

March 2011



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

New Zealand Earthquake

We are so thankful that our good friend and fellow member Ray Grimes, N8RG, and his wife Carol, returned safely from their vacation in New Zealand, just before the 6.3-magnitude earthquake struck the Canterbury region in the South Island on Tuesday, February 22, 2011, at 12:51 PM local time.

The quake severely damaged downtown Christchurch, including the main cathedral in the central city. During the first night, 120 survivors were pulled from the wreckage, but 300 people were missing. As of February 27th, the official death toll in Christchurch stood at 145. More than 200 people remained missing. Nationals of more than 20 countries are among the missing. More than 600 rescue workers, including overseas teams, have been toiling in rubble and ruined buildings. 62,500 people remain without water and 100,000 have no sewerage service.

Buildings collapsed around Cathedral Square in downtown Christchurch. The quake collapsed the ChristChurch Cathedral's tower and caused devastating damage to the remaining structure. Fears are held for some 20 people who may still be trapped in the rubble. The cathedral is one of around six sites of extreme concern around the city where many are believed to still be trapped.

As post-quake rescue operations proceed, members of AREC (Amateur Radio Emergency Communications), the public service arm to amateur radio in New Zealand,

are very active. AREC leader Richard Smart, ZL4FZ (from *Amateur Radio Newline Report 1750—February 25, 2011*), says 10 amateurs are using their two emergency communications vans to keep rescue and Civil Defence staff in touch with one another. One van is at a major welfare center, providing portable communications so personnel can talk to Civil Defence officials. The other van is assisting search and rescue teams in an area where communications are poor. Smart says that amateur radio operators throughout New Zealand are volunteering to help, and others are sending updates on the disaster to overseas families of people in Christchurch.

Arnie Coro, CO2KK, International Amateur Radio Union (IARU) Region II Area C Emergency Coordinator, advised users of the 40 and 20 meter bands to "...be aware of possible (earthquake) emergency communications traffic taking place in and around the affected areas of New Zealand's South Island, where Christchurch is located."

He continued, "This is a city of about 400,000 population and it was hit pretty badly because of the proximity of the epicenter of the earthquake and the fact that it was registered at a very shallow depth and very near to the city. The propagation on 40 meters more likely to cause problems to the New Zealanders from unintentional QRM coming from the Americas is the window that starts about two or three hours before sunrise and lasts until sunrise at this end. A similar pattern, with a slight time shift, shows up on 20 meters, too."

Continued on page 2

The Next
OCRACES
Meeting is

March 7, 2011

1930 Hours

840 N. Eckhoff St.,
Suite 104, Orange

Featured Speaker:
Ray Grimes, N8RG
RF Safety Training
for EOC Antenna Work



Orange County Sheriff's Department
Communications & Technology Division

Captain's Corner *Continued from page 1*

According to Warren Harris, ZL2AJ, of Hastings, NZ (as reported in *CQ Newsroom* on February 22nd), designated EmComm frequencies used by AREC NZ on HF for the Christchurch earthquake are 3.900 MHz USB, 5.320 MHz USB, and 7.100 MHz USB. However, NZART (New Zealand Association of Radio Transmitters) reported (on February 25th in *CQ Newsroom*) that all earthquake-related emergency communications activities there are being conducted on 2 meters, so there is no risk of hams in other parts of the world causing unintentional interference on the HF bands.

According to IARU Region 3 Disaster Communications Committee Chairman Jim Linton, VK3PC (as reported in the February 24th *The ARRL Letter*), 10 radio amateurs are using their two emergency broadcast vans to

keep rescue teams and Civil Defence staff in touch. One is at a major welfare center, providing portable communication so they can talk to Civil Defence, and the other vehicle is on its way to assist search-and-rescue teams in an area where communications are poor.

The Urban Search and Rescue (USAR) California Task Force 2 (CA-TF2)—a 74-member heavy-rescue team consisting of firefighters and paramedics from the Los Angeles County Fire Department, emergency-room physicians, structural engineers, heavy-equipment specialists, search dogs and handlers, hazardous-materials technicians, communications specialists, and logistics specialists, responded to Christchurch with personnel and 26 tons of prepackaged search-and-rescue tools and medical equipment.

House Bill Threatens 420-440 MHz Segment

On February 10, 2011, Rep. Peter King (R-NY), Chairman of the House Homeland Security Committee, introduced HR 607, the “Broadband for First Responders Act of 2011.” The bill has been referred to the House Energy and Commerce Committee, which handles telecommunications legislation. The bill addresses certain spectrum management issues, including the creation and maintenance of a nationwide public-safety broadband network. As part of that network, the bill provides for the allocation of the so-called “D-Block” of spectrum in the 700-MHz range for public-safety use.

The D-Block consists of two 5-megahertz-wide segments of spectrum (758-763 MHz and 788-793 MHz) that became available when the FCC ended analog television broadcasts in June 2009 and reallocated the 698-806 MHz band for public-safety and commercial broadband. It was anticipated that the D-Block would be auctioned for commercial use. There are several bills in Congress providing for the allocation of the D-Block for public-safety use, and HR 607 is one of those. But HR 607 uniquely provides for the reallocation of other spectrum for auction to commercial users, in order to offset the loss of revenue that would occur as the result of the allocation of the D-Block to public safety instead of commercial auction. HR 607 lists the paired bands of 420-440 MHz and 450-470 MHz among the bands to be reallocated for commercial auction within 10 years of its passage.

“Of serious concern to the ARRL is the inclusion of the 420-440 MHz amateur allocation in the list of frequencies to be cleared for auction,” said ARRL Regulatory Information Manager Dan Henderson, N1ND. “The ARRL and the Amateur Radio community certainly support the work of public-safety agencies and understand their desire for an interoperable network; however, the inclusion of most of the amateur 70-cm spectrum as one of the replacement bands is illogical and unacceptable. The 420-440 MHz band is not public-safety spectrum and should never have been included in any spectrum swap of public-safety allocations.

“As we continue to track the progress of HR 607, I urge ARRL members to watch for further information about the bill on the ARRL Web site,” Henderson said. “When that additional information is released, it will include a request to contact your representative and express opposition to HR 607, as long as it includes a provision to auction off any amateur radio spectrum for commercial use. The ARRL has prepared a sample letter to use when contacting your Representative in the US House to oppose HR 607. See <http://www.arrl.org/sample-letters> for downloading the letter and finding your Representative’s contact information, plus the contact information for ARRL’s legislative consultant, Chwat & Co. After personalizing and signing the letter, it should be sent to Chwat & Co for hand-delivery to the appropriate legislative offices without a lengthy delay.

Thanks to ARRL for providing this information through their Web site. Note that the 420-440 MHz segment of the 70-cm band, which is currently shared by amateurs and federal government radiolocation services, such as PAVEPAWS radar, is used by OCRACES and many City RACES units for Winlink, ATV, packet, and repeater linking and control. Some of our members are also involved with SSB, CW, and weak-signal propagation activities in this portion of the band.

Next OCRACES Meeting: March 7th

The next County of Orange RACES meeting will be on Monday, March 7, 2011, at 7:30 PM, at 840 N. Eckhoff Street, Suite 104, in Orange. Ray Grimes, N8RG, will give a training class on MPE (Maximum Permissible Exposure) limits with regards to RF safety. This is required training for all OCRACES members who wish to be part of crews that will soon be working on RACES antennas on the roof of the EOC at Loma Ridge. City RACES and MOU members who wish to acquire RF safety knowledge are also invited to attend.

SONGS Dress Rehearsal: March 8th

Primary and alternate participants in the 2011 SONGS Plume Phase Dress Rehearsal are registered to attend the exercise on March 8, 2011. Due to the high volume of participants in this year's SONGS Exercise, it will be necessary to park off site at Irvine Regional Park. Shuttles will bus participants from the park to the EOC.

Irvine Regional Park is located at 1 Irvine Park Road, just east of Orange (north end of Jamboree Road). Posted signage will direct to the participant parking lots and bus stops for passenger pickup. The buses will start arriving at the park at 6:15 AM and shuttle participants to the EOC until 7:30 AM. OCTA will deliver participants back to the park at the conclusion of the exercise. A bus will be available throughout the exercise for transportation back to the park for emergencies or unexpected situations. All EOC facility parking is designated for assigned daily staff, the EOC policy group, and law and fire first responders.

To register, use the north entrance to the EOC. Breakfast refreshments will be set up in the cafeteria area. Participants will remain in the cafeteria area until EOC activation. At that time, participants will report to their work station, review their Position Guide, and put on their vest. (RACES participants will wear an orange "Logistics" vest.) All communications (telephones, OA, radio, faxes, and computers) must begin and end with "This is a drill." WebEOC will be used during this exercise. Participants will receive multiple Operational briefings throughout the exercise.

EOC Activity Logs will be provided and must be used by all positions. Participants must insert their name and position on every page. "THIS IS A DRILL" must be indicated on all logs.

Information to be plotted on white boards must be documented on a Message Form. Face-to-face contact should be documented on a Message Form or EOC Activity Log. "THIS IS A DRILL" must be indicated on all messages.

At the conclusion of the exercise, place all documentation (EOC Activity Logs, Message Forms, and other notes) in the provided red folder for later review.

Hams Killed by Somali Pirates

According to an article on the ARRL Web site, three of the four Americans who were killed on February 22, 2011, by Somali pirates on their yacht off the coast of Oman were amateur radio operators. The victims were Scott Adam, K9ESO (Extra Class), his wife Jean, KF6RVB (General Class), Bob Riggle, KE7IIV (General Class), and Phylis Macay. The Adams were based in the Los Angeles area, and Riggle and Macay were from Seattle. They were on board the S/V *Quest* when pirates boarded their vessel on Friday, February 18th.

The US Central Command said the 58-foot yacht was in the Indian Ocean, headed toward the Somali coast, when, on February 18th, it sent a distress signal. The yacht was trailed for about three days by four US Navy warships—the aircraft carrier USS *Enterprise*, the guided-missile cruiser USS *Leyte Gulf*, and the guided-missile destroyers USS *Sterret* and USS *Bulkeley*. They tracked the yacht after being alerted that a Danish naval helicopter had seen the *Quest* off Oman under the pirates' control. The Central Command oversees US anti-piracy operations in the Indian Ocean.

Officials were negotiating for the Americans' release when gunfire was heard around 1 AM (EST) on February 22nd. As US forces responded to the gunfire, reaching and boarding the *Quest*, they discovered all four hostages had been shot by their captors. "Despite immediate steps to provide life-saving care, all four hostages ultimately died of their wounds," said US Central Command.

A former TV unit production manager, Scott Adam, 70, was an experienced sailor who owned a boat most of his life. Although Jean Adam, 66, a retired dentist, became seasick easily, she took medication for it because she loved being on the water. The Adams planned to hand out Bibles during their trip.

SART Invites OC Hams to Field Day Academy

by Gordon West, WB6NOA

Santa Ana Response Team (SART) invites all Orange County amateur radio operators to an all-week, evening Field Day 2011 training event. Santa Ana Response team, proud to be one of the City RACES units serving with Orange County RACES, encourages *all* ham radio organizations to take advantage of Field Day Academy week-long training held at Santa Ana Fire Department's Centennial Park Training Facility.

"Our Monday through Thursday evening event will be an educational and fun training opportunity to let seasoned Field Day operators share their learning experiences with new operators with limited Field Day participation," comments Larry Wilson, K6SCH, Assistant Radio Officer of SART.

"Santa Ana Fire Department has 5.5 acres of wide open training *fields*, next to the Santa Ana river at Centennial Park," comments Captain Steve Snyder, KI6EYQ, SART Advisor for the Santa Ana Fire Department. This fenced site has plenty of space for RV parking, antenna farms, and equipment displays on both paved and unpaved surfaces. The facility also features tall light poles with permanently installed pulley systems for raising antennas.

"The antenna systems we set up for demonstrations during the Academy may be left in place for the weekend operating event," adds Wilson, who is also displaying all the hardware for his outdoor Field Day food preparation!

This same facility also encompasses more than one classroom with full audio-visual permanently installed equipment available to Field Day Academy presenters.

Monday, June 20, 6 PM-9 PM: Field Day Orientation, ARRL Field Day packets, site survey, with upbeat 35-minute Field Day movie, show and tell of bandpass filters.

Tuesday, June 21, 6 PM-9PM: Demonstration of live rigs and power sources. Proper assembly and use of Anderson connectors for power. Demonstration of solar-panel deployment, power-supply "switchers," a site survey for generator power box feeds, and short video on antenna safety near overhead wires (however the SART site has no dangerous overhead wires).

Wednesday, June 22, 6 PM-9PM: Working with combination headset mics, external speakers, logging, and site survey for overnight camping and Field Day operating positions. Discussions on single or multi-station participation.

Thursday, June 23 6 PM-9 PM: On-the-air techniques—should you call CQ? Or *pounce* on another station calling CQ? Techniques on fast-paced signal exchanges, with "live" on-air Field Day example exchanges. Hear how to homestead a frequency, and let the contacts come to you.

Friday through Sunday, Field Day 2011, in action! Join the Santa Ana Response Team site as your own emergency response Field Day group. You may stake your claim early to an operating spot. Equal amounts of dirt and smooth concrete are available! RV's are welcome. Need elevation for microwave? We have a training tower just for you! Want to be a band captain? Let us know, we're happy to open these leadership positions up to folks outside of SART.

Work this weekend event as if you were operating from a centralized communications deployment *field*. Spread yourself out for minimum QRM, and plan to work your own supplied station, or take some shifts on other SART stations from 160 meters through 10 GHz.

The outdoor grill is fired up both Friday and Saturday nights!

The Field Day Academy idea is to bring in ham experts to offer training for all. Non Field Day ham operators receive a week's worth of valuable operating lessons each evening. There will be plenty of live equipment, a full training facility for DVD/CD presentations.

For those organizations needing a new site for Field Day, stake a claim at the Santa Ana 5½-acre training field. For those groups with an established site of their own, we want to learn from experts like yourselves how to maximize contact points. Have a topic or a special presentation for Field Day Academy? Spend four evenings gearing up for Field Day and share in a wealth of ham radio experience.

Contact John Gori, KM6O, SART Field Day Chairman, at jgori@deloitte.com or by cell at (714) 865-2500.

Rebuilding Together Orange County: April 30

by OCSD Emergency Communications Manager Marten Miller, KF6ZLQ

Although we were not able to support this great cause last year, OCRACES has once again been asked to provide logistics communications support for the annual Rebuilding Together Orange County (RTOC) event. One of the reasons we have not been able to provide support in the last couple of years is because there are other events occurring the same weekend and the RTOC job sites are usually not decided on until the last week, so members have already made other plans. I've communicated that to the RTOC staff and they understand the issue. This year, they have some early info to provide us so that maybe we can help them out once again. RTOC staff advised me that they really missed having our support last year and had to make do with cell phones, which didn't work out so well.

Formerly known as Christmas in April, the Rebuilding Together Orange County organization (<http://www.rebuildingtogetheroc.org/>) partnerships with the community to rebuild owner-occupied homes, shelters, and non-profit facilities for low-income residents. Services are provided particularly for the elderly and those with disabilities, so that they may live independently in warmth and safety. Although Rebuilding Together provides services throughout the year, the national rebuilding day for 2011 is Saturday, April 30, 2011. This is RTOC's largest event of the year and when communication support is needed the most. As we have done in the past, OCRACES will be seeking assistance from any interested City RACES or ACS unit or MOU organization. RACES volunteers must have a 2-meter/440-MHz handheld radio, and have the ability to drive their personal vehicle to a job site and possibly between locations throughout the day. This event usually starts by 0800 and runs as late as 1700 hours, although many shifts may end earlier, depending on how quickly the work is completed. If you are not available for the whole day, we will be glad to have you for as many hours as you can spare. Our communications link allows the various teams to make quick contact with the main office should any emergency or safety issue occur or when questions arise about resources or staffing.

Although the list of job sites has not been finalized yet, RTOC advised that they will have six job sites in Anaheim that will be sponsored by Boeing. They are pretty certain they will have one or two sites in Huntington Beach and Costa Mesa as well. There will likely be additional sites added at a later date, but even this is more information than we usually receive this early in the year. It would be great if we could provide a communicator at each job site as well as a net control operator. If we are not able to cover all job sites, some communicators might be asked to check up on more than one site. I will keep you posted as the list of job sites is developed and finalized.

Please contact me directly via e-mail at Marten.Miller@comm.ocgov.com if you are available to participate in this event, and let me know the times you are available.

Will New Broadband 4G Network Jam GPS?

On January 26, 2011, the FCC granted permission for LightSquared Subsidiary LLC, a Mobile Satellite Service (MSS) licensee in the L-Band, a conditional waiver of the Ancillary Terrestrial Component "integrated service" rule, allowing them to install 40,000 transmitters on cell towers for a wireless broadband network in frequencies adjacent to the GPS L1 Band (1559-1610 MHz). The transmitters are authorized to operate at 15 kW output. LightSquared's 4G application proposes to fundamentally change the FCC's own rules of usage of the L1 Band spectrum (1525-1559 MHz) from MSS (very low power, space-to-earth signals) to fixed, high power terrestrial broadband service.

Garmin described in a recent test evaluation the effects of proposed LightSquared transmissions on two of its most popular receivers: a GNS 430W FAA-certified general aviation receiver and a nüvi 265W portable navigation device. Both lost GPS reception. The consumer device detected jamming at 3.57 miles, lost service in the urban canyon at 1.79 miles, and lost fix at 0.66 mile in the open sky. "If this [FCC-LightSquared] modification is approved, widespread, severe GPS jamming will occur," said Garmin. A GPS-industry document presented to the FCC said that the LightSquared initiative "will have a severe impact on the GPS band" and "will create a disastrous interference problem for GPS receiver operation to the point where GPS receivers will cease to operate (complete loss of fix) when in the vicinity of these transmitters."

LightSquared said it will work with the GPS industry to see which GPS equipment needs "filtering so that they don't look into our band." The FCC requested that the testing process begin on February 25th and be completed by June 15, 2011. If LightSquared and the GPS industry cannot come to terms by June 15th, the FCC might revoke LightSquared's waiver, which would put their business model in peril.

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**

Costa Mesa

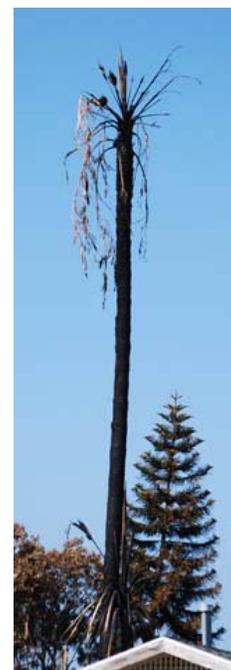
Due to budget cuts, the Costa Mesa City Council has eliminated its Airborne Law Enforcement (ABLE) Program, which means that the "Eagle One" helicopter, which was equipped with amateur television, will no longer fly. The City has had helicopters since 1970. In 1996, Costa Mesa and Newport Beach merged their individual helicopter programs into one and formed ABLE. ABLE serves the City of Santa Ana by way of contract. Annually ABLE flies 1500 hours and handles 3000 calls for service. The Eagle helicopter has been instrumental in reducing the workload for ground officers on perimeters, area searches, natural disasters, as well as reducing liability during pursuits and other dynamic events. ABLE works with the Fire Departments through the use of infrared technology, downlink of incidents, and firefighting of vegetation fires. Amateur television equipment that was configured by MESAC members has been instrumental in many of the successful Eagle missions.

San Juan Capistrano

As mentioned in the February 2011 issue of *NetControl*, The 53rd presentation of the Swallows' Day Parade and Mercado (street fair and market place) will be on Saturday, March 26, 2011, in San Juan Capistrano. OCSJ will deploy its Samantha trailer to serve as the Sheriff's command post for this event. The City's RACES unit, as part of Tri-Cities RACES, will support the City that day with communications. SJC Radio Officer Joe Lopez, W6BGR, has requested OCRACES to deploy its emergency communications response vehicle to serve as SJC RACES net control. If OCRACES participates, members need to be on scene no later than 8:00 AM. This will be discussed at the March 7th OCRACES meeting. The parade takes place in downtown San Juan Capistrano, and begins promptly at 11:00 AM. Most street closures are by 10:00 AM. It is the nation's largest non-motorized parade.

Hospital Disaster Support Communications System (HDSCS)

Shortly after 9 AM on October 1, 2010, an intense thunderstorm cell passed northward over the city of Fullerton. Lightning set fire to palm trees and knocked out power over most of the city. When power failed the first time, April Moell, WA6OPS, checked on the status of St. Jude hospital. Generators were operating but the telephone system was very busy with many internal calls. When city power came back and then failed again a few minutes later, St. Jude activated HDSCS by group paging. Paul Broden, K6MHD, arrived quickly at the hospital and was stationed at the Command Center that was being set up. Next to arrive was Bill Preston, KZ3G, who provided communications from the PBX area. Telephones were overloading and no incoming calls were being accepted. A third operator, Ken Simpson, W6KOS, provided communications from the St. Jude Medical Plaza across the street from the hospital, where surgeries and other procedures were being performed that day. Although the hospital staff said no more operators were needed at that time, HDSCS placed other members on standby, ready to respond rapidly. They included Monique Beringer, KI6RVT, Patricia Beringer, KI6RVU, and Dale Petes KI6ANS. HDSCS communications support continued at the hospital until shortly after 11:30 AM, when power was fully restored and telephones were stable. Dennis Kidder, W6DQ, April Moell, WA6OPS and Joe Moell, KØOV, made callouts and served as base-station support for this HDSCS emergency net.



March 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7 <i>OCRACES Meeting & Weekly ACS Net</i>	8 <i>SONGS Dress Rehearsal</i>	9	10	11	12 <i>EmComm Breakfast</i>
13	14 <i>Weekly ACS Net</i>	15	16	17	18	19
20	21 <i>Weekly ACS Net</i>	22	23	24	25	26 <i>Swallows Day</i>
27	28 <i>Weekly ACS Net & SWACS Radio Test</i>	29	30	31		

Upcoming Events:

- Mar 7: OCRACES Meeting, MPE Training, 1930, 840 N. Eckhoff St., Suite 104, Orange
- Mar 8: SONGS Dress Rehearsal, Orange County EOC
- Mar 12: EmComm Breakfast, 0800, Katella Grill, 1325 W. Katella Ave., Orange
- Mar 26: Swallows Day, San Juan Capistrano
- Mar 28: Southwest ACS frequency/radio test, 2015
- Apr 12: SONGS Graded Exercise, Orange County EOC
- Apr 16-17: Baker to Las Vegas Challenge Cup Relay
- Apr 30: Rebuilding Together Orange County
- Sep 9-11: HAMCON 2011, Marriott Torrance South Bay



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

Marten Miller, KF6ZLQ
(714) 704-7917

Radio Officers (Lieutenants)

Scott Byington, KC6MMF
Harvey Packard, KM6BV
Ralph Sbragia, W6CSP

Chief Radio Officer (Captain)

Ken Bourne, W6HK
(714) 997-0073

Assistant Radio Officers (Sergeants)

Jack Barth, AB6VC
Chuck Dolan, KG6UJC
Jim Carter, WB6HAG
Ernest Fierheller, KG6LXT

County of Orange RACES

OCSD/Communications & Technology
840 N. Eckhoff St., Suite 104

Telephone – (714) 704-7917
Fax – (714) 704-7902
E-mail – ocraces@comm.ocgov.com

County of Orange RACES

OCSD/Communications & Technology
840 N. Eckhoff St., Suite 104
Orange, CA 92868-1021

Telephone – (714) 704-7917
Fax – (714) 704-7902
E-mail – ocraces@comm.ocgov.com

Visit Our Web Site
<http://www.ocraces.org>
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Questions or Comments?
Contact *NetControl* Editor Ken Bourne, W6HK
w6hk@ocraces.org



**“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
KG6PEX



Nancee Graff
N6ZRB



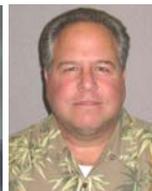
Ray Grimes
N8RG



Walter Kroy
KC6HAM



Martin La Rocque
N6NTH



Brian Lettieri
KI6VPF



Kenan Reilly
KR6J



John Roberts
W6JOR



Joe Selikov
KB6EID



Tom Tracey
KC6FIC



Brian Turner
KI6WZS