May 2007

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**The Next
OCRACES
Meeting is**

**May 7, 2007
1930 Hours
840 N. Eckhoff St.,
Suite 104, Orange**

**Featured Speaker:
Ralph Sbragia,
W6CSP, recapping
Baker to Vegas**

Orange County Sheriff's Department
Michael S. Carona, Sheriff-Coroner

County of Orange RACES

NetControl

Newsletter of the County of Orange Radio Amateur Civil Emergency Service

Captain's Corner
by Ken Bourne, W6HK, Chief Radio Officer

Members of County of Orange RACES are busier than ever, and enjoying every minute of it. It is such a pleasure to serve, and to search for ways to improve our capabilities.

One way to improve is to encourage all members with a Technical Class amateur radio license to upgrade to a least General Class, in order to participate in operations on HF. A code test is no longer required by the FCC for any class of amateur license. We plan to experiment with NVIS (Near Vertical Incident Skywave) propagation on 40 and 75 meters, to enable communications from low beach areas or deep canyon areas that cannot access our RACES repeaters. At least a General Class license is required for operating on those bands. Furthermore, some predict that the peak of the next sunspot cycle will be greater than any previous cycle peak, and we don't want any of our members to miss the excitement of HF propagation under those conditions. Volunteer Examiners (VEs) in OCRACES and a Volunteer Examiner Coordinator (VEC) in OCSD/Communications are planning to conduct certified test sessions for members who wish to upgrade, and for OCSD employees and others who wish to obtain their amateur radio licenses.

One of the greatest joys in amateur radio is experimenting. You can learn a lot by putting together ATV systems, direction-finding equipment, packet and Winlink systems, unusual antennas, WiFi type systems (but with higher power on amateur frequencies), other digital systems (such as PSK31), and so forth. Don't be afraid of making mistakes while experimenting. We all do that, and we learn from our mistakes. And don't hesitate to ask for help. It's enjoyable to work together with our fellow members to solve problems. I recommend that you read as many technical articles as possible in the amateur magazines and on the Web. Even advertisements are educational, revealing current technology and new products.

We are continuing to plan for our Disaster Communications Academy in November. We will soon choose a facility and date, as we select course material and appoint instructors. The Academy will be open to any radio amateur who is or wants to be involved in disaster communications (not entirely RACES). We will cover current technology, operational procedures (including NIMS), and interfacing with our served agencies. The Academy will also include a forum for discussing how to improve the capabilities of all disaster communications groups in Orange County, including communicating with each other, planning drills with mutual participation, and sharing knowledge and resources.

Baker to Vegas 2007
by Ralph Sbragia, W6CSP, Radio Officer

Baker to Vegas 2007, the twenty-third running of the Challenge Cup, is now complete. OCRACES thanks Scott Byington, KC6MMF, and Steve Sobodos, KN6UX, for their assistance in preparing the APRS, Pahrump Command Post, and Baker Tech. Support Equipment. Thanks also to Tony Sanchez, AE6QT, the Pahrump Command Post Captain, who was assisted by Jack Barth, AB6VC, Chuck Dolan, KG6UJC, and Martin La Rocque, N6NTH. For their assistance with the Baker Technical Support station, thanks go to Ken Bourne, W6HK, and Ray Grimes, N8RG. Lastly, but never least, our thanks go to Walt Wilson, K7WWW, who made his annual trek (well, flight, actually) from Oregon to assist with the Arizona DA team as well as anywhere else he could, both at Baker Technical Support and at Las Vegas Equipment Recovery.

Lt. Ralph Sbragia, W6CSP, checks APRS beacon boxes in his well-equipped communications trailer at Baker Technical Support

This was the seventh year that I have supported the OCRACES Baker to Vegas efforts as either our APRS or Event Coordinator. I ask the indulgence of our membership as I take this time to thank my family, especially my wife Anne, for their ongoing support of me as I undertake this project each year. This thank you extends beyond just my family to the families of each of the OCRACES members who supported our efforts each year. Thank you for your continued support of our members and this important event.

We supported seven teams with APRS this year, including the three Orange County Sheriff's Teams, two Orange County DA teams, the California Department of Insurance Fraud Investigation Unit, and the Arizona DA Team. The DOI team purchased their own APRS equipment (which OCRACES keeps and maintains) last year, and one of the OCDA teams purchased their own equipment this year. This allows OCRACES to assist other teams with our "loaner" APRS boxes. As we do each year, we also monitored the two high-level voice UHF repeaters that cover the western three-quarters of the course for any emergency traffic generated by the race participants.

Last-minute changes in the staffing of the official Race Communications Team may have led to some problems with the overall APRS network. These network problems limited the effectiveness of the overall APRS system; however, indications are that the OCRACES equipment (with one exception) worked as expected. During the next few weeks, if you monitor the national APRS frequency (144.390 MHz), expect to see our OCRACES trackers on the air as they are put through some post race testing and modifications.

On Sunday morning, OCRACES staff was sought out by the Race Communications Team, and an increase in the amount of support we provide to the overall race was requested for next year. Exactly how this will be manifested remains to be seen, but we will do our best to support the Teams, the Race, and all involved to the best of our abilities and resources. Currently, the Radio Baker Vegas website (http://www.b2v.org) has posted a date of April 19 and 20, 2008, as the dates for the 24th annual running of the Baker to Vegas Challenge Cup; however, the official race site (http://www.bakervegas.com) has not. Nevertheless, it would not be a bad idea for all of us to pencil onto our calendars the dates of April 19 and 20, 2008 for the next Baker to Vegas.

As of Monday, April 30, 2007, there has been no contact with OCRACES regarding the issue of the APRS boxes and using them in a remote controlled mode without a control operator present in the vehicle. Although this issue was brought up by the ARRL Orange Section Official Observer Coordinator prior to the race, and was the topic of some conversation

Walt Wilson, K7WWW, installs sign and checks antennas on OCSD follow vehicle at Baker

with Gordon West at our April monthly meeting, nothing further has been heard from ARRL volunteers or staff. OCRACES staff will continue to investigate and participate in discussions of this matter of minor controversy within the amateur community.

Lastly, all participants in ham radio communications to support the Baker to Vegas event are invited to attend the next monthly OCRACES meeting (Monday, May 7, 2007, at 1930 hours), during which we will have a "Lessons Learned" roundtable to discuss all aspects of ham radio support for this event, what went well, what could have gone better, what we can improve upon for next year, and how all of these skills can be applied to our primary mission of providing disaster communications support to the cities and counties of Southern California.

Next OCRACES Meeting: May 7, 2007

.The next County of Orange RACES meeting will be on Monday, May 7, 2007, at 7:30 PM, at OCSD/ Communications, 840 N. Eckhoff Street, Suite 104, in Orange. Radio Officer Ralph Sbragia, W6CSP, will lead a "Lessons Learned" roundtable to discuss all aspects of ham radio support for the Baker to Las Vegas Challenge Cup Relay, including what went well at the recent event, what could have gone better, what we can improve upon for next year, and how all skills can be applied to our primary mission of providing disaster communications support to the cities and counties of Southern California. All participants in the recent Baker to Vegas event are invited to attend this meeting.

OCRACES Van at EMS Tailgate on June 2nd

County of Orange RACES will exhibit its emergency communications response vehicle at the Fifth Annual EMS Tailgate Celebration at Angel Stadium on Saturday, June 2, 2007. The event is held by Orange County Emergency Medical Services (OCEMS), Health Disaster Management / Orange County Health Care Agency. The event occurs from 4:00 PM to 5:45 PM, but we need to arrive between 3:00 PM and 3:30 PM for setup.

Free hotdogs and beverages will be provided. Besides the OCRACES van, exhibits will include fire trucks, ambulances, police cars, and other emergency vehicles. The event is followed by an Angels versus Baltimore Orioles game, beginning at 6:05 PM.

OCRACES to Exhibit at HAMCON on Sept. 8th

The next ARRL Southwestern Division Convention, called HAMCON 2007, will occur on September 7-9, 2007, at the Marriott Hotel, 3635 Fashion Way, in Torrance. OCRACES will have a table in the hall leading to the exhibit area, and will also display our emergency communications response vehicle outside the hotel. We urge all members to be present at least on Saturday, September 8th, to explain our operations to convention visitors, and to recruit new members for OCRACES. We also invite members of City RACES units and all amateur radio emergency communications groups in Orange County to spend time at our table to hand out literature and to promote activities.

VMAD Disaster Preparedness Drill: Sept. 15-16

The Orange County California Citizen Corps Council (OCCCCC) will sponsor a Volunteer Mutual Aid Drill (VMAD) on Saturday and Sunday, September 15 and 16, 2007. Setup is on Friday, September 14th. Each CERT Search & Rescue Team will have two scenarios. The standard ICS structure will be used. RACES participates in the OCCCCC and is responsible for the communications component of this drill. The drill will take place at Laser Village in the Sheriff's Training Facility on Katella Avenue in Orange. County and City agencies will participate, with at least 200 participants expected each day. We urge all County and City RACES members to schedule the third weekend in September for participating in this drill, either at Laser Village or from their own EOCs. All volunteers at Laser Village will receive IS-100 and IS-700 classroom training. Further details will be revealed as plans are written.

OCSD Emergency Communications Coordinator Marten Miller, KF6ZLQ, discussed aspects of this drill during his Citizen Corps presentation at the Fullerton Radio Club meeting on April 18, 2007.

Rebuilding Together Orange County
by Marten Miller, KF6ZLQ, OCSD Emergency Communications Coordinator

Saturday, April 28, 2007, was the annual National Rebuilding Day for Rebuilding Together Orange County (RTOC). RACES members were there once again to provide the communications link between the job sites and RTOC's headquarters in Santa Ana. Formerly known as "Christmas in April," the Rebuilding Together Orange County organization 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. Rebuilding Together provides services throughout the year, but coordinates a national rebuilding day once a year. This is RTOC's largest event of the year and when communication support is needed the most. This year there were 11 job sites in central and North Orange County. Seven RACES personnel provided the communications link

OCRACES Member Martin La Rocque, N6NTH (left) and Linda Panits (right), RTOC House Captain for Orange, with the resident (center) of the home in Orange that was renovated by RTOC volunteers

between these sites and Net Control located at the RTOC headquarters office in Santa Ana. Some of the communicators kept busy moving between multiple job sites to provide status updates, as we didn't have enough personnel to assign a communicator for each site. In addition to the job sites, we provided a mobile communicator to accompany the RTOC director, Steve Carpenter.

This year's RTOC National Day event was another success as homes were painted, doors and windows replaced, bathrooms made handicap accessible, roofs repaired, kitchens updated, termite damage repaired, landscaping cleaned up and improved, fencing replaced, and much more. Our communicators were able to get quick answers for the volunteers at each site as issues came up throughout the day. At the end of the day, both RTOC Director Steve Carpenter and RTOC Project and Volunteer Coordinator Mary A. Bloom-Ramos expressed their sincere gratitude for the communications service RACES members provided their volunteers. I too want to thank the following RACES personnel who made it possible for us to provide this service:

♦ From Los Alamitos RACES—John Unrath, K6JHU, and Sally Unrath, KF6MDT
♦ From Westminster RACES—Richard Ingwerson, N6PFY
♦ From OCRACES—Nancee Graff, N6ZRB; Steve Sobodos, KN6UX; Martin La Rocque, N6NTH; Chuck Dolan, KG6UJC; and Ken Bourne, W6HK

July 31st is OCRACES Night at OC Fair

County of Orange RACES will exhibit its capabilities on July 31, 2007, from 5:00 PM until 11:00 PM, at the Ham Radio Booth at the Orange County Fair. This will be an excellent opportunity to demonstrate to the public how radio amateurs provide communications during times of disaster.

The Ham Radio Booth will be open every day (July 13th through August 5th) and during all hours of the Fair. City RACES units and other amateur radio organizations are scheduled to exhibit. Besides demonstrating emergency communications capabilities, all groups will explain the many aspects of amateur radio to the public. This will be an excellent opportunity to recruit young people into experiencing the excitement of radio electronics for the rest of their lives.

Watching The Web
Web Sites of Interest to RACES Personnel
by Ken Bourne, W6HK, Chief Radio Officer

Timewave Technology, Inc.
http://www.timewave.com

Timewave Technology's Web site at http://www.timewave.com offers an interesting array of products for amateur radio, marine, military and government, and commercial and industrial. Amateur radio products include the HamLinkUSB rig control, TZ-900 AntennaSmith antenna impedance analyzer, DSP-599zx digital noise filter, PK-232/PSK multimode data controller, PK-232/USB upgrades, DSP-232 multimode data controller, ANC-4 antenna noise canceller, and PK-96/100 packet radio terminal node controller.

Timewave's HamLinkUSB Rig Controller Plus is a USB to logic-level conversion device for CAT-CI-V enabled (non-RS-232) transceivers that provides PTT output, keying output, or foot-switch input options. In addition to the standard serial interface, the user can choose an option that connects and controls PTT lines, keying lines, or general-purpose outputs, or that accepts inputs from external devices such as foot switches.

The TZ-900 AntennaSmith antenna impedance analyzer features a full-color TFT LCD graphic display. It covers 0.2 to 55 MHz and measures SWR, impedance, reactance, and reflection coefficient, and displays a Smith chart. Modes include sweep, manual, and synthesizer. It analyzes without a PC connection.

The DSP-599zx digital noise filter incorporates a high-speed CPU. The LCD display, pushbuttons, and Visible Memory reveal the exact settings of the filter. Optical encoders provide continuous tuning of the filters.

The PK-232/PSK multimode data controller has a sound-card interface with dual transformer isolation and 18 DSP filters. It features twin peak RTTY filters, adaptive PACTOR filters, a 100-Hz CW filter, an external reset switch, and an overload LED on the front panel. Modes include RTTY Baudot, RTTY-ASCII, PACTOR, packet (300 b/s HF and 1200 b/s VHF), Morse, FAX HF, AMTOR, SITOR, NAVTEX, TDM, and more.

The ANC-4 antenna noise canceller and diversity combiner cancels high noise levels, nulls strong interfering signals, works with any transceiver/receiver, and makes two antennas into a phased array.

The PK-96 is a 9600/1200 b/s packet-ready TNC featuring gateway as a node, GPS firmware, remotely programmable GPS commands, and stand-alone tracking.

Ray Grimes Receives Exchange Club Award

OCSD/Communications Assistant Director Robert Stoffel, KD6DAQ (right), introduces Ray Grimes, N8RG

Congratulations to OCRACES Member Ray Grimes, N8RG, OCSD/Communications Engineering Manager, who received the prestigious Civilian Supervisor of the Year 2006 Award by the Corona Del Mar Exchange Club on April 11, 2007.

At the ceremony, held at the Bahia Corinthian Yacht Club in Corona Del Mar, Ray also received the County of Orange Certificate of Recognition, Corona Del Mar Exchange Club, 2007 Crime Prevention Program, Civilian Supervisor of the Year.

Carol Grimes, WB6VMH, and husband Ray, N8RG, with Ray's awards

RACES News from Around the County

"RACES News" provides an opportunity to share information from all City & County RACES organizations in Orange County.

Please send your news to:

w6hk@ ocraces.org

Hospital Disaster Support Communications System

Telephones at Saddleback Hospital in San Clemente became unstable during the morning of March 20, 2007. Hospital staff used the HDSCS call-up list to contact Jim Riedel, K6EEE, via cell phone. Jim alerted April Moell, WA6OPS, and proceeded to the hospital with his go-kit. April served as net control and contacted the Orange County Communications Center to advise that if hospitals, fire departments, or others were unable to contact the hospital, they could call April for radio message relay into the facility. The Safety Director at a sister Saddleback hospital in Laguna Hills decided that it would be good to have an operator at his facility to have a backup for contacting San Clemente. John Walker, AC7GK, with his equipment at the ready, was activated to Laguna Hills. Phones at San Clemente were repaired not long after HDSCS operators arrived, but the hams stayed on location and maintained contact until the entire system was stable under load.

On March 21, 2007, the Telecommunications Supervisor at an Orange County trauma center alerted HDSCS by group page of a telephone failure. HDSCS's attempts to call into the hospital were met with rapid busy signals, confirming the problem. For the next hour, HDSCS Coordinators made calls to members to activate communicators to the facility. Within an hour, two HDSCS responders were on site and three more were about to enter the facility's driveway. At that point, the hospital Incident Commander declared the situation to be stable and released the communicators. Responders were Galel Fajardo, KB6MOH, David Mofford, W7KTS, Ken Simpson, W6KOS, Corky Walker, KG6YWY, and John Walker, AC7GK. Net control was April Moell, WA6OPS.

County of Orange

County of Orange RACES is pleased to welcome Randy Benicky, N6PRL, as its newest member. He holds a General Class amateur radio license. He has been with the Orange County Sheriff's Department since 1977, and recently retired. After graduating from the Sheriff's Academy, he worked the Central and Theo Lacy Branch Jails. He then worked as a bailiff at Central Court and later was transferred to South Patrol. He trained in Dana Point and worked in San Juan Capistrano (an OCSD contract city). He was promoted to investigator in 1982. During one incident that included freeing a hostage and a gun battle, Randy won the Medal of Valor.

Randy was promoted to Sergeant in 1984. He again worked at Central Jail and South Patrol, and then in Stanton (another contract city). In 1994 he became a Homicide Sergeant. In 1996, he was transferred to the Emergency Communications Bureau at Loma Ridge. He eventually went back to the Central Justice Center. One day at the CJC, Randy was confronted with a juror having a heart attack. Using an AED, he revived the victim, who was then transported to the hospital. Consequently, Randy received a Courage to Respond Award from the Red Cross.

Randy supports Baker to Vegas every year, as well as other events. We are happy that Randy is now bringing his experience and capabilities to OCRACES.

May 2007

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5 *Red Cross Communications Boot Camp*
6	7 *Monthly Meeting & Weekly Net*	8	9	10	11 *Volunteers in Police Service Expo*	12 *RACES Breakfast*
13 *Mother's Day*	14 *Weekly Net*	15	16	17 *CPRA Chapter Meeting*	18	19
20	21 *Weekly Net*	22	23	24	25	26
27	28 *Weekly Net*	29	30	31		

Upcoming Events:

- **May 7**: OCRACES monthly meeting, 7:30 PM, Eckhoff St.
- **May 12**: RACES Breakfast, Mimi's, 8 AM
- **Jun 2**: EMS Tailgate, Angel Stadium, 4 PM
- **Jun 23-24**: Field Day
- **Jun 25**: City/County RACES meeting
- **Jul 28**: Southwest ACS Meeting, Riverside, 9 AM
- **Jul 31**: Orange County Fair booth duty, 5-11 PM

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:

- ☐ 6m: 52.62 MHz output, 52.12 MHz input, 103.5 PL
- ☐ 2m: 146.895 MHz output, 146.295 MHz input, 136.5 PL *
- ☐ 23cm: 1282.025 MHz output, 1270.025 MHz input, 88.5 PL
- ☐ 1.25m: 223.76 MHz output, 222.16 MHz input, 110.9 PL
- ☐ 70 cm: 449.180 MHz output, 444.180 MHz input, 107.2 PL

* Primary Net - Mondays, 1900 Hours

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Questions or Comments?
Contact the *NetControl* Editor
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*"W6KRW ...
Serving
Orange County"*

Meet your County of Orange RACES Members!

Ken Bourne W6HK	Scott Byington KC6MMF	Harvey Packard KM6BV	Ralph Sbragia W6CSP	Joe Selikov KB6EID	Marten Miller KF6ZLQ	Robert Stoffel KD6DAQ
Jack Barth AB6VC	Jim Carter WB6HAG	Ernest Fierheller KG6LXT	Randy Benicky N6PRL	Bill Borg KG6PEX	Chuck Dolan KG6UJC	Nancee Graff N6ZRB	Ray Grimes N8RG
Walter Kroy KC6HAM	Martin LaRocque N6NTH	John Roberts W6JOR	Tony Sanchez AE6QT	Steve Sobodos KN6UX	Tom Stroud N6FDZ	Tom Tracey KC6FIC