

RF



VOL. XLIX NO. 4 P.O. Box 3454, Tustin, CA 92781-3454 April 2007

The PREZ Says:



I cannot believe that it is already the month of April. Where does the time go?!?! April is such a busy month with holidays and it is the start of conventions! The DX Convention is April 27-29th. I know a few of our members will head up toward Visalia for that weekend. There is also Baker to Vegas, which is unfortunately the weekend of our meeting, but many of our members also participate in that event as well.

We are looking for other ideas on other events and or classes you would like our club to hold or participate in. If you have any ideas please let someone on the board know. We want to try to meet the

needs of all of our members and their interests. We have many great speakers lined up this year covering hospital communication, EME, DXpeditions, and much more. Don't forget to bring your show and tell to the next meeting! Since this is the month of April Fool's Day, they are several jokes throughout the RF. Can you find them all?!?!
73,
Kristin, K6PEQ

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**THE ORANGE
COUNTY
AMATEUR RADIO**



Club Dues:

Regular Members...\$20

Family Members*...\$10

Teenage Members...\$10

Club Badge**...\$3

Dues run from Jan. through Dec. & Are prorated for new members.

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

** There is a \$1 charge for the badge being mailed to you.

ORANGE COUNTY AMATEUR RADIO CLUB – W6ZE

2007 Board of Directors:

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ARRL Assistant Director:

Ken Konechy, W6HHC
(same as above)

ARRL Awards Appointee:

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(714) 557-7217
k6vdp@aol.com

OCCARO Delegate:

Loran Dargatz, KD6LRD
(714) 777-9081
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MONTHLY EVENTS:

General Meeting:

Third Friday of the month
at 7:00 P.M.
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
Jaugerhaus
2525 E. Ball Road
(Ball exit off 57 freeway)
Anaheim, CA

Club Nets (W6ZE):

7.086 ± MHz CW OCNW
Sunday 9-10 a.m.
Rick KF6UEB, Net Control

28.375 ± MHz USB
Wednesday 7:30-8:30 p.m.
Bob AF6C, Net Control

146.55 MHz Simplex FM
Wednesday 8:30-9:30 p.m.
Bob, WB6IXN, Net Control

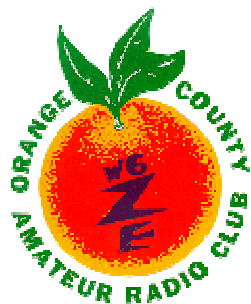
Renew Your OCARC Membership



It's that time of the year again. Time to renew your OCARC membership for 2007, if you have not already done so.

Help continue to support your growing club. There are many entertaining monthly meetings, speakers and events planned for this year. But it can't happen without your support for OCARC.

Dues can be paid at the monthly club meetings, club breakfasts or via snail mail. Regular dues are only \$20. Additional family members are \$10 (Total). Membership for teenagers is only \$10 as well. What a deal!



OCARC
P.O. Box 3454
Tustin, CA 92781

OCARC General Meeting Minutes 2007-03-16

The OCARC General meeting was held at the Red Cross complex in Santa Ana at 7PM on Friday evening, March 16th. There were a total of 44 members and visitors in attendance. There was a quorum at the meeting with all ten of the club directors present.

PROGRAM:

The March program was presented by Mick Stwertnik KB6JVT of the NCG Company, who gave a presentation on the latest and greatest products from NCG, Comet Antenna, Maldol & Daiwa.



Guest Speaker Mick-KB6JVT talks on Comet products and Daiwa products at the OCARC meeting.

OLD BIZ:

The Secretary reported that the Board of Directors had voted to move forward on making a bid for the tower/trailer set-up being sold by the Santa Barbara Radio Club. The main tower is 80 feet high when fully extended. The board recommended the club bid \$1201 plus any pledges received from members at the March General Meeting.

[Editor's note: over \$900 was pledged by club members towards the tower/trailer bid.]

Loran KD6LRD offered to store the tower/trailer for the OCARC in Orange, if the club bid was successful.

GOOD OF CLUB:

Dan-N6PEQ reminded all members that a special event station, W6YMX, celebrating the essence of Daylight Savings Time. Contact the Yamon DX Federation "W6YDX" station in Tustin for a special commemorative full-color photo Daylight Saving Time QSL card.

Ken-W6KOS reported that at a recent VE testing session there was an overflow crowd of 26 people, since the Morse Code testing requirements were dropped by the FCC

Submitted by Ken W6HHC – Secretary



President Kristin-K6PEQ calls the March OCARC General Meeting to order in front of a great gathering of club members and visitors.

SUBMIT AN ARTICLE



You don't need to write like William "Bill" Shakespeare in order to write an article for the RF Newsletter. In fact, we prefer articles without the words "Thy", "Whilst", "'Tis" and "Oft".

Do you have an idea for a newsletter article? Maybe you have acquired a new piece of equipment, designed or constructed a new antenna, took a trip focused around ham radio, want to share an amateur radio related experience or discuss a technical topic. Why not write an article for the monthly RF newsletter? The article can be short or long, simple or elaborate, and can even include pictures!

The RF newsletter relies on articles from our members. So why not give it try? Write an article and send it to the newsletter editor. It's fun, and at the same time, your contribution helps support our club and hobby!

COAR RACES in City of Orange Prepares Communications Plans for the Upcoming Baker-2-Vegas Race

by Ken W6HHC

There are lots of hams that have been working together to plan for providing communications for the Orange Police Department runners in the upcoming Baker-2-Vegas relay-foot-race (known as B2V). The B2V relay race course is 120-mile-long. The race course contains 20 individual relay legs that start outside of Baker, goes through the cities of Shoshone (Calif) and Pahrump (NV), then goes over the mountain at Mountain Springs and ends in Las Vegas. Over 220 different law-enforcement teams are expected to participate in this yearly event that will held on April21-22.

The large scale communications plan includes:

- Setting up five communications centers along the 120 mile race course from Ibex Pass all the way to Las Vegas. These comm-centers provide a “communications backbone” for relaying logistics messages and providing runner timing information to Orange PD officials in Las Vegas.
- Providing a “follow vehicle” that travels alongside the runner that is equipped with multiband communications and an APRS beacon. Three shifts of comm. operators will travel during the race.
- Two-person ham teams will staff a communications support vehicle. The support vehicle will travel to each relay-point to assure the OPD runners are in place on-time. Again, three shifts of comm. operators will travel during the race.



**Group Picture of Hams attending the COAR B2V Planning Meeting on April 2.
COAR Radio Officer Rich-KE6WWK has the White Sleeves**

Most of the members of COAR RACES are also members of the OCARC. But, you don't have to live in the City of Orange to be welcomed into helping provide communications for the Orange PD running team. Above is a picture of the 18 hams that showed up for the April 2 COAR B2V planning meeting. This group included 10 hams from the OCARC.



2007 INTERNATIONAL DX CONVENTION

APRIL 27, 28, 29, 2007
HOLIDAY INN, VISALIA, CA

YOUR REGISTRATION FEE INCLUDES THE FOLLOWING:

All HF, low-band, and DX oriented forums and technical sessions; the traditional Convention Patch; Hosted Cocktail Parties; Saturday Night Banquet, and DX oriented program with a well-known speaker; Sunday Morning Breakfast Buffet, with more great programs. Pre-registration Drawing for a Super Prize; only for those who pre-register by the 15th of March 2007.

Registration includes Saturday lunch served by the Hotel. Remember to bring the YL's. We are Planning a great (optional) "Saturday Tour." Get your reservations in early so you can participate in the pre-registration drawing.

NEW THIS YEAR:

EVENTS FOR NEW DXERS: Special Programs and events designed to help new DXers.

ADVANCE RAFFLE TICKET SALES: Book of 11 raffle tickets for \$10 when purchased with your pre-reg.

YOUNG HAM REWARDS RETURNS THIS YEAR: Pre-register a Young Ham, under 21, with your pre-registration. When you and the young ham, with FCC Ticket and proof of age in hand, come to the Convention Registration Desk to pick up your Registration Packets you will be eligible for a Reward of \$30.00 in convention raffle tickets. Bring as many young Hams as you like, but the reward is only for the 1st one. The young Ham's admission to the exhibits and technical sessions is free, convention meals (Saturday Lunch & Banquet and Sunday Brunch) are \$60.00. *Students and Hams under 21 are free.* Just show your ID and get a FREE Saturday Day Pass good for exhibits and technical sessions.

POPULAR EVENT RETURNS: The very popular "Vendor New Product Showcase" will be held again this year from 9:00 to 10:00 AM, Saturday in the Convention Hall.

BANQUET THEME: "Elmering New DXers is Job 1" Old Timers; Strike up a conversation with new DXers and share DXing tips or swap "war stories" about favorite DX contact. Maybe, whet their appetite by sharing one of your rare QSL's.

CONVENTION SHIRTS: High quality Polo Shirt with collar, embroidered logo above shirt pocket, Name, and call sign will be opposite pocket side of shirt. Color of shirt will be white. Be sure to order your shirt when you Pre-Register.

GOLF TOURNAMENT ON FRIDAY (Contact Don Bostrom, n6ic@scdxc.org)

"THE SATURDAY TOUR": Tour will be Saturday, April 28, from 9:00 AM to 4:00 PM. For more info keep checking our web site: www.dxconvention.org

CARD CHECKING: DXCC Card Checking for 3 Hrs on Saturday.

RV PARKING: (DRY) RV Parking (DRY) is available in the parking lot behind the Holiday Inn at a cost of \$35 per vehicle. Contact the Holiday Inn at (559) 651-5000 or via internet at www.visalia.holiday-inn.com.

RV PARKING: (WITH HOOK UPS): If you want parking with hook ups please check the website: www.visitvisalia.org and click on the link for Recreation

PRE-REGISTRATION ENDS MARCH 15, 2007

Sponsored this year by the NCDXC www.ncdxc.org or www.dxconvention.org

(See Next Page for Pre-registration Form)

OCARC Financial Statement
Jan 1, 2007 through Mar 31, 2007

Income

ARRL Dues: \$ 109.00
Badges: 21.00
Badge Mailing: 2.00
Dues (Family): 90.00
Dues (Full) 720.00
Dues (Overpayment) 6.00
Donations: 6.00
Monthly Raffle: 698.00
Web Site 0.00

Total: \$ 1,652.00

Expenses

ARRL Dues: \$ 105.00
Badge Cost: 0.00
Badge Mailing: 0.00

Dues Reimbursement: 6.00

Monthly raffle Expense: 433.94
Web Site Quarterly Fee: 29.97

Total: \$ 574.91

OCARC Checking Account:

Statement Balance (1/1/07) \$ 2,677.00
Outstanding check #709 (3.60) (cleared in January)
Beginning Balance (1/1/07): \$ 2,673.40

Income: \$ 1,652.00
Expenses: (\$ 574.91)

Ending Balance (3/31/07): \$ 3,750.49
Outstanding check #730 37.00
Statement Balance (3/31/07) \$ 3,787.49

OCARC Savings Account:

Beginning Balance (1/1/07) \$ 778.19
Interest (3 months): 1.34
Ending Balance (3/31/07): \$ 779.53

Total Balance (3/31/07):
Checking Account: **\$ 3,750.49**
Savings Account: **\$ 779.53**
Total: **\$ 4,530.02**

R. W. Eckweiler

Bob Eckweiler, AF6C
Treasurer OCARC 2007



Ham Cuisine

Dan Dankert N6PEQ
n6peq@dxer.com

Pulled Otter Butt

Ingredients:

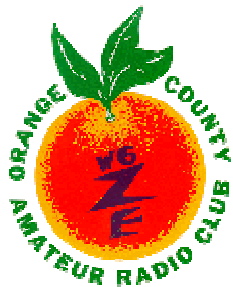
2 1/2-3 lb. boneless otter loin or otter roast
1 8-oz. can tomato sauce
1 cup barbecue sauce
1 onion, sliced
2 4 1/2-oz. cans diced green chilies
4 tablespoons chili powder
1 teaspoon ground cumin
1 teaspoon dried oregano
1/4 teaspoon ground cinnamon
1/2 cup chopped cilantro

Cooking Directions:

Grab otter and shave all fur. Place fur into a bag for later usage, such as pillows or maybe a small wig. In 4-quart slow cooker, stir together tomato sauce, barbecue sauce, onion, chilies, chili powder, cumin, oregano and cinnamon; add otter and spoon sauce over otter. Cover and cook on low heat setting 8-10 hours, until otter is tender. Remove otter to a cutting board and pull into shreds. Serve with sauce on side. Garnish with fresh cilantro.

Serving Suggestions:

Favorite southwestern flavors simmer with an otter roast in the slow cooker. Shred the slow-cooked otter and serve in its sauce alongside corn muffins or warm flour tortillas. This shredded otter and sauce is also perfect to stuff tacos, burritos, enchiladas or chilies rellenos. Toss along side a spotted-owl salad to accompany.



Please support the companies
who support OCARC!

Make sure to thank them for their support
of OCARC when you order from them, or
when you see them at a convention!



Hearing
Is Believing

Hamstore.com

Your internet source for quality used gear

The DX Store

A Shack on the Belt Free Zone

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



FREE PL-259

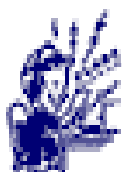
Visit our Web site fo details

Amateur Radio Equipment for DXers!
sales@dxstore.com

www.dxstore.com



PRYME®
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MFI
THE World Leader in
Ham Radio Accessories!



OCARC Board Meeting Minutes

2007-04-07

The OCARC Board meeting was held at the JagerHaus Restaurant at 8AM on Saturday, 2007-04-07. There were a total of 14 members and visitors attending. There was a quorum of club directors present, with only Dan N6PEQ absent due to illness.

DIRECTOR REPORTS:

- **Treasurer** – Bob-AF6C reported the club had \$4,530 in the treasury.
- **Publicity** – discussed plans to prepare press releases for Field Day.
- **Membership** – currently the club has 57 members.

OLD BIZ:

- **NewsLetter Editors**

- April is Kristin K6PEQ
- May is Ken W6HHC
- June is Paul W6GMU

- **CLUB SPEAKERS**

Kristin reported that Dan-N6PEQ has confirmed that:

- April speaker will be April Moell WA6OPS on the Hospital Disaster Support Communications System,
- May will be Dennis W6DQ on EME.
- June program will be Chip K7JA on Field Day plans and strategy,
- July presentation will on the XT2C DXpedition.
- August presentation will be on ATV
- September meeting will host a reunion of past OCARC members
- October meeting will be replaced by the club's yearly Ham AUCTION

The OCARC is looking for ideas for a November speaker.

- **Santa Barbara Field Day Trailer** – Kristin – K6PEQ reported that the OCARC's bid for \$2,100 for the tower/trailer had not been accepted by the Santa Barbara Radio Club, because of conditions that OCARC had attached to the bid to allow an inspection visit, if we had the winning bid.
- **Field Day Planning** – Willie N8WP was going to conduct the next Field Day planning meeting at the Los Alamitos JFTB after the club breakfast ended.
 - Willie explained that we are still looking for a Team Captain to head up a VHF/UHF station at FD
 - A map of the layout of FD stations was shown at the meeting.

NEW BIZ:

- **OCCARO** – the board unanimously approved a motion to pay the 2007 membership fee to OCCARO (\$20) and to donate \$100 to OCCARO to help defray the cost of the OC Fair.
- **OC FAIR** – Kristin N6PEQ said that the OCARC will be staffing the OC Fair booth on Wednesday, July 18 and also Saturday, Aug 04. A sign-up sheet will be circulated at future OCARC meetings.

GOOD-OF-CLUB:

- **Catalina not-so-DXpedition** – Willie – N8WP started a discussion about a weekend ham operation trip to Catalina Island.
- **OCARC Lanyards** – Bob AF6C showed that an OCARC Lanyard for holding club badges could be obtained in reasonable quantities.
- **B2V Conflicts** – the B2V will conflict with OCARC General Meeting on Friday April 20.
 - Loran KD6LRD agreed to assume secretary duties for absent Ken W6HHC
 - Cheryl KG6KTT agreed to assume treasurer for absent Bob AF6C

Submitted by Ken W6HHC - - Secretary

HAMCON 2007
ARRL Southwest Division
Amateur Radio Convention
 September 7, 8, & 9 2007
 Torrance Marriott Hotel-Resorts
 3635 Fashion Way, Torrance, CA 90503-4897
 1-800-228-9290 Hotel Resv. Code: HAMCON



REGISTRATION FORM

ALL ATTENDEES MUST BE REGISTERED - Please list additional attendees
 No Charge for Children under 16 when Accompanied by a Registered Adult

Call Sign: _____ Last Name: _____ First Name: _____
 Address: _____ City: _____
 State: _____ Zip Code: _____ E-Mail: _____

ADDITIONAL ATTENDEES

NAME (PLEASE PRINT)	CALL SIGN	CHILD	ADULT
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

REGISTRATION

Early Bird (Post Marked by April 30, 2007)	\$15.00	_____ @ \$15.00 ea. = \$ _____
Convention Pins Included (Supplies are limited)		
Pre- Registration (Post Marked by August 1, 2007)	\$18.00	_____ @ \$18.00 ea. = \$ _____
On Site Registrations	\$20.00	_____ @ \$20.00 ea. = \$ _____
Breakfast Tickets	\$20.00	_____ @ \$20.00 ea. = \$ _____
Luncheon Tickets	\$25.00	_____ @ \$25.00 ea. = \$ _____
Banquet Tickets	\$40.00	_____ @ \$40.00 ea. = \$ _____
<input type="checkbox"/> Short Ribs <input type="checkbox"/> Salmon <input type="checkbox"/> Chicken <input type="checkbox"/> Vegetarian		
		Total = \$ _____

Make Checks Payable To: HAMCON, INC. P.O. Box 333 Pomona, CA 91768 For Information Visit HAMCON.ORG	Staff Use Only Date Received: _____ # Pins Given: _____ Amount: _____ # Registered: _____ Check Number: _____ Other: _____ Receipt #: _____ Other: _____
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The Need for a Portable Case

Roland, K5CW, was inspired to create a portable case in response to a request to come up with something that could be used in the highly portable and mobile world of ARES and RACES. The case needed to be packaged differently than in an ammo can, metal or wooden box or back pack, etc. It also needed to have the ability to be used in the car while driving, on a desk top, or just about anywhere ARES and RACES might be called to serve. The case also definitely needed to be easily transportable. There was one other caveat...it had to look professional (no hanging wires, etc.) and could also be operated from an internal battery. Not a small feat at all to come up with something that has to hold so many different parts and be able to function in so many diverse locations.

Roland met the challenge of the portable case. His case features the following:

- Easily transported in any weather.
- An external switch selects either 12vdc internal or external 12vdc power.
- Can be easily modified/converted to operate on an internal battery power supply.
- Coax and power connectors are externally mounted.
- The case is air cooled (fan pulls air out of case, found to be more efficient).
- The case can be put into operation in just a couple of minutes without having to remove the contents.





The case as seen in the pictures contains the following:

- IC-706MKIIG w/remote mounting kit (for all around operating versatility)
- SEC 1223 switching power supply
- 12vdc operated relay
- 4 socket power distribution box
- ICOM HM-154T hand mic
- 12vdc fan
- surface mounted coax connectors, 120vac surface mounted connector; Anderson 75 amp surface mounted connector, 12vdc surface mounted switch.

The case also carries a 30 to 75 amp adapter connector, Traveler Headset and Kantronics KPC3+ TNC.



Roland is a retired Army officer who was first licensed in 2000. He is an ARRL VE and a member of the EL Paso Amateur Radio Club, W5ES.

Thank you Roland for sharing this great portable case with us. The pictures and ideas are fantastic.

W6NGO Tower Take-Down

by Ken W6HHC

When Matthew-KI4HFL in South Carolina saw the tower for sale on the OCARC WEB site, he recognized the fair selling price. The estate of former club member Kei-W6NGO (now a silent key) had a very nice 54-foot self-standing motorized-crank-up tower in the back yard. So how do you get a 700 lb tower that is standing up in Orange County over to a buyer in South Carolina? And to complicate matters there were still two very large antennas mounted on the tower. This purchase was definitely **NOT** like buying a handheld rig on e-Bay.



This was the “You Take It Down” sale condition of the 54-ft tower with a 4-ele 20M beam (on top) and a 7-ele 15M beam (the bottom one) still mounted.

It turns out that the efforts required to relocate the tower to KI4HFL created six major tasks:

- 1) First locate a OC contractor who could do the work on lowering the tower
- 2) Lower the two large antennas and put them aside for a future buyer.
- 3) Lower the tower and remove the huge mast.
- 4) “Wrestle” the tower onto a towing trailer
- 5) Haul the tower on trailer to a freight company distribution point.
- 6) The freight company delivers the tower cross-county to KI4HFL.

The first task was solved by Mathew KI6HFL contracting with Dino-K6RIX to do the work of taking down the antenna beams and then lowering the tower and finally hauling the tower on a trailer to a freight company. Dino-K6RIX has a lot of experience lowering antennas and lowering towers.



Dino-K6RIX lowers the 15M beam.



Dino uses a truck-mounted electric 9000-lb wench and a pulley to begin the lowering of the tower.

The second task is shown in the picture above as Dino begins lowering the large 15M beam onto the roof of the tractor shed.

The picture below shows the tower almost lowered. It also shows that the heavy antenna mast will not clear a storage shed that been place in the back yard (after the tower was first erected). The mast was too heavy and much too awkward to safely lift out of the tower. So a sharp saw quickly cut it off in order to clear the storage shed.



Dino-K6RIX lowers the 54-ft tower to point that the long mast is just above the storage shed.

With mast removed, Dino-K6RIX was able to then wrestle the 700 lb tower onto a boat trailer and tow it out of the yard. Later it was a simple towing job to deliver the tower to a freight company that had been contracted by Matt-KI4HFL for the final Task 6.

The vast experience that Dino has in both raising towers and lowering towers was a great asset to Mathew's purchase. Dino-K6RIX was able to efficiently and safely complete this tower take-down project.

In another generous act, the widow of ex-member W6NGO donated the proceeds from the tower sale to the Kei Yamachika Trust Fund. This trust fund has a long history of making donations to the Orange County Amateur Radio Club.

OPERATORS NEEDED

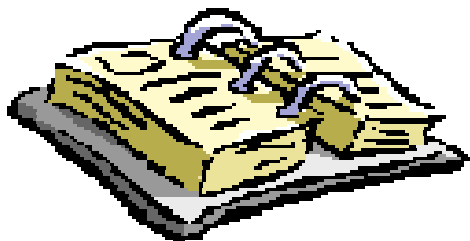
Attention: ALL Amateur Radio Operators - Your Help is Needed

PUBLIC SERVICE EVENT

Saturday April 28, 2007 from 7:00 a.m. to 10 a.m.
DonateLIFE 5K / 1K FunRun at CSUF

Help! This event is only TWO WEEKS away. We still need TEN more ARO's including atleast ONE BIKE MOBILE. The route has been changed from last year and we need more ARO's because of this change and hazards along the route. Thanks for your help in the past and we really need it again. This event lasts only about three hours.

If you are able to help, please contact: Gene Thorpe KB6CMO
KB6CMO@ARRL.net or 714-680-4258



Upcoming OCARC Events!!!

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



April 20th (Friday 7:00pm)
April Moell WA6OPS of the Hospital
Disaster Support Communications System
is scheduled to give a presentation.
Details to come!

May 18th (Friday 7:00pm)
Dennis Kidder W6DQ discusses the
exciting world of Moon Bounce (EME)
communications!

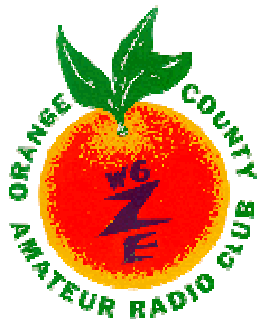


June 15th (Friday 7:00pm)
Chip Margelli K7JA will present a Field Day Pep Talk. Chip could
write a book about Field Day with all of his experience. He is
sure to get you in the mood for Field Day!!!



**June 22nd, 23rd & 24th
(Friday, Saturday & Sunday)**

OCARC's annual ARRL **Field Day** effort will be
from the Los Alamitos Air Station. Come join us for
some fun and friendship! Details on OCARC website.



The Orange County Amateur Radio Club "OCARC"
P.O. Box 3454 Tustin, CA 92781

Web: <http://www.w6ze.org>

Email: ocarc_info@w6ze.org

*** Product Review ***

Icom IC-7800 "Upgraded" HF/50 MHz Transceiver

By: Dan Dankert N6PEQ

n6peq@dxer.com

March 7, 2007

This product review is an update of a previous review that I had written on the Icom IC-7800 in February of 2005. With the new "Upgraded" IC-7800 now on the market, and now having owned a IC-7800 for more than two years, it was necessary to provide an updated review of this product. This review is a hybrid of the original review in conjunction with added or revised information due to the IC-7800 upgrade.

After having owned several top of the line HF transceivers over the years, I was waiting for that one "special" rig to arrive on the market that would catapult HF amateur radio to the next echelon. In recent years, I was loyal to a trusty Kenwood TS-950SDX and even had a stint with a Yaesu FT-1000MP Mark-V. In 2003 Icom announced that they were developing a new top of the line rig that would replace their discontinued IC-781 transceiver. This radio was named the IC-7800, and Icom alluded that the performance of the radio would be far beyond anything previously offered in the amateur market. In fact, Icom expressed so much confidence in the IC-7800, that their literature states, "No one else comes close!". This is quite a strong statement. Does the IC-7800 live up to the hype? The price sure does, as most hams were surprised to see the list price of ~\$13,500 announced. Yes, we have now stepped into the world of 5-digit priced amateur transceivers.



The Impressive Icom IC-7800

In December 2004, Icom America offered me an IC-7800 (Pre-Upgrade Era) to test drive for a few weeks. Of course I accepted the offer as I was anxious to try out the radio, but at the same time, I was skeptical as to whether it would really be that much better than other rigs that I have used. As soon as the radio arrived at my QTH, it was a marathon race to get it wired into the shack. My first impression was that this radio was large and heavy. It weighs in at a whopping 55 pounds, and is approximately 17" wide, 6" high and 17" deep! Personally I like big radios, so this definitely appealed to me. Looking at the back

of the radio, I found no less than four antenna ports, a transverter port, USB port for a keyboard and a VGA monitor output. Plus there are the typical accessories ports, speaker outputs, RS-232C port, relay output, etc. After only a few minutes (which at the time seemed like an hour!), the 7800 was connected and ready to power up.

As the radio came to life, I could not help but be awe struck by the beautiful 7" wide color TFT LCD display. Wow! The vivid colors and multitude of information displayed is nothing short of impressive. You feel somewhat overwhelmed at first with all the knobs and features, but in fact the radio is easy to navigate and learn as I will explain later. Icom replaced the standard mechanical coil S-meters with "virtual" D'Arsonval meters.



The IC-7800 Multi-Color TFT Display

The movement of the digital S-meters is truly a treat to watch. The simulated rise and fall of the meters make you feel like you are looking at the real McCoy, but in fact it is just an LCD image. Two other S-meters styles are also selectable. There are a few different fonts and display styles that can be selected as well. The spectrum display is large, and you can change the scope colors to your preference. For the YL operators, you can even set the spectrum display color to “pink” to match the Heil PR-20P microphone! At the press of a button, you can view power output, ALC, Compression, SWR, FET drain current, FET drain voltage and power amplifier temperature all at the same time! This was especially attractive to me, as I like to keep an eye on all the audio/XMIT parameters at once while transmitting. Does all this displayed information seem too much for the 7" wide display? Never fear! You can simply plug a VGA monitor into the VGA port located on the rear of the radio, and your monitor becomes a huge duplication of the IC-7800 display. The external monitor output provides super color, great resolution and is pleasing to the eyes. Nice touch!



Bandscope Menu



Display Settings Menu

One of my pet peeves with most of the radios (HF and VHF/UHF) on the market is the congestion of large quantities of tiny light-weight knobs on far too small an area of real estate. To my delight, Icom did an excellent job of addressing this challenge. The front panel buttons and knobs all have a very nice, rugged, tight and "heavy" feel to them. To Icom's credit, they spent the extra money on a radio that lists out at ~\$13,500 to make it feel like a radio that should cost that much! The knobs and buttons are nicely spaced, intelligently designed, logically laid out and clearly labeled. For ease of use, the controls for the two receivers tend to be right next to one another. Thus, once you locate a specific control-knob for receiver “A” (e.g. AF-gain, RF-



CW Filter Menu Settings



AGC Time Constant Menu

gain, DSP noise-reduction, noise blanker, etc.), the identical control-knob for receiver “B” resides right beside the receiver “A” control-knob. This allows one to become quickly proficient at operating the IC-7800. You’ll find yourself spending more time going in for the kill and working that rare DX station, rather than searching for that elusive QRM fighting feature, which is sometimes astonishingly hidden on other transceivers.

Icom also spent extra effort in allowing menu functions to be accessed with a more commonsense approach, as compared to other radios. There are a several short lists of menus, which are broken down into categories for setting the clocks, display colors and effects, TX/RX levels, etc. The large TFT display allows you to view several different menu parameters at once, which results efficient programming. Scrolling thru menu settings is easy with the “up” and “down” arrow buttons. Specific feature menus such as AGC time constants, noise blanker levels, receive filter settings, antenna port/band settings, etc. are accessed by a simple push of a button. For example, just like any other radio, you can engage or disengage the noise blanker with a simple quick push of the “NB” button. But on the IC-7800, if you push and hold the “NB” button for approximately one second, the noise blanker menu pops up on the display. Simply make your adjustments, then push and hold the “NB” button again, and you’re back to the normal display. This menu programming method is used for several key features found in the IC-7800. This is an extremely straightforward procedure, which makes the IC-7800 seem almost too simple to operate, considering the numerous features available on the transceiver. This menu structure is in direct contrast to other radios, which combine virtually all menu settings into one colossal and large and unwieldy list, which is disorganized and inept! Icom’s goal is for you to enjoy spending time making QSO’s, instead of fumbling through poorly thought out control panels and convoluted menus that result in inefficient operating and lost DX opportunities. Thank you Icom!



Transmit & Receive Level Menu



CW Keyer Menu

Tuning around the HF bands, I discovered how smooth the tuning dials felt. Yes "*tuning dials*". The 7800 has two duplicate and fully independent receivers, which each have their own 32-bit floating DSP unit. The receivers are completely separate from the antenna inputs all the way to the speaker/headphone outputs. Each receiver has its own set of controls including: tuning knob, twin passband tuning, noise blanker, digital noise reduction, AGC, squelch, AF gain, RF gain, notch filter (auto & manual), audio peak filter, twin peak filter, 3 IF filters, tuning speed adjustment, digital RF selector, preamp, attenuator, voice synthesizer, dial lock, S-meters and auto tune feature. The features go on and on!

The receive audio quality is exceptional. In fact, an SSB signal with a moderately strong signal level actually sounds somewhat like AM broadcast. Very full and easy on the ears! The receiver itself is very sensitive and selective. It gives you the sense that you can hear a pin drop on Bouvet Island. I’ll just have to wait for next DXpedition to Bouvet in order to perform the “pin drop” test! Three custom-selectable receive filters are available for each mode. They can be adjusted anywhere from 3.6 KHz down to a super narrow 50 Hz for the

SSB, CW & PSK modes. In the AM mode, the filters are adjustable from 10 KHz to 200 Hz, and from 2.7 KHz to 50 Hz in the RTTY mode. In the SSB, CW, PSK, RTTY & AM modes, the roofing filter is selectable between three preset values, 3 KHz (*Available in upgraded version only*), 6 KHz & 15 KHz. In addition, the DSP filter's cutoff shape can be selected between "sharp" and "soft". The filter width and shape, plus the roofing filters, are all adjustable on the fly while tuning a signal for maximum efficacy. The ability to utilize extremely narrow filters as tight as 50 Hz is especially helpful on CW. Combine this filtering with a selectable 1 Hz tuning rate and 3 KHz roofing filter, and you are ready to dig out some weak signals. It is simple to tune and clearly receive a weak station, when a significantly stronger station is only 50 Hz (0.05 KHz) away! In the 50 Hz filter width, CW signals tend to have a nice tone quality without the "ringing" that might be expected. I find myself typically using very narrow filtering during CW operation, due to the exceptional receive audio quality. The IC-7800's capability of rejecting adjacent-channel interference is tremendous and second to none.



CW Memory Keyer Menu

The "Upgraded" IC-7800 also features revamped PLL circuitry in both receivers to improve phase-noise performance. In years past, I had frowned upon DSP receive audio & DSP noise reduction, since I have never witnessed it implemented properly on amateur radio equipment. In other radios, I had noticed the DSP resulted in very mechanical and re-manufactured sounding receive audio, a quality that I find unpleasant. In some cases, the DSP in other receivers tend to attack the incoming signal that you want to receive, as much as the noise that you desire to remove, thus resulting in zero

gain whatsoever. I am pleased to report that the DSP receive audio and DSP noise reduction in the IC-7800 sounds is exceptional! In fact, there is nothing quite like it on the amateur market today. The audio is very natural, and the DSP noise reduction effectively removes a vast majority of noise without significant harm to signal quality. The performance of DSP noise reduction is very apparent on noisier bands such as 80 & 160 meters, where it is common to dig out a signal that is barely noticeable, resulting in a Q5 signal. This was the first time that I have witnessed DSP used effectively and advantageously on amateur radio equipment. Three AGC speeds (Fast, Mid & Slow) are available for each mode, with the exception for FM, which is fixed in the "Fast" position. In all modes, except for FM, the AGC time constant for each speed setting is user adjustable in the AGC menu. Two preamplifiers are switchable in and out of the receiver circuit for increased signal to noise ratio and receiver sensitivity. I also found the receiver to be excellent for shortwave, long wave and AM broadcast band radio listening, making full use of the IC-7800's excellent filter capabilities and audio quality!

The transmitter puts out 200 watts on all bands, so the rig hardly gets a workout if driving an amplifier with 50 to 100 watts. The transmit audio quality (another pet peeve of mine) is outstanding! Using the new Heil PR780 microphone, which is specifically designed for use with the IC-7800, I have received rave audio reports on SSB, AM & FM modes. Several AM'ers had a difficult time believing that I was using a solid-state radio due to the exceptional quality of my audio. The bass and treble of the SSB, AM & FM transmit audio can be adjusted in the setup menus. The SSB transmission passband width can also be tailored to your preference through three user selectable settings,



Dan N6PEQ & Bob Heil K9EID with the Heil PR-780 & Icom IC-7800 at N6PEQ

“Wide”, “Mid” & “Nar”. You can switch between the three width settings on the fly. This is fantastic for altering your transmitted SSB audio between a very natural “wide” sound for rawchewing to a very aggressive “narrow” style for breaking those big pileups! I have found the Heil Goldline microphones with the HC-4



N6PEQ with the IC-7800 at the Dayton Hamvention in 2006

element to be an outstanding combination with the IC-7800 for contesting and DXing. CW operation is a piece of cake, and the full break-in feature works beautifully. "Split" operation with some transceivers can be confusing, but not with the 7800. Split mode is signified by a large white LED located on the top center of the radio's front panel, and the two VFO's are clearly marked as to which is the transmit VFO and receive VFO. There is no guess work involved. Another nice feature for split operation is that the spectrum scope display scan-width can be selected between presets of ± 2.5 , 5, 10, 25, 50, 100 & 250 KHz. This makes it quick to find that "clear" frequency within the QSX window of a DX station operating split. The scanning speed for each scanning width of the spectrum scope can also

be selected between three settings (Slow, Mid & Fast). Working RTTY & PSK is simple with the 7800. Simply press the 'RTTY/PSK' switch to select the proper mode, press the 'Decode' button and plug a USB type keyboard into the back of the radio. You can now decode RTTY or PSK right on the display of the 7800, and transmit using the keyboard! This makes it easy for a SSB/CW guy, such as myself, to enjoy dabbling in RTTY & PSK. I found making contacts in either of these modes were a snap. The PSK decoder in the 7800 does a super job of copying very weak signals. The 7800 display has an indicator to assist in proper tuning, plus also includes a "waterfall" display for PSK. The tuning speed and frequency



PSK Decode Window with Waterfall Display

readout can be selected to 1 Hz increments in any mode, but is especially useful for tuning in PSK signals. The RIT is also adjustable in 1 Hz increments when the 1 Hz tuning-speed setting is engaged.

The IC-7800 also includes a slot for a flash memory card. The flash card stores digital voice keyer memories, memory channel settings, operator settings, etc. This is a big plus for a multi-operator contest station. Each operator can store his preferences on a flash memory card, so that you do not waste time setting up the radio each time a new operator uses the radio. Each IC-7800 comes with a test report generated at the factory. The test report includes data for each band such as power output, receiver sensitivity, and 2nd & 3rd harmonics.

Carrier suppression, receiver dynamic range, and 3rd order intercept test data are also included. I only have a few suggestions for the improvement of the 7800. First, Icom did not incorporate an automatic repeat function for the voice keyer. This is an excellent feature found in the Kenwood TS-950SDX and TS-2000(X) transceivers. During lulls in a SSB contest, it is nice to place a rig in "auto pilot", which eliminates the need to keep pressing the voice keyer button over and over. For some reason other manufacturers have not found this feature to be of interest. Secondly is that it would be nice to have a matching remote keypad to actuate the digital voice recorder and CW memory keyer. Third, the ability to view the waveform of your transmitted signal as well as a received signal would be quite slick. Fourth is the ability to switch into a dual “Mini”

bandscope mode, where you can view band activity on both the main and second receivers simultaneously. Lastly, I would like to see a “variable peak-hold” function for the bandscope. Whereby you could view band activity history from a few seconds to infinite. Currently the peak-hold function is either “On” (infinite) or “Off”. Did the 7800 impress me enough to consider purchasing one? Well, the morning after I received the demo IC-7800, my wife Kristin 'K6PEQ' walked into the radio room. She caught me with a tape measure as I was measuring the size of the IC-7800 to see if it would fit where my Kenwood TS-950SDX resided. As soon as she saw this, she knew that I was hooked! I unexpectedly fell for the rig, hook, line and sinker. The following day I purchased my very own IC-7800. To top it off, we subsequently purchased a second IC-7800 for our station. The only thing better than owning a IC-7800 is having multiple IC-7800's! Earlier I had mentioned that I would explain how easy the IC-7800 is to learn and navigate. Well, thanks to the intelligent layout of the 7800, plus the easy to navigate menu system, I had no reason to open the operating manual for the transceiver until almost a month after I owned the radio, and that was only to obtain some terminology for my review of the transceiver!



N6PEQ & K6PEQ at their home QTH

Congratulations to Icom for creating a radio that results in a giant leap in HF/50 MHz performance while maintaining simplicity of operation. If you are looking for a high-end rig with incredible QRM/QRN fighting features, beautiful audio quality (Transmit & Receive), superb receiver characteristics and that is simply a pleasure to operate, I highly recommend the 7800. It is the pinnacle of transceivers for DXing, contesting and ragchewing. Simply world class! After using the IC-7800 as well as other current top of the line transceivers on the market, I can testify that *"No one else comes close!"*

More information on the IC-7800 can be found on Icom's website at:

<http://www.icom.co.jp/world/products/amateur/7800/index.htm>

The current street price is \$10,599. Owners of original IC-7800 “Non-Upgraded” transceivers can have their transceiver upgraded for a fee. Contact Icom America for more information. If you have any questions regarding the features or operation of the IC-7800, you are welcome to contact me at 714-544-9846, or via email at n6peq@dxer.com



The IC-7800 at N6PEQ

Otter Bay DXpedition 2007

The planning for the Otter bay DXpedition started at the 2006 International DX Convention in Visalia. A group of experienced DXers was sitting around drinking fashionable adult beverages and trying to figure out where to go next. Two members of the group had been to Otter Bay the year before on vacation, and suggested we go there. After much discussion and several beverages at about 2:30am it was decided, we would head to Otter Bay.



Otter Bay is located on the central coast of the PRC (Peoples Republic of California) about 190 miles south west of the PRC capital. With a population of just under 30,000 we would not be alone, but we were unsure of the reception we would get upon our arrival. Most of the members of the DXpedition were traveling from the Orange county area and one from the adopted hometown of Andy Devine. Local politics and customs of Otter Bay are very different from that of our home locations so we were careful not offend our local hosts.

We decided that February 2007 would be our target date, this would include the Otters on the Bay World Wide DX Contest weekend. The members of the DXpedition would include, Dan, N6PEQ; Kristin, K6PEQ; Willie, N8WP; Cheryl, KG6KTT; Pat, W7PZ; Jim, N6DHz, Linda (N6DHz's YL) and Sumo. We started by making contacts with some of the locals in Otter Bay and found them receptive to our efforts. We were soon able to book accommodations at the best hotel in Otter Bay, well it was the best in the western half of Otter Bay. We got rooms with a view of the Ocean (Avenue), which would give us a nice takeoff angle to the north and west.

We decided to travel overland as air travel to Otter Bay is very difficult and expensive. Our caravan of vehicles left the orange county area at about 5:00am. We made a few stops along the way including a visit to a childhood hangout of Kristin, K6PEQ. Fortunately for her we arrived too early in the morning for any of her friends to be there, this saved her much embarrassment.



Jim, N6DHz, getting ready in case the group decided to take a boat instead of traveling by land.

We arrived in Otter Bay at about 1:00pm and immediately went about setting up our station. Right after we consumed an appropriate amount of complimentary wine and cheese of course.



Dan, N6PEQ, with Sumo, JS1UMO, enjoying the complimentary cheese, fruit, crackers and wine.

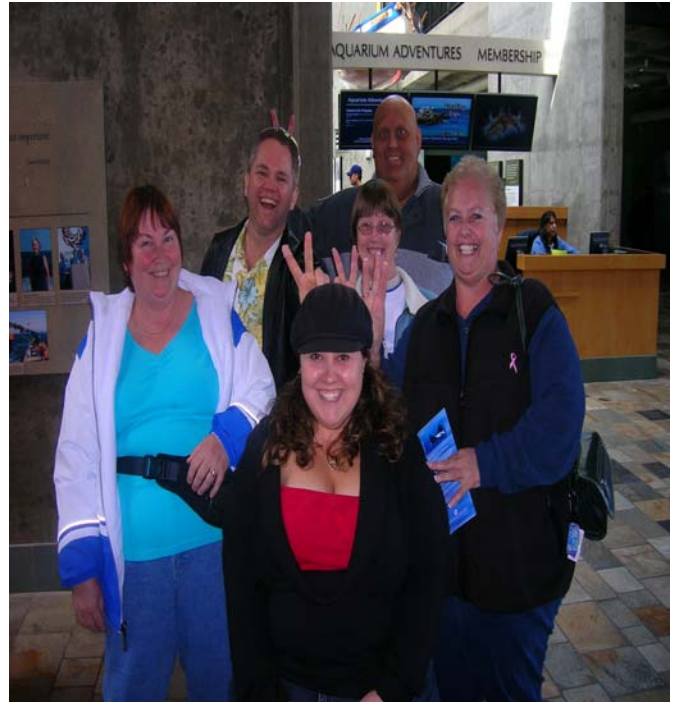
Once the station was set up we proceeded to take a tour of the local area since we had some time before we could collect our operating permission from the local communications authority. Once we had operating permission in hand we headed out to dinner and watched Dan consumed massive amounts of seafood at the Real Cost Café. This turned out to be his favorite place for seafood and we had a hard time keeping him out of the café and on the air.

Let the pileups begin... Willie, N8WP made our first contact with JY1 and we proceeded to put some 222,316 Q's in the log over the next two days. The majority of our Q's were made on EME with some on phone, CW and RTTY also. We were able to maintain a rate of over 4600 Q's/HR by liberal amounts of complimentary cheese and wine. Our final Q was with 1S1A.



Willie, N8WP, taking a small break to smile for the camera in between being slammed with making Q's on phone.

Once we were finished and had scored a first place in our category in the Otters on the Bay contest we decided to celebrate with a group dinner at a local watering hole. We met that night at Captain Bullwackers for a feast of pulled Otter Butt. This is not as nice a place as the Real Cost Café but it has the best pulled Otter Butt in town. The next morning we packed up the station and headed for home. This was truly a great experience and I think all of us will be meeting in Visalia again this year to discuss where to go next.



The group pictures were taken at the Aquarium where the group was introduced to many different delicacies and sea life.

We would like to thank our sponsors ICOM America, Heil Sound Ltd. and The DX Store for all their support and backing without which this expedition would not have been possible.

Breakdown of contacts by band and mode:

	Phone	CW	EME	RTTY
160M	456	5	22,012	283
75/80M	1456	10	30,189	460
60M	1298	12	32,122	455
40M	22	99	29,072	409
30M	22,000	2	0	289
20M	123	83	9,023	454
17M	320	20	10,111	390
15M	677	64	13,405	352
12M	229	77	14,666	302
10M	4657	40	812	327
6M	10,220	12	14,989	312



O.C. Fair



When: July 13th-August 5th

Theme: CowAbunga – The year of Herefords, Surfers and Sand

Fair Hours: Tuesday-Friday is noon to midnight

Saturday-Sunday is 10a.m. to midnight

***Our booth hours will be slightly different due to the building hours that the booth is in.**

Orange County Amateur Radio Club Booth Days:

Wednesday, July 18th – This day is also the Summer Food Drive at the fair benefiting Harvest Food Bank. There is free admission to the fair with a donation of 5 canned or dry food items. Once closer to this time, we will be making a canned food drive at our club to take to the fair and donate. We will keep you updated!

Saturday, August 4th – This is the last Saturday of the fair and will be a busy one!

Loran, our OCCARO delegate, will keep us posted as more details emerge about our days at the fair and the Amateur Radio booth. Please note these days on your calendar as we would love to have you help out at the fair!

Our club donated \$100 to OCCARO toward the cost of the O.C. Fair. I know that this generous donation will help immensely with the cost of the booth and decorating the booth. Thank you!

2007 Contest Schedule

JUNE:

9-11 ARRL June VHF QSO Party
23-24 ARRL Field Day

JULY:

14-15 IARU HF World Championship

AUGUST:

4-5 ARRL UHF Contest
18-19 ARRL 10 GHz and Up Contest

SEPTEMBER:

8-10 ARRL September VHF QSO Party
15-16 ARRL 10 GHz and Up Contest

OCTOBER:

15-19 School Club Round Up

NOVEMBER:

3-5 ARRL November Sweepstakes (CW)
17-19 ARRL November Sweepstakes (Phone)
30-12/2 ARRL 160-Meter Contest

DECEMBER:

8-9 ARRL 10 Meter Contest

PALM SPRINGS DX CLUB

FLEA MARKET

JOIN IN THE FUN

LOTS OF GOODIES FOR THE HAM

RADIO LOVER

LOTS OF DRINKS AND HOT DOGS

(FOR A SMALL FEE)

SATURDAY, MAY 5, 2007

9:00 TO 4:00

HOSTED BY: BART, K6UNR AND GARY, KD6QLT

TALK-IN:

146.940 PL 107.2

Place: 4193 Matthew Drive, Palm Springs

Take I-10 East to Palm Drive exit (past Palm Springs turn off, past Indian Ave to next off ramp) Turn right at end of off ramp (turns into Gene Autry Trail). Continue approx 5 miles to Palm Canyon (past airport, Lowes and water park) Cross Palm Canyon, road curves to right. You will see the antennas on the hill on left. First driveway on left, go up hill to large building (the "Barn").