

If you use an RSS reader to keep up with blogs and such on the internet, the photo gallery software has features for you. You can subscribe to the entire gallery and see each new photo that's posted, or you can subscribe to individual albums within the gallery. You can also subscribe to comments on a particular photo, which would be handy if you have a question about the photo.

Many other features can be added to the gallery software. If you have a particular request, please let me know. Comments and questions are invited, to [webmaster@palomararc.org](mailto:webmaster@palomararc.org).

## Carlsbad Amateur Radio Exams

by Paul KB5MU

Since the FCC turned over amateur radio exams to volunteer examiners in 1984, the Palomar Amateur Radio Club has sponsored and supported one of the local teams of volunteer examiners, which provides a scheduled exam session on the second Saturday morning of just about every month in the north county. These exams are held in the same room where the club meets, in the Carlsbad Safety Center, and are coordinated by ARRL VEC. The schedule is aligned with SANDARC-VEC sessions held in other locations in San Diego County, so that exams are scheduled on every Saturday somewhere in the county. Additional exam sessions are scheduled as needed when there's a license class or a convention in the area. How many other parts of the country have this much access to exams?

Detailed information on the Carlsbad exam session is available at

<http://www.kiloxray.com/vec/>

or via a link on the club's web page.

The Carlsbad VE team has made it easier than ever to register for the exam. There's now a very simple online form to fill out, and the system automatically acknowledges your registration. On the session's web page, you can see the roster for the next upcoming session. You can confirm that your registration is on the list, and you can see how many others are signed up. This is nice to know, since if fewer than three candidates pre-register, the exam session will probably be canceled. Registrations are also accepted by email or telephone, as an alternative to the web page form.

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Editor: Michelle Thompson W5NYV

Submissions: [scope@palomararc.org](mailto:scope@palomararc.org)

Questions? Ideas? Comments? [W6NWG@amsat.org](mailto:W6NWG@amsat.org)

### Featured Program:

At 7:30pm, Palomar Amateur Radio Club will host a program at the monthly membership meeting on 5 January 2011. The presentation will be on Antenna Modeling, and will be given by Michelle W5NYV. We'll demonstrate antenna modeling, discuss why models are important, what makes a good model, and how they help us learn. Arrive at 7:00pm to socialize. We look forward to seeing you at the Carlsbad Safety Center, 2560 Orion Way, Carlsbad, CA.