



RF



ORANGE COUNTY AMATEUR RADIO CLUB, INC.

VOL. XLVII NO. 11

P.O. BOX 3454, TUSTIN, CA 92781-3454

November 2006

The Prez Sez...

By Willie N8WP

Hello OCARC :)

Thanks to everyone for participating in the annual OCARC auction. I had fun being the auctioneer and the whole event went smooth as silk. I know some lucky hams left with some treasures. I freed up a bunch of storage space to fill during 2007. I know Cheryl is looking forward to that!



Wille-N8WP Auctions off an Owl

With November comes the election for the OCARC Board. There is still time to make a nomination or throw your own hat into the ring from the floor. Do you have some ideas for making OCARC a more dynamic and fun organization? Attend a board meeting, get breakfast, or better yet become a board member.

With a little luck, and a lot of raffle tickets I may be able to adorn some of the newly acquired free space in my shack with a brand new IC-7000. The club will once again have one in the auction with a host of other great raffle prizes for the annual OCARC Christmas Party. Party time will be here before you realize it. Make sure you pick up a pair of tickets at the next club meeting.

See you at the next meeting.

73, Willie - N8WP

November Meeting

The November meeting will be held in the Red Cross Building meeting location. Our guest speaker for this month will be Michael McLaughlin - KJ6EQ, Orange Cnty Skywarn coordinator:

"SKYWARN"

The talk will be about the weather and SKYWARN activities.

Don't miss it. All members and visitors are welcome.

Also, the annual OCARC Board of Directors elections will take place. All members are encouraged to run and vote.

The next general meeting will be:

**Friday, Nov 17th
@ 7:00 PM**

We will be meeting in Room 208
In the east Red Cross Building

In This Issue: Page

The PREZ SEZ	1
CLUB INFORMATION	2
Tech Talk - Digital SW	3
HOT QRP Fun	4
Board Nominations	7
Christmas Party Raffle Prize	8
ARDF Contest in Bulgaria	9
D-STAR Repeater	10
HAM Cuisine	11
The QSL Vault	12
OCARC Christmas Party	13
Albuquerque	13
Upcoming Events	14
Board Meeting minutes	15
Support these Companies.....	16

THE ORANGE COUNTY AMATEUR RADIO



2006 Board of Directors:

President:

Willie Peloquin, N8WP
(714) 318-4047
n8wp@arrl.net

Vice President:

Kristin Dankert, K6PEQ
(714) 544-9846
kdankert@comcast.net

Secretary:

Ken Konechy, W6HHC
(714) 744-0217
kkonechy@pacbell.net

Treasurer:

Cheryl Peloquin, KC6KTT
(714) 318-4042
cpeloqui@gmail.com

Membership:

Bob Eckweiler, AF6C
(714) 639-5074
af6c@arrl.net

Activities:

Dan Dankert, N6PEQ
(714) 544-9846
n6peq@comcast.net

Publicity:

Tom Weed, K6CCD
(714) 838-9672
TVWeed@aol.net

Technical:

Kenan Reilly, N6CCE
(714) 543-5073
n6cce@yahoo.com

Member At Large:

Lowell Burnett, KQ6JD
(714) 997-0999
KQ6JD@aol.com

2006 Club Appointments:

W6ZE Club License Trustee:

Bob Eckweiler, AF6C
(714) 639-5074
af6c@arrl.net

Club Historian:

Bob Evans, WB6IXN
(714) 543-9111
bobev@netzero.net

RF Editor (rotating):

Nicholas Haban, KI6AUL
714-693-9778
KI6AUL@DSLextreme.com

WEB Master:

Ken Konechy, W6HHC
(714) 744-0217
kkonechy@pacbell.net

ARRL Assistant Director:

Ken Konechy, W6HHC
(714) 744-0217
kkonechy@pacbell.net

ARRL Awards Appointee:

Larry Beilin, K6VDP
(714) 557-7217
k6vdp@aol.com

OCCARO Delegate:

Loran Dargatz, KF6LRD
(714) 777-9081
DargatzLR@msn.com

Monthly Events:

General Meeting:

Third Friday of the month
at 7:00 PM
American Red Cross
601 N. Golden Circle Dr.
(Near Tustin Ave. & 4th St.)
Santa Ana, CA

Club Breakfast:

First Saturday of the month
at 8:00 AM
Jagerhaus Restaurant
2525 E. Ball Road
(Ball exit off 57-Freeway)
Anaheim, CA

Club Nets (Listen for W6ZE):

7.086 ± MHz CW **OCWN**
Sun- 9:00 AM – 10 AM
Rick KF6UEB, Net Control

28.375 ± MHz SSB
Wed- 7:30 PM - 8:30 PM
Bob AF6C, Net Control

146.55 MHz Simplex FM
Wed- 8:30 PM - 9:30 PM
Bob, WB6IXN, Net Control

VISIT OUR WEB SITE

<http://www.w6ze.org>

for up-to-the-minute club information, the latest membership rosters, special activities, back issues of RF, links to ham-related sites, vendors and manufacturers, pictures of club events and much more.

Club Dues:

Regular Members ...\$20
Family Members* ...\$10
Teenage Members ..\$10
Club Badge**\$3

Dues run from January thru Dec and are prorated for new members.

*Additional members in the family of a regular member pay the family rate up to \$30 per family.

**There is a \$1 charge if you'd like to have your badge mailed to you.

TechTalk #53 - DRM

Digital SW Broadcasting

by Ken Konechy – W6HHC

A few weeks ago I saw an intriguing e-mail thread on a ham radio chat-room....

"If you want to hear some broad band digital over the air, listen to 7140-7150 KHz early in the AM. I am told it's a New Zealand broadcast digital radio station. It's been on the air for a few days.

73 de K5GP"

:

2006/10/20, Kenneth Stringham AE1X wrote:
"Must be one of the new DRM broadcasts!"

I asked myself...."what the heck is DRM??" Perhaps DRM stands for Digital Rights Management....the technology used to protect music and video against piracy??? Nope - read on.

Digital Radio Mondiale (DRM)

While the US seemed to focus on satellite digital radio, such as **Sirius** and **XM**, broadcast planners in Europe and the rest of the world planned for MW and SW digital broadcasting using a technology called Digital Radio Mondiale, aka DRM. Beginning around 2003, Digital Radio Mondiale, has been replacing AM broadcasts transmissions below 30 MHz.

Digital radio uses two techniques to fit high-fidelity audio into a reasonably narrow radio spectrum bandwidth: a **CODEC** and a digital modulation technology.

CODEC (**Code/DEC**ode) is a digital compression scheme that takes digital representation of audio and compresses it; much like the JPEG compression scheme compresses the size of a digital photograph.

The compressed DRM digital data is then modulated for broadcasting using the **COFDM** (Coded Orthogonal Frequency Division Multiplexing), where every carrier is modulated with **QAM** (Quadrature Amplitude Modulation) with a selectable er-

ror coding.

The choice of transmission parameters depends on signal robustness wanted, propagation conditions. Transmission signal is affected by noise, interference, multipath wave propagation and Doppler effect.

Technically, these DRM signals are transmitted using interleaved data streams using multi-phase quadrature amplitude modulation over a typical AM channel. Once demodulated by the receiver, a software application must provide further demodulation to convert the digital stream back to audio. The signal can be received using normal short-wave radios with one catch. The total signal bandwidth is approximately 10kHz wide (see **Figure 1** below). This requires that a receiver have a filter that is wide enough to capture the full bandwidth of the signal.

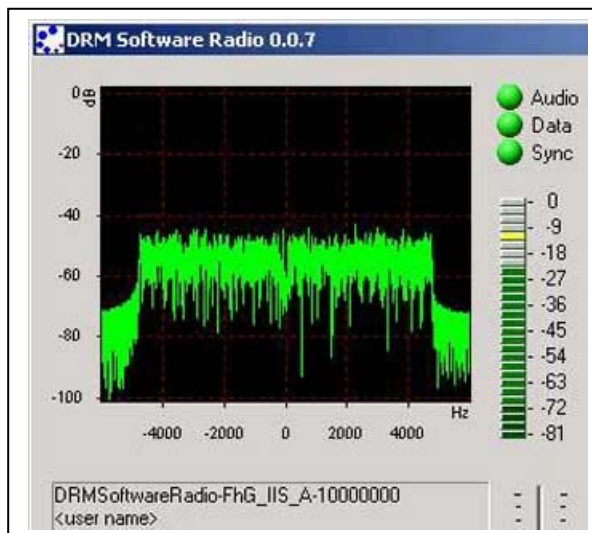


Fig 1 – The DRM signal is typically 10 KHz wide.

Several receiver models have been modified to accommodate this bandwidth issue, primarily by means of picking off one of the intermediate frequencies, and modulating down to a 12kHz center frequency. You can then take the output of the receiver and send it into a PC soundcard that is running DRM software in order to listen.

HOT QRP Fun in Palm Desert!

by Dan Dankert N6PEQ
n6peq@dxer.com



Willie N8WP, Cheryl KG6KTT, Kristin K6PEQ & Dan N6PEQ spent the weekend of September 30th at the J.W. Marriott Villas in Palm Desert, CA. This was a good chance to relax, and release the built-up stress from the day-to-day life of Orange County. Willie had the great idea of taking along a QRP rig to test out the band conditions from the desert location.

Palm Desert is located about 100 miles from Orange County, 15 miles east of Palm Springs, and is located along highway 111. Although the area is surrounded by tall mountain peaks, we should still be able to work a few stations, right? This area of California is known for famous celebrities, great restaurants, fun shopping, hot weather and if we're lucky, maybe a few HF QSO's!

After a short drive out to our vacation location, we were pleased to discover that our villa was on a nice and wide golf course. Plenty of room to string out a few radials for a small vertical antenna!

We installed the Super Antennas MP-1 vertical on the grass. The radials used were three of the



all ham bands from 6 meters thru 40 meters.



Our station consisted of a Yaesu FT-817 transceiver with microphone, a Vibroplex Code Warrior Jr CW paddle, an Icom IC-91AD VHF/UHF HT, 9913 Coaxial cable and a Kuranishi Model BR-210 SWR analyzer. The Kuranishi BR-210 made it a snap to tune the MP-1 vertical to the correct frequency. The entire antenna system and radio station took 5 to 10 minutes to install. An easy setup that is just perfect for a quick weekend getaway.

Now for the important stuff..... Did we make any QSO's?!?!? Yes, we did! In between having a few great meals, soaking in the sun and seeing Al Jarreau, 20, 30 & 40 meters managed to provide contacts from as far away as British Columbia, Argentina, and Florida. Band conditions seemed good, as signals boomed in quite nicely. We received reports as strong as a 589 in Seattle with the little over 2 watts generated by the FT-817. Not too shabby for a quick and easy getup.

But this wasn't the only DX that "propagated" itself towards us. While Willie was operating the "Command Center" (shown to the right) of a restroom in a restaurant in Cabazon, CA, he conjured up an interested eyeball QSO. Do you notice anything peculiar in this picture other than the ASCII?



The zoomed in photo to the left shows that Willie spotted some amateur radio graffiti. We see that apparently someone had used the bathroom stall wall as a "log", or K9LA previously operated from this location at an earlier time. Hopefully band conditions were not as crappy for K9LA, as they were for N8WP on this day, while working the pileups!

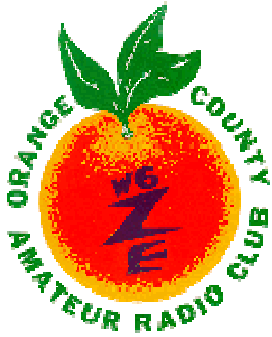


Not only were the HF band conditions hot for us, but the temperature was too! While cruising around in Willie & Cheryl's convertible, we survived a thermal peak of 115 degrees. Fortunately luck was on our side, as it was a "dry heat". So what do you do in the middle of the desert when you're roasting, you ask? You take pictures of crazy hams with dinosaurs, what else?!?! Willie rescued Cheryl from the jaws of Tyrannosaurus Rex above, and then attempted to teach the over-grown lizard a lesson by proceeding to remove one of its molars.



Dan then freed Kristin from the same sneaky T-Rex, by using his trusty snake-a-saurus as a giant lasso! Guess all those years of stringing dipoles from tall trees finally paid off. The T-Rex was not too happy, and stomped off with a "tude"

So the next time you are thinking of embarking on a getaway for a few days, don't forget your radio! Nowadays, a simple radio and antenna system can easily fit in a suitcase or a small Pelican case. It can be as basic or elaborate as you wish. QRP on HF is a blast even with the sunspots at a minimum. Just sit back, relax, sip your favorite drink and enjoy the wonderful hobby that is amateur radio. Catch you on the bands!



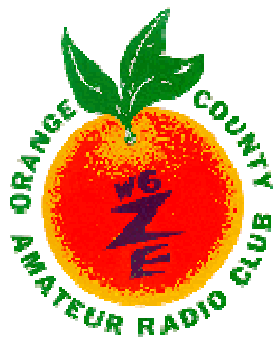
OCARC NOMINATIONS FOR THE 2007 BOARD OF DIRECTORS

These are the Nominees for the 2007 Board of Directors:

President:	Kristin Dankert, K6PEQ
Vice President:	Cheryl Peloquin, KG6KTT
Secretary:	Ken Konechy, W6HHC
Treasurer:	Bob Eckweiler, AF6C
Tech Chair:	Paul Gussow, W6GMU and Nicholas Haban, KI6AUL
Activities:	Dan Dankert, N6PEQ
Publicity:	Rich Helmick, KE6WWK
Membership:	Steve Brody, N1AB
Member at Large:	Willie Peloquin, N8WP
Member at Large:	(open)

Thanks to all who have "stepped up to the plate" (forgive me baseball season is almost over) and said they want to be on the Board for next year.

Rich Helmick
KE6WWK
Chair of the nominating committee for 2007



**OCARC
Party
Grand**

HF/VHF/UHF ALL MODE TRANSCEIVER

IC-7000



**Holiday
Raffle
Prize!!!!**

Come to the OCARC holiday party and enter the raffle. You will have the chance to win a brand new Icom IC-7000 transceiver! You must be present to win. This radio is a breakthrough in size versus performance. Enjoy all the QRM/QRN fighting features of a base rig in the small size of a mobile transceiver. Use it at the house, take it mobile or go on a portable expedition. Experience the advantage of extraordinary DSP filtering technology!

Learn more about this incredible radio at <http://www.icomamerica.com/products/amateur/7000/>

There will be many more prizes too! Don't miss out! See Cheryl "KG6KTT" an OCARC general meeting or OCARC club breakfast. You can also call her at 714-318-4047 to arrange purchasing your holiday party dinner tickets! Remember to bring your spouse and friends too! Dinner tickets are only \$23 per person. See the club website for more details (<http://www.w6ze.org>)

Mark the date on your calendar!
**Friday night, December 15th at
7:00pm.**



IF filter setting screen



Manual notch filter setting

Jagerhaus Restaurant
2525 East Ball Road
Anaheim, CA

**Don't miss it. All members and
visitors are welcome.**



On the road to Bulgaria, ARDF World Championships

By Jay Thompson, W6JAY

From September 11-18 2006 I had the opportunity to participate in the 13th ARDF (Amateur Radio Direction Finding) World Championships in Primorsko, Bulgaria. Where is Primorsko you might ask. Well first of all Bulgaria is just north on Turkey and Primorsko is the seaside resort town on the Black Sea, in the eastern end of Bulgaria. Being the youngest member of Team USA I traveled there with my father (Richard WA6NOL) for this world class event. There were competitors from thirty countries totaling over 400 for this World Championships. We flew out of LAX on 911 nonstop to Munich, Germany on Lufthansa and the flight took about 11 hours. The another



two hour flight to Sofiya the capital of Bulgaria. There we meet Milcho Milanov, LZ1RF (President of Bulgaria Federation of Radio Amateur) and his wife. He drove us another seven hours all the way across Bulgaria from the eastern side to the western side of the country on two lane

country roads. We traveled over 20 hours before we reached the hotel. Our suitcase arrived a day later. It was early morning and as we got out of the car there were outer members of Team USA greeting us. The picture above is from our hotel room looking out over the Black Sea. What a view and the weather was great too.

Team USA wins 1st Medal

If you didn't already hear about it, Team UAS wins it's first medal. Nadia Scharlau of North Carolina gets a Bronzes in the 80 meter competition. You can read all about it on Joe Moell's K0OV homingin.com web site.

This is the fifth ARDF Worlds Championships the Team USA went to. Held on even years the first one was in 1998 in Hungary with only four members. Then China 2000, Slovakia 2002, Czech Republic 2004, and

the Bulgaria with thirteen members. Twelve men and one woman made up the team. I was on the M21 age group with two other members making a team. We can win team or individual medals.

**1st Medal for
Team USA, Nadia's
3rd place medal in
the 80 meter
competition.**



See more pictures on
www.wa6nol.com

More information

- Results on www.ardf2006.com/
- Story on www.homingin.com
- ARDF Equipment at wa6nol.com
- Next ARDF World Championships will be in South Korea 2008
- I could write a book about my adventures, thanks for reading my story, 73 Jay



W6JAY operating
special event station
LZ13 ARDF

Left is LZ2LE,
Lubomir

Middle is me Jay,
W6JAY

Right is LZ1AF,
Dimitar

Top floor of the Parla
Beach Hotel

D-STAR

D-Star Repeater Now in Orange County !!!!!

The South Orange Amateur Radio Association "SOARA" (K6SOA) has just recently installed a D-Star repeater system in Orange County. The K6SOA D-Star system is on 445.660- MHz and is open for all to use. You can learn more about SOARA's system at:

<http://www.soara.org/dstar/>

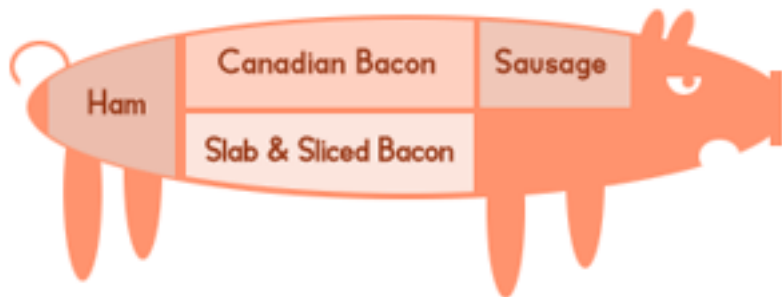
You can learn more about D-Star at:

<http://www.icomamerica.com/amateur/dstar/>

SOARA plans to install D-Star repeaters on 2-meters and 23-cm in the future as well. "D-Star" is digital repeater system which is just starting to "take off" in the USA. Currently, ICOM is the only radio manufacturer, which is manufacturing D-Star compatible radios.

Several hams in the area are already using the SOARA system. Give it a try! It's fun!





Ham Cuisine

*by Dan Dankert N6PEQ
n6peq@dxer.com*

Arkansas Slow-Smoked Ham

Ingredients:

- 1 6 to 7 pound cooked bone-in ham
- 1 cup ketchup
- 1/3 cup finely chopped onion
- 1/3 cup honey
- 1/3 cup cider vinegar
- 1/4 cup bourbon or water
- 2 tablespoons yellow mustard
- 2 tablespoons lemon juice
- 1 teaspoon dried thyme, crushed
- 1 teaspoon minced garlic
- 1/2 teaspoon red pepper flakes
- 3 cups wood chips (use hickory or oak chips for the best flavor)

Cooking Directions

Sauce:

In medium saucepan, combine ketchup, onion, honey, vinegar, bourbon or water, mustard, lemon juice, thyme, garlic and red pepper flakes. Bring to a boil. Reduce heat and simmer, uncovered, for 10-15 minutes or until desired consistency, stirring frequently. Divide sauce into two portions; set aside.

Ham:

At least 1 hour before grilling, soak wood chips in enough water to cover; drain before using. In charcoal grill with cover, place preheated coals around a drip pan for medium-low indirect heat. Sprinkle half of the wood chips over the coals. Place ham on the grill rack over drip pan. Cover and grill for 2 to 2 1/2 hours, until internal temperature (measured with a meat thermometer) is 140 degrees F., basting with one portion of sauce the last 15 minutes. Add more preheated coals (use a hibachi or a metal chimney starter to preheat coals) and wood chips halfway through grilling. Remove ham from grill. Cover and let rest for 15 minutes before slicing. Reheat second portion of sauce and serve with ham.

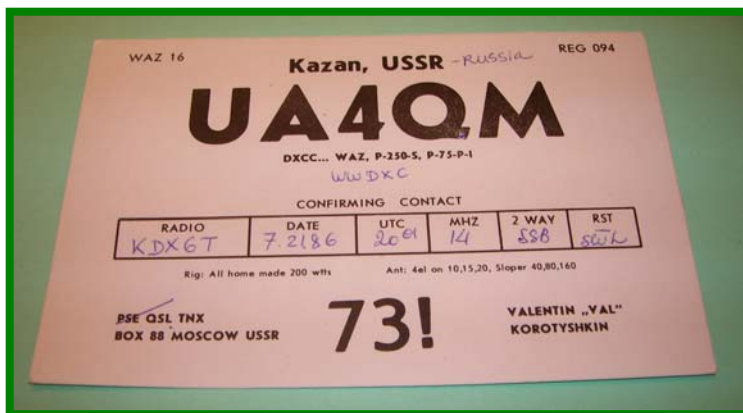
Thanks to the "Other White Meat" website for this yummy recipe!

The QSL Vault!

by Dan Dankert - N6PEQ
n6peq@dxer.com



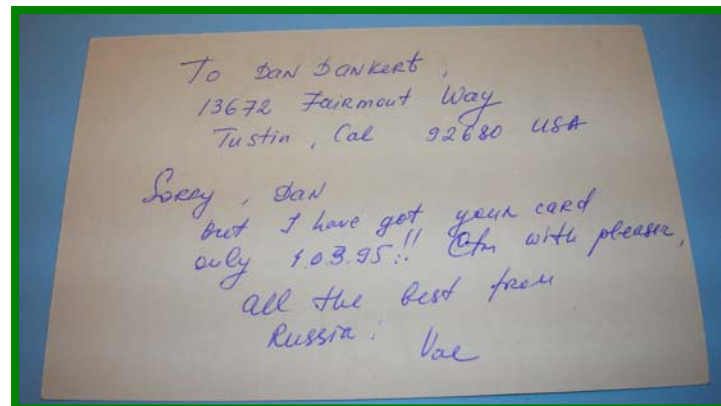
It was asked in a OCARC meeting earlier this year, "What is the oldest QSL card that you have received via the QSL bureau?" Ironically a few days after this meeting, a large envelope full of QSL cards from the sixth-district QSL bureau arrived at our home. Low and behold there was an old card contained in the stack. How old??? The QSL card, which I received, was in response to a SWL report that I sent to a Soviet ham (Val - UA4QM) back in 1986. UA4QM received my SWL card in 1995! Having received Val's card in 2006, this totals to a round trip of 20 years!!!



Times have changed, but the thrill of opening that envelope from the bureau is still just as exciting as always!

Remember to keep a supply of envelopes and postage at the QSL bureau. You never know what may show up in your mailbox!

Reflecting on when I heard Val on 20 meter SSB, I realized that I was 15 years old, a sophomore in high-school, did not yet have my driver's license, but had recently received my amateur radio license. My SWL equipment consisted of an Icom IC-R71A receiver and a HQ-1 Mini-Quad antenna at 30 feet.



Buy Your Tickets to the OCARC Christmas Party

Friday, Dec 15

WHEN: Friday, December 15th

TIME: 7:00 PM

COST: \$23 Per Ticket
(will be sold at the Nov meeting,
December club breakfast,
or contact Cheryl KG6KTT at
(714) 318-4047 or
CPeloqui@gmail.com)

WHAT: Dinner, beverage, Dessert, **Tax and Tip are included in ticket price!!**

WHO: Everyone and Visitors

Where: Jagerhaus Restaurant
2525 East Ball Road
Anaheim, CA 92806

Located on Ball Road just West of the
57-Freeway.

www.jagerhaus.net

714-520-9500

There will be Terrific Party Raffle Prizes

Grand Prize

is a

ICOM IC-7000

See Page 8 for prize details

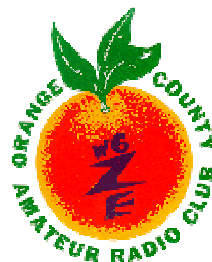
2006 Albuquerque

Balloon Festival

Two OCARC members just returned from a four week vacation to the famous yearly Albuquerque International Hot Air Balloon Festival. Rich Helmick KE6WWK and his wife Beverly Helmick KI6APH enjoyed a motorhome vacation in Albuquerque that not only enjoyed the sights of the famous hot air balloon event, but also donated their time to be volunteers for assisting the operations of the balloon festival.



Beverly KI6APH took the picture above that shows just some of the many many balloons that get launched at the Albuquerque event. For ten days in October, the New Mexico skies are painted as hundreds of balloons lift off from Albuquerque's Balloon Fiesta Park. Nothing rivals the power of Mass Ascension on crisp early mornings as these graceful giants leave the ground to take their place in the blue desert sky.





Upcoming OCARC Events!!!

(Check the club website for updates and additions
<http://www.w6ze.org>)

November 17th (Friday 7:00pm)

Speaker: Michael McLaughlin - KJ6EQ.

Mike is the Orange County Skywarn Coordinator, and he will introduce Skywarn, as well its history. Skywarn spotters are trained by the National Weather Service to provide 'ground truth' weather information to the weather forecasters. They are activated and deactivated by the National Weather Service in either the anticipation of an approaching weather system or occurrence of severe weather.



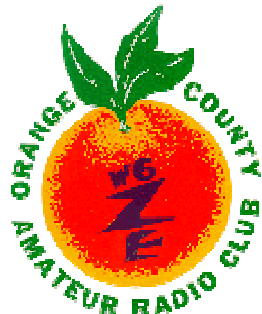
Annual club elections after presentation. Are you a member of OCARC and thought about running for the board of directors? Here's your chance to help OCARC continue to grow and improve!



December 15th (Friday 7:00pm)

OCARC annual holiday party! Held at the Jaegerhaus Restaurant at 2525 East Ball Road in Anaheim (Located on Ball Road just West off of the 57-Freeway). Purchase your dinner tickets from Cheryl-KG6KTT at an OCARC general meeting, breakfast meeting or request tickets by e-mail at cpeloqui@gmail.com

We will have a raffle after dinner. Grand prize is an Icom IC-7000. Last year's raffle featured over \$3000 worth of prizes!!!



The Orange County
 Amateur Radio Club "OCARC"
 P.O. Box 3454
 Tustin, CA 92781
 Web: <http://www.w6ze.org>
 Email: ocarc_info@w6ze.org

OCARC Board Meeting Minutes**2006-11-04**

The OCARC Board meeting was held at the JagerHaus Restaurant at 8AM on Saturday, 2006-11-04. There were a total of 10 members and visitors. There was a quorum present with the following directors absent: Kenan-N6CCE, Lowell-KQ6JD, and Tom-K6CCD.

DIRECTOR REPORTS:

- Program Director, Kristin-K6PEQ, reported that the following programs have been set up for club meetings:
 - November – SkyWarn
 - December – (Christmas Dinner)
 - January – Heil Sound
 - February – ARRL Org SM - Carl WU6D
 - March – Comet Antennas
- Treasurer, Cheryl-KG6KTT, reported that the club \$2,687 in the bank, as of the end of October.
- Secretary, Ken-W6HHC, reported the club received a renewal notice from World Radio.

OLD BIZ:

- Cheryl-KG6KTT reported that the cost of Christmas Dinner tickets is \$23/person this year. Dan-N6PEQ presented a motion for the OCARC to spend \$400 for the Christmas Party general raffle prizes (in addition to donations) and \$100 for the women's raffle prizes. The Board approved the motion.
- The club yearly ham radio auction was declared to be a huge fun success. Cheryl-KG6KTT reported that the OCARC net profits from sales and donations were \$182 this year.
- Rich-KE6WWK reported that nominations for all board positions have been filled with the exception of one Director-At-Large position. The slated of nomination for 2007 directors will be published elsewhere in the RF newsletter.

- Prez Willie-N8WP led a discussion on possible further improvements to the OCARC WEB site. Several investigations and trials will be conducted by Ken-W6HHC and Bob-AF6C.
- Ken-W6HHC presented an updated report to the board on details of changing the club's NON-PROFIT status from current 501(c)7 to 501(c)3 classification. It was discovered that OCCARO had also obtained 501(c)7 like OCARC. The board agreed that no changes were required. Ken-W6HHC made a motion to overturn the previously approved motion to change to 501(c)3. The board approved the new motion.

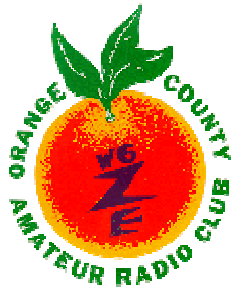
NEW BIZ:

- The following members volunteered to be rotating editors of the RF newsletter:
 - Dec – Cheryl-KG6KTT
 - Jan – Kristin-K6PEQ
 - Feb – Bob AF6C
- President Willie-N8WP announced that he would be accepting nominations by e-mail from board members for the selection of the OCARC yearly "Good-of-the-Club" Award.
- Bob-AF6C discussed the creating a club policy to clarify the structuring the dues. The intent is to clarify the pro-rating of dues that occurs during each quarter.

GOOD-OF-CLUB:

- Dan-N6PEQ reported that 40M CW was just great despite the low sunspot count. Dan reported recently working Iraq, Israel, Canary Islands, and Zambia.
- Ken reported that the ARRL FD results were out. In Class 4A, OCARC placed 13th in the nation and 1st in California!!! Well done!!!

Submitted by Ken-W6HHC, Secretary



Please support the companies
that help support OCARC!



The DX Store

A Shack on the Belt Free Zone

**Heil - Bird - I.C.E - Inrad - Comet
Daiwa - Alpha - DCI**



FREE PL-259

Visit our Web site fo details

Amateur Radio Equipment for DXers!
sales@dxstore.com

www.dxstore.com



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