

July 2010



Newsletter of the County of Orange Radio Amateur Civil Emergency Service

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Captain's Corner

by RACES Capt. Ken Bourne, W6HK, Chief Radio Officer

Direction Finding

Several years ago, OCRACES conducted T-hunts (fox hunts) once a month after our Monday-night net, with the fox transmitting on the input of our 2-meter repeater. Most T-hunts occur on Saturday nights (or the SOARA hunt on a Sunday afternoon) on 146.565 MHz simplex, but we used the input of our repeater so that the hunters, who could start from any location, would know when the fox started transmitting (just in case a hunter started in a "dead spot"). The first hunter to find the fox was the winner, and got to hide the following month. The hunts generated a considerable amount of activity, resulting in several guest hunters becoming active OCRACES members. However, some members never participated because they did not have SUVs or four-wheel-drive pickup trucks (sometimes the fox hid in challenging off-road locations), or did not have portable "sniffers" for finding transmitters that were hidden far from where any vehicle could drive.

We are thinking of reviving our Monday evening T-hunts, but with a different emphasis. Rather than it being a contest as to who finds the fox first (which often results in an unsafe race to the fox), we would make this a cooperative event, with all hunters communicating on a different frequency, such as on one of our UHF repeaters, to compare

notes and to help each other in finding the fox. This would be a group exercise in quickly locating a signal, making us more valuable to OCSO and other agencies for tracking interference. We can eventually develop techniques for using GPS for accurate tracking, possibly with each hunter sending their latitude, longitude, and bearing data automatically to a central location for computer analysis and pinpointing the signal source by triangulation. Fixed stations with rotating directional antennas could also transmit that information to the central location.

Having GPS, APRS, and other high-technology equipment would not be a requirement for participating, but would add to the enjoyment of those who are so technically inclined. Having rugged vehicles, big quad antennas, and portable sniffers would also not be required. The fox would be required to hide on publicly accessible hard pavement (such as a restaurant parking lot) in Orange County, to where any hunting vehicle could easily and safely drive. Instead of big quad or yagi antennas, hunters could throw a small Doppler DF system into their sedans, with four equally spaced mag-mount quarter-wave whips on the roof or trunk, which would provide an LED display of the direction to the fox.

The proposed hunts (perhaps on a second Monday after the net) would be short and enjoyable, and would enhance our capabilities for locating interference.

The Next
OCRACES
Meeting is

July 12, 2010
1930 Hours

840 N. Eckhoff St.,
Suite 104, Orange

Agenda:

Charlie Basham, N6DZW,
Southern Calif. Edison
Electrical Safety



Orange County Sheriff's Department
Communications & Technology Division

Next OCRACES Meeting: July 12th

The next County of Orange RACES meeting is on Monday, July 12, 2010, at OCSO/Communications, 840 N. Eckhoff Street, Suite 104, in Orange. At this meeting, Charlie Basham, N6DZW, from Southern California Edison, will give a highly informative presentation on electrical safety. Also at this meeting we might conduct a message-handling drill, so be sure to bring a handie-talkie.

OCRACES to Exhibit at OC Fair on July 30th

OCRACES will occupy the Ham Radio Booth at the Orange County Fair on Friday, July 30, 2010, from 4:00 PM until 11:00 PM. This is a great opportunity to introduce young people to amateur radio, and to explain the importance of amateur radio for emergency communications to the public. A limited number of parking and fair passes will be available to OCRACES members who participate.

Making Progress with Winlink Installations

Thanks to an incredible amount of work by OCRACES Radio Officer Scott Byington, KC6MMF, with many hours of assistance by Don Cooke, AF6CV, our Winlink project is making great progress. Scott says he is available for training for each of the client stations. He wants to bring a communications service monitor to each of the city sites to check system performance and throughput, before the training session begins. In preparation for each meeting, required ports must be open for telnet configuration. In the Paclink software, under the "Help" tab, are extensive instructions for determining what ports are needed and why. Scott has also offered to help city RACES members who bring their own Winlink equipment to the meetings, in setting their XMITLVL figures with the service monitor to enhance their success in using the system. Scott cautions each city to carefully assemble their stations using TNC #1 on COMM port 1 with the UHF radio marked #1. The TNCs and radios are marked accordingly, and must be paired as marked to maintain drive levels that were previously set in the ".APS" files. Power connections are simplified, thanks to the outstanding custom Powerwerx power cables generously provided by Ken Mirabella, KM6YH.

Three servers are installed at Loma Ridge, one dedicated to Winlink, one that is going to be dedicated to Outpost, and the third that can be used as a backup or other application. Installing BPQ32 software (AX.25 NET/ROM compatible node software) is going to be complex, with radios, servers, and desktop computers at separate locations in the EOC. The TNC serial port is connected to a "serial to Ethernet" bridge. At all three RMS sites (Loma Ridge, San Clemente, and Olinda), serial data is moved through the network to the servers where "virtual ports" are established. The TNC serial ports at the latter two sites are backboned into Loma Ridge via microwave where their serial data is added to the serial IP bridge. The UHF radio that supports Outpost will be mounted in the RACES Room and attached to a second "bridge." Scott expects that the Outpost/BPQ32 e-mail server will be available on both UHF (9600 baud) and VHF (1200 baud).

Scott emphasizes that Outpost/BPQ32 is not the platform that we prefer for moving important data during activations or incidents, because the actual body of the message is sent in plain text that can be monitored by anyone. On the other hand, the body of a Winlink message is broken down into binary data and compressed for sending, adding security to the system.

Five more ports are available at Loma Ridge for installing additional dual-port TNCs. Scott suggests that one port could be connected to a Kantronics KPC-3+ TNC and dedicated to APRS applications. Another port could be connected to a KPC-9612+ TNC supporting Outpost. If hardware is available, remaining ports could be used for digipeaters, KAnodes, TCP/IP over radio (TOR), and Airmail (HF portion of Winlink). Another suggestion is to include an Icom D-STAR radio on UHF/VHF, while another port could be an Icom D-STAR radio on 1.2 GHz.

When visiting the cities, Scott wants to get the local RMS sites running. They will be available to city members with slower (1200-baud) TNCs connecting their 2-meter radios to computer soundcards. RMS support will also be valuable to local CERT members, for communicating to city EOCs with a laptop, soundcard, and mobile 2-meter radio, for example, without tying up the entire Winlink system. Most importantly, city RMS sites allow e-mail traffic to be moved between cities, even if the county RMS sites and the Internet fail.

RACES Provides Election Communications

Members of County of Orange RACES, HDSCS, and Anaheim, Brea, Buena Park, Costa Mesa, Fountain Valley, Fullerton, Huntington Beach, Irvine, Laguna Beach, Los Alamitos, Mission Viejo, Orange, Placentia, Santa Ana, Seal Beach, Tri-Cities, and Westminster RACES units provided communications from Collection Centers to the Vote Tally Center during the evening of the Primary Election on June 8, 2010, advising Net Control of the precinct numbers of the JBC boxes loaded into the vans. Net Control recorded the Collection Center name, the time, and the precinct numbers. The communicators also informed Control 2 of ballot box arrivals, ballot transportation vehicle arrival, departures, and any activity around the Collection Center that could cause delay of the movement of ballot boxes.

This was the first time we used the 2-meter repeater since it was upgraded to a simulcast system. Coverage had improved in some areas, but other areas had drop-out problems that had not existed previously. The UHF repeater provided excellent coverage, but interference that appeared to be malicious plagued some of our operations. We also had significant delays (up to a half hour) on both repeaters in reporting precinct numbers, due to heavy traffic. Because the November election will be even busier, we need to activate two more of our UHF repeaters to handle the increased traffic, which means that the already crowded conditions at Control 2 will need to be resolved to add two more Net Control positions. Winlink or other digital communications would also speed operations. Because ballot boxes often arrive in large numbers while the communicator is trying to make a report and record numbers at the same time, it is advisable that at least two RACES/MOU members be at each Collection Center.

OCRACES members at the Vote Tally Center included Tom Tracey, KC6FIC, Harvey Packard, KM6BV, Jack Barth, AB6VC, Scott Byington, KC6MMF, Chuck Dolan, KG6UJC, Ralph Sbragia, W6CSP, and Brian Turner, KI6WZS. The Collection Centers and City or County RACES or MOU members at those centers included Anaheim PD (Jonathan Ramos, W6TFK, Anaheim RACES), Canyon Hills (Tom Baldwin, KA6ZPY, Anaheim RACES), Buena Park (James Payne, KB6WUM, Reuben Rogers, KG6WEG, Anthony Santangelo, K1ACS, and Star Rogers, KI6SHG, Buena Park RACES), Costa Mesa (Mike Oviatt, KE6IWM, Costa Mesa RACES), Santa Ana (Steve Snyder, KI6EYQ, SART), Fountain Valley (Glen Langer, W6GTL, Fountain Valley RACES), Fullerton (Gene Thorpe, Fullerton RACES), Garden Grove (Walter Kroy, KC6HAM, OCRACES), Huntington Beach (Steve Albert, KE6OCE, HB RACES), Irvine (Pete Bergstrom, K6PB, and Randy Kolar, KG6WCA, IDEC), Laguna Beach (John Kountz, KE6GFF, LBECT), Laguna Woods (Nancee Graff, N6ZRB, OCRACES), La Habra (Ken Mirabella, KM6YH, Brea RACES), Los Alamitos (Tom Rothwell, K6ZT, Los Alamitos RACES), Orange (Steve Carmichael, KI6DDE, Rich Helmick, KE6WWK, and Bill Burbridge, W6VKO, COAR), Santa Margarita Fire Station #45 (Randy Benicky, N6PRL, OCRACES), Placentia (John McCauley, KD6PGC, Placentia RACES), San Clemente (Joe Lopez, W6BGR, Tri-Cities RACES), Saddleback (Knute Josifek, K6HIV, Mission Viejo RACES), Tustin (Ken Bourne, W6HK, OCRACES), Westminster (Al Toll, W6JNU, and Adam Valek, N6HVC, Westminster RACES), Laguna Niguel, Fire Station #49 (Clark Crocette, KI6IZE, Tri-Cities RACES), and Aliso Viejo (Al Way, KC6LNP, HDSCS).

ARCEP Rules D-STAR Illegal in France

As D-STAR grows in popularity in the United States, especially with RACES units and for emergency communications, we learn that the French Autorité de Régulation des Communications Électroniques et des Postes (ARCEP, France's equivalent of the US Federal Communications Commission) has ruled, citing national security reasons, that D-STAR is illegal because it could allow operators to connect to the Internet. The ARCEP also cites alleged concerns regarding cryptography and national security, as well as the use of a proprietary codec. While it's true that the D-STAR codec is proprietary, its owner (Japan Amateur Radio League) has openly licensed it (for a fee, of course) to any manufacturer who wants to build it into their equipment. Any licensed amateur radio operator who lives within the EU can sign an online petition protesting this decision.

2010 Field Day a Success in Many Ways

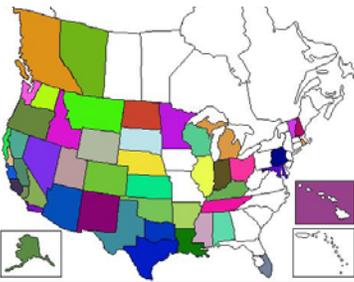
by **RACES Lt. Ralph Sbragia, W6CSP, Radio Officer and Field Day Coordinator**

On June 26 and 27, 2010, OCRACES participated in the ARRL's annual Field Day exercise. Fourteen OCRACES members worked to keep two transmitters on the air, test the use of "Ham Stick" HF dipoles as well as other antenna systems, introduce the public to amateur radio, and enjoy a festive afternoon barbecue. Participants included Ken Bourne, W6HK, Scott Byington, KC6MMF, Ernest Fierheller, KG6LXT, Martin La Rocque, N6NTH, Tom Tracey, KC6FIC, Walter Kroy, KC6HAM, Brian Turner, KI6WZS, Harvey Packard, KM6BV, Chuck Dolan, KG6UJC, Randy Benicky, N6PRL, John Roberts, W6JOR, Kenan Reilly, KR6J, Don Cooke, AF6CV, and Ralph Sbragia, W6CSP. Equipment deployed included the OCRACES van and W6CSP's Radio Trailer. Setup began as scheduled at 0800 Saturday morning and breakdown was completed about 1300 Sunday.



RACES Lt. Ralph Sbragia, W6CSP, at Field Day GOTA station

From an operational standpoint, we came the closest we have in several years to keeping both transmitters fully operational for the entire 24-hour period. This was in part due to the significant contribution of Kenan Reilly, KR6J, who worked long into the night, as well as Brian Turner, KI6WZS, and Tom Tracey, KC6FIC, who both worked late into Saturday night. Altogether, we made 294 contacts, 282 as W6ACS and 12 as W6HK on the Get On The Air (GOTA) station. Kenan was responsible for 102 of these contacts on CW, as well as a significant share of the phone contacts.



Sections worked at Field Day

One of the primary goals of this Field Day was to test a method of deploying the "Ham Stick" HF dipole system in anticipation of the special-event station we will be operating on September 16th (CPRA 75th Anniversary at Irvine Park). Our trial showed that a two- or three-member team can set up the station and get reasonable results making contacts (dependent upon band openings, of course). Weaknesses that were discovered included the need for a pair of 6-meter "Ham Sticks" so that we have the major bands from 50 MHz down, and some needed improvements to the lanyard system used to raise and lower the dipoles. We also identified the need to have two of the three Kenwood HF transceivers serviced for various issues. Another discovered operational issue is that the van's generator is designed in such a way as to stop running if the fuel tank drops below a quarter tank. For this reason, OCRACES will be taking steps to insure the van always has a full tank of fuel.

Our Field Day was also a success from the standpoint of introducing younger visitors to radio operations. Two teenagers visiting from Arizona for a family party in the park received the full tour of our stations, as well as each making a 20-meter phone contact. Later in the day, our Chief Radio Officer's grandson Sam (son of Don Bourne, KB6TVK) showed ham radio is in the blood as he worked with Ralph Sbragia to make a 15-meter contact via the GOTA station. All in all, a good time was had by all participants.



OCSD Reserve Lt. David Corsiglia, WA6TWF (left), watches Kenan Reilly, KR6J, rack up contacts on 40 meters, before catching a 6-meter opening



RACES Lt. Ralph Sbragia, W6CSP (left), and former OCRACES member Don Bourne, KB6TVK (visiting from Porterville), erect long-wire antenna



OCSD Reserve Deputies Lt. Mark Hergesheimer, KD6WLY, Don Mikami, N6ELD, and Lt. David Corsiglia, WA6TWF (left to right), at Field Day

OCRACES Activates for AMBER Alert

Just before 7:00 AM Monday morning, July 5, 2010, OCSD Emergency Communications Manager Marten Miller, KF6ZLQ, paged OCRACES members to the 2-meter repeater. He then called Chief Radio Officer Ken Bourne, W6HK, by telephone, to request a RACES activation in response to an AMBER Alert that had just been issued by the Costa Mesa Police Department, involving a car jacking with a 17-year-old girl as a captured victim. After Ken made the initial AMBER Alert announcements on the repeater, Assistant Radio Officer Ernest Fierheller, KG6LXT, took over making the announcements. Meanwhile, Ken composed a script for all to use, based on information received from Marten and from EDIS bulletins, and e-mailed the script to all members. Kenan Reilly, KR6J, relieved Ernest for a couple of hours, and then was relieved by Brian Turner, KI6WZS. Radio Officer Ralph Sbragia was going to relieve Brian, but at about 12:25 PM Control One announced on Red Channel that the AMBER Alert had been canceled, and called Ken to advise him accordingly.

CPRA Invites OCRACES to Anniversary Event

OCRACES will bring its emergency communications response vehicle to the 75th Anniversary celebration of the California Public-Safety Radio Association (CPRA) on Thursday, September 16, 2010, in Irvine Regional Park east of Orange. We will operate a Special Event Station from the van and also on a table outside the van, using CPRA's call sign of W6ID. The operation will occur from 10:00 AM until 1:00 PM. CPRA is the Southern California Chapter of the Association of Public-Safety Communications Officials—International (APCO). See their Web site at <http://www.cpra.org>.

2010 Great California Shakeout: October 21st

More than 4.1 million Californians are registered to participate in the 2010 Great California ShakeOut annual statewide earthquake drill on October 21st. Anyone can register to participate by going to <http://www.shakeout.org/register>. Individuals, families, neighborhood groups, CERT groups, schools, Scouting groups, colleges and universities, businesses, non-profit organizations, faith-based groups, medical centers, local governments, and museums may register. The Orange County Sheriff's Department, Emergency Management Bureau, is a registered participant, as well as the American Red Cross of Orange County.

The ShakeOut has formed the Earthquake Country Alliance (ECA) to foster an earthquake and tsunami resilient California. It is a public-private partnership of leading earthquake professionals, emergency managers, government officials, businesses and community leaders, and others. See <http://earthquakecountry.info/alliance>. The Southern California Earthquake Alliance, which is one of four regional alliances within ECA, has many partners, including the Southern California Earthquake Center, U.S. Geological Survey, FEMA, Caltech, California Earthquake Authority, California Emergency Management Agency (Cal EMA), California Geological Survey, California Seismic Safety Commission, Southern California Association of Governments, Art Center College of Design, Providence Health Care, State Farm, American Red Cross Orange County Chapter, Southern California Edison, California State University/Fullerton, City of Brea, ReadyOC, City of Irvine, Anaheim Fire Department, and Discovery Science Center.

ShakeOut encourages all Californians to reduce potential damage and injuries by strapping furniture and large appliances to walls, securing TVs and electronics, applying quake putty to small items, and more.

During the ShakeOut drill, follow these steps:

1. **Drop, Cover, and Hold On:** **Drop** to the ground, take **Cover** under a table or desk, and **Hold On** to it as if a major earthquake were happening (stay down for at least 60 seconds).
2. While still under the table or wherever you are, look around and imagine what would happen in a major earthquake. What would fall on you or others? What would be damaged? What would life be like after? What will you do before the actual earthquake happens to reduce losses and quickly recover?
3. Practice what you will do after the shaking stops. Check for injuries and damage such as fire, gas leaks, damaged electrical wiring, broken lights and appliances, downed power lines, spills, and damaged masonry.

RACES/MOU News from Around the County

"RACES/MOU News" provides an opportunity to share information from all City & County RACES/ACS units and MOU organizations in Orange County.

**Please send your news to
NetControl Editor
Ken Bourne,
W6HK, at:

w6hk@
ocraces.org**

Buena Park

Buena Park RACES exhibited their new Radio Room in the new police building at the Buena Park Police Department Open House on Saturday, June 12, 2010. The Radio Room includes a countywide 800-MHz base station for a police officer or dispatcher to use. Space is reserved for Winlink equipment to provide digital communications capability. Four working positions have computers connected together with the room's own switch, so RACES is independent of the BPPD computer system. Radio messages can be printed on ICS 213 fill-in forms and stored in the same common files.



Buena Park RACES Chief Radio Officer Jim Reynolds, N6MIP, in new RACES Room at the new Police Department building

The Radio Room consists of four Yaesu FT-8800 and one FT-8900 on 2 meters, 440 MHz, and 6 meters. Two additional radios are on 220 MHz, one dedicated to communications between the city's two EOCs, and the other primarily for communicating with mobile and hand-held field units.

All radios are 12-V powered by two power supplies, each with a 12-V marine battery as a backup.

All wiring is hidden underneath the counter top in wire-mesh cable racks.

Radios are protected with lightning arrestors mounted to a structural metal beam in the attic.

Some radios are stored in a metal case for protection from an EMP (electromagnetic pulse) attack caused by

high-altitude atomic bombs.

In addition to the Disaster Radio Station (Radio Room) next to the EOC at the Buena Park Police Department, BPRACES has another Disaster Radio Station at the city's main Fire Station 61 near Knott's Berry Farm. BPRACES also has a van that can operate independently of any power source. Two marine batteries separate from the van's own electrical system are kept charged by solar panels mounted on the van roof.

Hospital Disaster Support Communications System (HDSCS)

A power failure in the City of Orange took down the telephone system at Chapman Medical Center at about 9:20 PM on June 23, 2010. When the lights went out in their own home, HDSCS members Ken and Cheryl Simpson, W6KOS and KD6MWZ, followed established procedures by checking on the status of nearby hospitals. When they could not make telephone contact with Chapman Medical Center, Ken immediately set out for that hospital with his "go kit" and Cheryl contacted April and Joe Moell, WA6OPS and KØOV, who started calling out more HDSCS members to respond. When Ken and Richard Deen, KI6HWY, reached the hospital at about 9:45 PM, all internal and external phone lines were non-functional, so they established communications with Cheryl and April via amateur radio. April and Joe continued to call HDSCS operators to go to the hospital to provide communications between units therein. As technicians worked to reset the phone system, HDSCS members provided links for the hospital's Emergency Department, Medical/surgical Unit, Intensive Care Unit, Subacute Care Unit, Geriatrics Unit, and the Laboratory. All phones became functional again for internal and external calls at 11:30 PM and HDSCS operations secured at midnight when it was determined that the phone system was stable. Other members serving in the hospital units were Paul Broden, K6MHD, Tom Hall, N6DGK, Justin Miller, KI6AFZ and Bill Preston KZ3G.

July 2010

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4 <i>Independence Day</i>	5 <i>Weekly ACS Net</i>	6	7	8 <i>Earthquake Country Alliance Meeting</i>	9	10 <i>EmComm Breakfast</i>
11	12 <i>OCRACES Meeting & Weekly ACS Net</i>	13	14	15 <i>CPRA Meeting, San Bernardino County</i>	16	17
18 <i>QuakeNet 2010</i>	19 <i>Weekly ACS Net</i>	20 <i>Planning & Intelligence and Finance Training</i>	21 <i>Logistics Training</i>	22	23	24 <i>SWACS Meeting</i>
25	26 <i>Weekly ACS Net & SWACS Radio Test</i>	27	28	29	30 <i>OCRACES at OC Fair Ham Radio Booth</i>	31

Upcoming Events:

- **July 8:** Earthquake Country Alliance Meeting, Anaheim Downtown Community Center, 250 E. Center Street, 0900
- **July 10:** EmComm Breakfast, 0800, Katella Grill, Orange
- **July 12:** OCRACES Meeting, 1930, 840 N. Eckhoff St., Suite 104, Orange
- **July 18:** QuakeNet 2010, 1330-1500
- **July 20:** Planning and Intelligence Training, 0900-1100, OC EOC
- **July 20:** Finance Training, 1030-1130, OC EOC
- **July 21:** Logistics Training, 0900-1000, OC EOC
- **July 24:** Southwest ACS Meeting, Ventura County Sheriff's Station
- **July 26:** Southwest ACS Frequency/Radio Test, 2015
- **July 30:** OCRACES at Orange County Fair Ham Radio Booth, 1600-2300
- **Sept. 16:** CPRA 75th Anniversary, Special Events Station, Irvine Regional Park, 1000-1300
- **Sept. 17-19:** ARRL Southwestern Division Convention, Four Points Hotel Sheraton, 8110 Aero Drive, San Diego



www.ocraces.org



Mission Statement

County of Orange RACES has made a commitment to provide all Public Safety departments in Orange County with the most efficient response possible to supplement emergency/disaster and routine Public Safety communications events and activities. We will provide the highest level of service using Amateur and Public Safety radio resources coupled with technology, teamwork, safety, and excellence. We will do so in an efficient, professional, and courteous manner, accepting accountability for all actions. We dedicate ourselves to working in partnership with the Public Safety community to professionally excel in the ability to provide emergency communications resources and services.

County of Orange RACES Frequencies

- 10 m: 29.640 MHz output, 29.540 MHz input, 107.2 Hz PL (disabled)
 - 6 m: 52.620 MHz output, 52.120 MHz input, 103.5 Hz PL (disabled)
 - 2 m: 146.895 MHz output, 146.295 MHz input, 136.5 Hz PL*
 - 2 m: 147.480 MHz simplex
 - 1.25 m: 223.760 MHz output, 222.160 MHz input, 110.9 Hz PL
 - 70 cm: 446.000 MHz simplex
 - 70 cm: 449.100 MHz output, 444.100 MHz input, 110.9 Hz PL (private)
 - 70 cm: 449.180 MHz output, 444.180 MHz input, 107.2 Hz PL (private)
 - 23 cm: 1282.025 MHz output, 1270.025 MHz input, 88.5 Hz PL
- *Primary Net—Mondays, 1900 hours

Program Coordinator

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Harvey Packard, KM6BV
Ralph Sbragia, W6CSP

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Ken Bourne, W6HK
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Chuck Dolan, KG6UJC
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Questions or Comments?
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**“W6ACS ...
Serving
Orange County”**

Meet your County of Orange RACES Members!



Ken Bourne
W6HK



Scott Byington
KC6MMF



Harvey Packard
KM6BV



Ralph Sbragia
W6CSP



Marten Miller
KF6ZLQ



Robert Stoffel
KD6DAQ



Jack Barth
AB6VC



Jim Carter
WB6HAG



Chuck Dolan
KG6UJC



Ernest Fierheller
KG6LXT



Randy Benicky
N6PRL



Bill Borg
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Nancee Graff
N6ZRB



Ray Grimes
N8RG



Walter Kroy
KC6HAM



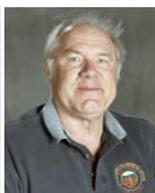
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Brian Lettieri
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KR6J



John Roberts
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Steve Sobodos
KN6UX



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