

November, 2005



Newsletter of the County of Orange Radio Amateur Civil Emergency Service

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Captain's Corner

by Ken Bourne, W6HK, Chief Radio Officer

Every OCRACES member appears to have a passion for emergency communications. It's gratifying to see such enthusiasm to serve. Most members participated in the recent City/County RACES exercise on Saturday, October 1st, and handled their responsibilities exceptionally well. Instead of complaints, I heard suggestions on how to make the exercise better next time. City RACES members and HDSCS members also did a great job during the exercise.



Carol Matthews, KF6ERZ—Outbound radio traffic

The main scenario of our exercise was a complete failure of public-safety communications systems. How appropriate! On Tuesday, October 18th, we had a major telephone outage, affecting mainly the western areas of Orange County and into Los Angeles County, due to a Verizon computer failure in Long Beach. The outage affected some main city police dispatch channels and County Fire communications, and our EOC was activated. The State OES Regional EOC in Los Alamitos was also activated. OCSD Emergency Communications Coordinator Marten Miller, KF6ZLQ, sent an alphanumeric page to OCRACES members, and immediately several members responded to our 2-meter repeater and indicated their availability. Harvey Packard, KM6BV, responded to the EOC on Loma Ridge and activated the RACES net, and Chuck Dolan, KG6UJC, indicated he was ready

to respond at any time to Loma to relieve Harvey, or to Westminster where OCFA indicated a communications need. Other members were available to respond at various times throughout the next 24 hours or more, to various locations.

It's good to see such willingness to participate in exercises and to respond when the need arises. But we must ask ourselves how ready are we to deploy to any conceivable emergency. Could we handle a situation as extensive as the hurricane disaster in Louisiana and Mississippi? Could we handle a 7+ earthquake in Orange County? Could we handle a terrorist attack against our power grid? Are our duty bags fully equipped? Have we taken the on-line NIMS training (which, by the way, MUST be accomplished before the end of November!)? Are we keeping up with the latest communications technology?

Continued on page 2

The Next
OCRACES
Meeting is

November 7, 2005
1930 Hours
840 N. Eckhoff St.
Orange, CA

*Guest speaker
will be Jim Olliff,
KE6URZ, Glendale
(GEARS) Radio
Officer*



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

Captain's Corner *Continued from page 1*

You owe it to yourself and to OCSD/Communications to be as knowledgeable as possible about the technology that could be used during our deployments. How up-to-speed are you on APRS, ATV, SSTV, PSK-31 and other digital modes, Winlink, finding sources of interference, backup power, antennas, RFI and noise suppression, etc.? How about HSMM (high-speed multimedia), using Wi-Fi computer wireless technology on the 2.4 GHz ham band? Some of us have already jumped into many of these areas of technology, but all of us have a lot to discover.

HSMM played an important role in Louisiana and Mississippi after hurricane Katrina. According to an article in the October 5th edition of *The Orange County Register*, the FCC said Katrina initially knocked out 2.8 million phone lines, more than 1,600 cell phone towers, and more than 420,000 cable TV connections that also can serve as Internet links. At a hospital in Bay St. Louis, help came from a group at the Naval Postgraduate School in Monterey, California. That team brought a number of vehicles, including a 33-foot RV loaded with Wi-Fi and satellite gear as well as emergency technologies for carrying high-bandwidth connections over a range of miles. Within five hours of the NPS team's arrival, anyone with a laptop at the hospital could send E-mail, surf the Web, and send instant messages. With an Internet telephone, they could make and receive calls over the interconnection that's similar to a low-priced DSL link. Once our HSMM capabilities are developed, we could provide similar communications capabilities, plus video!

Learn more about HSMM and other modes of communications by reading articles in the ham magazines such as *QST* and *CQ*. If you like to build and experiment, consider subscribing to *Homebrewer Magazine*, published four times a year and available in CD-ROM format from the American QRP Club <http://www.amqrp.org>. The subscription is only \$15 per year. The latest issue includes the SoftRock-40 Receiver. This little 1"x 2" board plugs into the USB port of your computer and works together with "PowerSDR" software from FlexRadio to provide a 40-meter receiver with stunning performance. The quadrature sampling detector pulls out very weak signals.

Our next meeting on Monday, November 7th, will be another opportunity to learn. Our guest speaker is Glendale City Radio Officer Jim Olliff, KE6URZ, who is the owner of JO-COMM, a new manufacturer of DC power splitters incorporating Anderson Powerpoles. Jim will give us a highly informative presentation on DC power distribution. Also during this meeting Marten Miller will train us on our duties for the following evening, Tuesday, November 8th, for the Statewide Special Election.



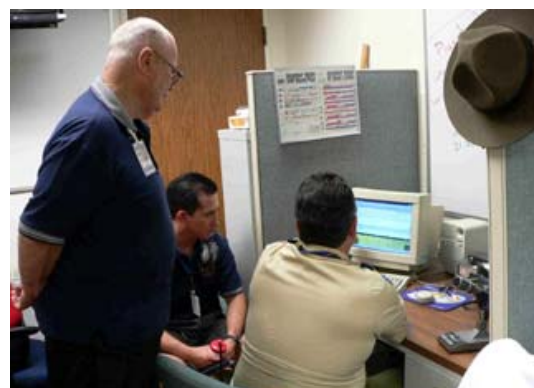
Ernest Fierheller, KC6LXT—Outbound radio traffic



Walt Kroy, KC6HAM & Jack Barth, AB6VC at ATV position.



Tony Sanchez, AE6QT—Outbound radio traffic



Harvey Packard, KM6BV; Tom Tracey, KC6FIC; Ralph Sbragia, W6CSP at PSK31 position.

Watching The Web

by Ken Bourne, W6HK, Chief Radio Officer

The Web site of Industrial Communication Engineers, Ltd., is worth a look, not only for some interesting products (receive-only processing equipment, chassis enclosures, impulse suppressors/arrestors, RF switching products, chemical treatments, RF and telephone filters, industrial facility hardware, and RF coaxial cable assemblies), but especially for some free, highly informative special publications. Steer your browser toward <http://www.iceradioproducts.com> and prepare to get an education!

Here is a list of publications available for reading on the I.C.E. Web site:

- *How to Conduct A Noise Audit of Your Telecommunications Station*
- *Modern Beverage Receiving Antenna Construction and Installation*
- *Modern Lightning Protection for Radio Transmitting and Receiving Facilities: RF Entry Ports*
- *Modern Lightning Protection for Radio Facilities: AC Power Lines*
- *Modern Lightning Protection for Radio Facilities: Telephone, Rotator, and Control Lines*
- *Modern Do-It-Yourself Grounding Techniques*
- *Bulkhead Grounding for Telecommunications Facilities*
- *Using Water Pipe and Service Joints for RF Grounding—Please Don't*
- *Modern Coaxial Lightning Arrestors: Polyphaser vs I.C.E.*
- *Modern Coaxial Lightning Arrestors: Alpha Delta vs I.C.E.*
- *The Infamous Gas Tube*
- *FCC Interference Handbook*
- *Earth Grounding Construction Materials*
- *Grounding Coaxial Cable Shields: Why, Where, and How*
- *Fighting Back Against BCB Interference*
- *Low Pass Filters—It's What You Have and What You Do with It*
- *Resolving 6 Meter Amateur Interference*
- *Using Highpass Filters for TVI—and When Not To*
- *Mobile Radio Noise Elimination*
- *Solving Telephone RF Interference—Helpful Hints and Suggestions*
- *AC Power Line Noise—Stop the Madness*
- *The Infamous Arc—The Hidden Interference Generator*
- *Using Anti-Oxidants To Ensure Good Conductivity*
- *DC Grounded Antennas—The Myth, The Legend, The Fantasy"*
- *Dodging Thor's Hammer (a customer-written application note)*
- *QST: Product Review—AC Line Filter Solves PC Switch Mode Power Supply RFI Problem*
- *Modern Do-It-Yourself Grounding Techniques*

The above special publications may solve some sticky problems in and around your ham shack. Many excellent ideas and techniques are provided.

RACES Support Still Needed for November 8 Election

We are now planning for the November 8, 2005 Statewide Special Election which will require all 23 Collection Centers we've traditionally used. RACES support is again requested to provide communications support between Collection Centers and the VTC. In this election our involvement has grown to include relaying the precinct numbers for each box loaded into the vans. This will greatly increase the radio traffic and will require two frequencies to accomplish. The plan will be covered in detail at the OCRACES monthly meeting at 7:30 pm on November 7, 2005. We still have a few Collection Centers without RACES support so it's not too late to be involved.



Winter Weather Workshop

National Weather Service Forecast Office



The National Weather Service Forecast Office in San Diego worked closely with all of our customers this past year and we were pleased with the help which you provided in dissemination of critical forecasts, watches, warnings and advisories. As we begin to think about this coming winter season, we would like to again work together to guarantee that our residents and tourists receive timely weather information, and are fully prepared if threatening weather affects southern California. To accomplish this goal, we will be holding four Winter Weather Workshops this year in 4 different locations. The Orange County workshop will be November 15, 2005, from 9:30 am until Noon at the Orange County Resources and Development Management Department (RDMD), 1750 S. Douglass Road, Anaheim (Thomas Bros. 799-D2). The purpose of the workshop is to provide a brief update of the National Weather Service operations including our web page and digital forecasts as well as a review of products, services, and definition. There will also be a review of last winter's weather and, of course, a winter weather outlook will also be presented. Tsunamis and the warning system will also be discussed concerning coastal areas.



Here is the agenda for the Winter Weather Workshop:

9:30 - 9:40 am	Welcome and Introductory Remarks - Jim Purpura
9:40 - 9:55 am	Why so much precipitation?- Jim Purpura
9:55 - 10:40 am	Review of last winter- Steve Vanderburg, Mark Moede
10:40 - 11:00 am	StormReady program - Ed Clark
11:00 - 11:15 am	Winter Outlook-Ed Clark
11:15 - 11:30 am	Questions and Wrap Up-All

RACES officers or their designees are welcome to attend this workshop. Please RSVP to Ms. Diane Foster at (858) 675-8700 Ext. 221 or Ed Clark at Ext. 223 or via email to Edwin.Clark@noaa.gov.

New Orange County EMS Program Manager Appointed



Greg Boswell is the new Program Manager for Orange County Emergency Medical Services replacing Darlene Gidley, who just retired. Julie Poulson, RN, Director of the Health Care Agency, made the appointment and said that she looks forward to working with Greg in his new capacity. Prior to Darlene Gidley the EMS Manager position was held by CeCe Waite and Betty O'Rourke.

Greg has worked at Orange County EMS for 2½ years as EMS Coordinator for facilities. His projects have included the recent designation of new Cardiovascular Receiving Centers, work on the diversion problem, trauma centers, and pediatric issues.

Greg came to EMS from Huntington Beach Hospital where he was Director of Critical Care, working with the emergency department and the intensive care unit. He has been a Registered Nurse at both Huntington Beach Hospital and Fountain Valley Regional Hospital. Greg grew up in Wyoming. He is married to a pharmacist, Robin, and has a son, Tyler, 12. Greg is active in Boy Scouts, little league and other family and community activities.

CHARGING AHEAD

Written by Ray Grimes, N8RG



An exciting new rechargeable battery has been announced by Toshiba. The new battery is a Lithium-ion type that features a one-minute charge to 80% capacity. The new battery uses the latest advances in nano-material technology applied to Lithium-Ion cell design. Another benefit realized from this new battery technology is extended life where loss of capacity is only 1% after 1,000 charge and discharge cycles. One more significant benefit of this battery technology is that it can operate with acceptable performance down to -40C (-40 F), which is a benefit not much appreciated by those living in Southern California. Toshiba will introduce this new battery technology in 2006 with

the first applications being found in automotive and industrial markets. The new and improved Lithium-ion rechargeable battery technology may find a promising future in hybrid electric vehicle applications. This new Lithium-Ion rechargeable battery technology may eventually find its way into portable electronics and ham radio applications. More information about this battery can be found at the following link: http://www.toshiba.co.jp/about/press/2005_03/pr2901.htm



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

Program Coordinator

Marten Miller, KF6ZLQ
(714) 704-7917

Chief Radio Officer

Ken Bourne, W6HK
(714) 997-0073

Radio Officers

Scott Byington, KC6MMF
Harvey Packard, KM6BV
Joe Selikov, KB6EID
Ralph Sbragia, W6CSP

Assistant Radio Officers

Jack Barth, AB6VC
Tony Sanchez, AE6QT
Ernest Fierheller, KG6LXT

County of Orange RACES

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

Telephone – (714) 704-7917
Fax – (714) 704-7902
E-Mail – OCRACES@ocgov.com

RACES News from Around the County

IRVINE IDEC

Irvine is planning to hold a Ham Radio Licensing class that will be taught by Gordon West. The class is being tentatively scheduled for the weekend of February 25-26, 2006. Gordon will only charge for the materials (\$50) for teaching City or County volunteers. Gordon will need a commitment of at least 40 people to do the class. Please contact Bob Pestolesi, KE6GYD if you have personnel interested in taking this class.

scenario where all phones were out of service. HB RACES dispatched radio operators to the four school districts who have radios to their schools. They dispatched both RACES operators and CERT Communicators to the 13 private schools. The EOC maintained contact with the school districts and private schools throughout the earthquake exercise. In a disaster, HB RACES radio operators provide the critical communication link between the City and the schools.

HUNTINGTON BEACH RACES

At 4:30 AM on October 18, 2005, Huntington Beach RACES was activated when all phones and the 9-1-1 phone system failed within Huntington Beach. Police dispatch channels were also affected so RACES was activated to backup the Police Department. The City coordinated with Huntington Beach Hospital, the American Red Cross, and the County of Orange EOC. HB RACES was prepared to coordinate with the Red Cross hams as well as the hospital hams, if needed. Dozens of HB RACES personnel were dispatched to each of the five school districts and the 13 private schools with the emergency phone numbers. The system became operational and the EOC was deactivated at 2:00 PM.

HDSCS

October was a busy month for HDSCS starting with the city/county drill on October 1st. It was the largest effort ever with 23 members participating. The drill exercised message prioritizing, good net procedures and moving to different frequencies. Though some cities and the Red Cross were missing, it was a great drill for HDSCS.

On October 4, HDSCS members supported Children's Hospital of O.C. during major phone work. Phones and internal staff paging were not available. Thirteen HDSCS members were stationed in various crucial locations until 2:30 a.m. when the operation was secured.

On October 18 HDSCS provided support to South Coast Med. Center, Orange Coast Memorial and Los Alamitos Hospital during this 8 hour activation due to a widespread phone outage caused by the failure of a Verizon Switch in Long Beach. A communicator was also sent to Loma Ridge to provide back-up to the Central Point. Twelve HDSCS members responded to this incident.

On October 19, 2005 the City of Huntington Beach held its annual city-wide school drill. One of Huntington RACES top priorities in a disaster is to determine the needs of the schools. This is done by HB RACES providing emergency communications from the EOC to the school districts and the private schools. The drill was an earthquake

"RACES News" provides an opportunity to share information from all City & County RACES organizations in Orange County. Please send your news to: OCRACES@ocgov.com

November 2005

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7 <i>Monthly Meeting & Weekly Net</i>	8 <i>Election Day</i>	9	10	11 <i>Veteran's Day</i>	12
13	14 <i>Weekly Net</i>	15	16	17 <i>Statewide EMS Drill</i>	18	19
20	21 <i>Weekly Net</i>	22	23	24 <i>Thanksgiving Day</i>	25	26
27	28 <i>Weekly Net</i>	29	30			

Upcoming Events:

- **November 7:** OCRACES monthly meeting, 840 N. Eckhoff Street, Orange, 1930 Hours
- **November 8:** Statewide Special Election
- **November 11:** Veteran's Day
- **November 17:** Statewide EMS Disaster Exercise
- **November 24:** Thanksgiving Day

New OCSD/Communications Training Officer

By Marten J. Miller/KF6ZLQ



OCSD/Communications has announced the appointment of Pasquale (Pat) Campobasso, KF6PND to the position of Communications Training Officer. Pat possesses the unique combination of skills and knowledge necessary to fulfill the requirements of this position, which includes developing and providing training to public safety personnel on a wide variety of specialized radio communications systems, equipment and procedures. Pat has been with the County of Orange for 16 years. He began his County career as a Communications Coordinator II at Control One in 1989 and was promoted to Supervising Communications Coordinator in 1999. Pat became the "Training Supervisor" and put his knowledge and experience to work creating new training manuals for Control One.

Prior to his employment with the County, Pat worked several years for GTE. He worked his way up from Installer to Foreman to Field Engineer and finally Maintenance Supervisor. Pat left GTE in 1981 to become part owner and Operations Manager of Triton Communications, Inc. which provided telecommunications sales, service and installations. Pat, his wife Jeanne and their son Jared, 11, live in Riverside. Pat also has a General Class Amateur Radio license as well as a private pilot license.

We are confident that Pat's unique blend of operational and technical experience will serve him well as the new Communications Training Officer. Pat can be reached by phone at (714) 704-7916 and email at Pat.Campobasso@ocgov.com.

County of Orange RACES

OCSD/COMMUNICATIONS
840 N. ECKHOFF ST. SUITE 104
ORANGE, CA 92868-1021

Telephone - (714) 704-7917
Fax - (714) 704-7902
E-Mail - OCRACES@ocgov.com

Visit Our Website
www.ocraces.org
It's Where It's @!

Questions or Comments?
Contact the Net Control Editor
OCRACES@ocgov.com



**"W6KRW ...
Serving
Orange County"**

Meet your County of Orange RACES Members!



Ken Bourne W6HK Scott Byington KC6MMF Harvey Packard KM6BV Joe Selikov KB6EID Ralph Sbragia W6CSP Marten Miller KF6ZLQ Robert Stoffel KD6DAQ



Jack Barth AB6VC Bill Borg KG6PEX Chuck Dolan KG6UJC Ernest Fierheller KG6LXT Nancee Graff N6ZRB Ray Grimes N8RG Bryan Hovde KD7CRA Walter Kroy KC6HAM



Martin LaRocque N6NTH Carol Matthews KF6ERZ John Roberts W6JOR Tony Sanchez AE6QT Steve Sobodos KN6UX Tom Stroud N6FDZ Tom Tracey KC6FIC