On Friday, July 22nd, the California ISO (Independent System Operator) declared the Southern California Region a Stage 2 Electrical Emergency. Although the emergency has since ended, we have at least another couple of months ahead of occasional very hot weather, where we could have even a Stage 3 emergency and possible load interruption. What happens to public-safety communications systems when commercial power is interrupted? In Orange County, the systems are very well designed and backed up by well-maintained generators. But anything can happen when the power fails, whether by system overload during extended high-temperature conditions, transformer or other equipment failures, line failures, terrorism, earthquakes, Santa Ana winds, wildfires, and so forth.

The County maintains a modern, sophisticated communications system designed to continue operating during the most severe conditions. But OCSD/Communications is realistic, and realizes anything can happen, and has backed up their system accordingly. One such backup is County of Orange RACES, providing additional frequencies, repeaters (including portable), ATV, SSTV, APRS, text/data communications, auxiliary operations (such as fire patrols, Amber-alert assistance, public-service event communications, rumor control, and dispatching), location of interference, and deployment of our own emergency communications response vehicle.

Our City/County RACES exercise on October 1st is geared around a potential loss of public-safety communications systems. City and County EOC’s may also conduct the exercise using backup power. During a possible extremely severe emergency, causing loss of commercial power for at least a couple of weeks, even backup power might become unavailable, due to lack of fuel. During such a condition, cell sites would at first be overpowered, and then completely dead (due to commercial power failure and discharged backup batteries). In the event of such an emergency, with public-safety systems out of commission, will our own repeater systems continue to operate? Will we be able to obtain fuel for our home generators (if we have them in the first place), or for our emergency communications response vehicle, or for our own vehicles? We have a lot to think about between now and October 1st. We will plan on having at least some means of communications, with some fuel for our vehicles and generators and repeater sites. But we need to design part of the exercise for a complete loss of fuel. Do any of us have backup solar power? Do we have stored fuel for our home generators? If so, for how long can we run those generators? If the situation is so bad that public-safety communications have failed, how will we provide RACES communications when the fuel runs out?

Oh, doom and gloom! I don’t mean to be so negative, when we have such a positive RACES unit. But we must plan for the worst. Please share your thoughts with each other, and give me your ideas for how we would be able to communicate under such conditions, so we can design our solutions (as well as related emergency scenarios) into the October exercise plan. We will share our thoughts about this exercise at the next OCRACES meeting on Monday, August 1st.

Finally, thanks to the OCRACES members who participated in Field Day, and especially to Ralph Sbragia, W6CSP, who coordinated the event. As we go to press, the OCRACES ATV team, commanded by Jim Carter, WB6HAG, is preparing to participate in the Arena Response 2005 Metropolitan Medical Response System Exercise in Anaheim on July 28th. On August 25th and 26th, the County of Orange Health Care Agency will host the Disaster Ready! conference in Garden Grove, and our OCRACES emergency communications response vehicle will be on display.
As we planned for Field Day 2005, I proposed a mission objective which contained two goals: to operate the RACES vehicle with radios on for 24 hours, and to have fun doing it! We accomplished both parts of our mission objective. I believe I can say from my discussions with the members who participated that they had fun, and we ran the vehicle for 24 hours.

I would like to thank the following members for their participation: Scott Byington, KC6MMF, Harvey Packard, KM6BV, John Roberts, W6JOR, Ken Bourne, W6HK, Walter Kroy, KC6HAM, and Tony Sanchez, AE6QT. A special thanks goes out to Bryan Hovde, KD7CRA who came over after his evening work shift to operate overnight and Glen Shiery, AF6Z (CSUF RACES) for helping during set up and coming back to operate during the evening hours.

We have submitted a proposed score of 1026 for a Class 2A station. We made 68 80M, 181 40M and 29 20M contacts via phone for 556 points, we also had 470 bonus points (400 of which came from running on emergency power, being in a public place and having a sponsoring agency official (Robert, KD6DAQ) visit.

OCRACES extends a special “thanks” to Ralph Sbragia, W6CSP (above) who was our 2005 event coordinator for both Baker-To-Vegas and Field Day. Thanks Ralph!

Field Day 2006 will be the weekend of June 24th & 25th. I will not mount my soap box right now with a sermon regarding participation and readiness! However, Field Day is more than just a contest, it is an opportunity to test your abilities to make contacts and pass traffic under less than optimal conditions, as well as learning something about field deployment and field antenna propagation. All members should mark their calendars now and plan on attending and participating in Field Day 2006.
City/County RACES Exercise Coming in October

The annual City/County RACES Exercise will be conducted on Saturday, October 1, 2005, from 0900 until 1100 hours. The purpose of this annual exercise is to allow city and County RACES organizations, and affiliated organizations, the opportunity to test various amateur radio communications methods between their respective EOC’s. 100% participation is encouraged so that all organizations may gain maximum benefit of this annual exercise. This year, the scenario is a loss of public safety communications systems. If possible, EOC’s are also encouraged to conduct the exercise using back-up power. A specific exercise plan will be developed and shared with all participating organizations. For planning purposes, the emphasis this year will be voice communications between city EOC’s, and a secondary emphasis on communicating with the County EOC. Additionally, those may optionally participate with ATV, SSTV and/or PSK31. Additional information will be sent to each city Radio Officer and Coordinator in the month of August.

OCRACES Members to Receive Volunteer Award

At our August 1st OCRACES meeting, 10 members will be awarded The President’s Volunteer Service Award. Each member will receive a letter from President Bush, an Award Certificate, and a Service Pin.

Our members are being recognized for the incredible number of hours donated to the RACES vehicle project. Please join us August 1st for this special recognition.

OCRACES Breakfast Makes Debut in July

Our first OCRACES monthly breakfast on Saturday, July 9th, brought together the following OCRACES members and their families for an enjoyable conversation and good food: Bill Borg, KG6PEX, Ken Bourne, W6HK, Scott Byington, KC6MMF, John Roberts, W6JOR and Ralph Sbragia, W6CSP. Including family members and friends, we had 11 people at the breakfast, and visited with each other for more than two hours.

One of our many topics of discussion was a suggestion for a combined City/County RACES picnic, perhaps in the fall.

Our next OCRACES breakfast will be on Saturday, August 13th, at 8:00 AM, probably at the same location (1008 E. 17th St., Santa Ana). It's an unofficial event, and a nice way to get together with your friends in OCRACES and their families.
Did You Know? Interesting Facts About The O.C.
From The County Connection Newsletter

- The County maintains approximately 300 miles of roads within unincorporated OC, enough to stretch from San Clemente to Las Vegas.
- Orange County residents generate enough refuse to fill a major league stadium every five months.
- The two summits of Old Saddleback Mountain are Santiago and Modjeska peaks; Santiago is the taller one.
- The oldest surviving California building is the Serra Chapel at Mission San Juan Capistrano. The oldest portion dates back to 1778.
- Several Orange County communities once had different names:
  - Orange was known as Richland.
  - Huntington Beach was Pacific City.
  - Seal Beach was Bay City.
  - Brea was Randolph.
  - La Palma was once Dairyland.
- The first woman elected to County office was Justine Whitney, who was elected County Recorder in 1914; she served until 1936.
- The three lakes in Laguna Canyon are the only historical fresh bodies of water in Orange County. The culvert that connects two of these lakes will be removed so that the lakes can be re-joined into one larger lake.
- Between 1953 and 1957, eight new cities were incorporated in Orange County: Buena Park, Costa Mesa, Cypress, Fountain Valley, Garden Grove, La Palma, Stanton, and Westminster.
- More than 43 million people visited Orange County in 2004. That’s equal to the population of Spain.
- Visitors spent $7.3 billion in Orange County in 2004. That’s an average of $168 per person.
- In 2004, 76 percent of visitors arrived by car and 22 percent by plane. That may be because 57 percent of visitors were from Southern California.
- Ten different reality shows have been filmed in Orange County: The OC, MTV’s Laguna Beach: The Real OC, The Bachelor, Extreme Makeover: Home Edition, Merge, Switched, How Clean Is Your House?, Wife Swap, Trading Spaces: Family, and Date My Mom.
- The Laguna Canyon Roadway traverses the Laguna Coast Wilderness Park, one of the county’s regional park jewels. Much of the existing overhead utility lines will be under grounded within the Park, which will improve the views for motorists and bicyclists.
- Movies recently filmed in the county include Miss Congeniality 2, Big Momma’s House, Dodgeball, Cellular, and Elizabethtown.
- There are 6,542 bus stops in Orange County where 210,000 riders board OCTA buses on weekdays.
- Several new bridges will be constructed along the Laguna Canyon Roadway, each with architectural enhancements to evoke an earlier, less hectic time of the county's history. If you look closely, you might see the vestiges of the old stagecoach station rumored to be somewhere in the canyon.
- There are 383 miles of regional trails and bikeways -- long enough to stretch from Los Angeles to Sacramento.
- Laguna Canyon Road was originally a stagecoach route in the 1800s. A 1901 topographic map shows the road westerly of the Laguna lakes where it is being reconstructed today.
Watching The Web – By Ken Bourne, W6HK

Each month, we feature a Web Site of interest to RACES personnel, as located by Ken Bourne, W6HK, Chief Radio Officer, County of Orange RACES. An interesting Web page by Jim Sandoz, N2MPT, on building your own portable, self-powered station for RACES deployment may be found at: http://losdos.dyndns.org:8080/public/ham/RACES+ARES-portable-box.html. In his introduction, Sandoz lists the following design requirements:

1. Ability to operate from AC mains, internal battery, or external DC power.
2. Provide everything needed for emergency communications (EMCOMM) in one container.
3. Capable of providing a reasonable amount of battery power (~24 hours EMCOMM).
4. Ability to monitor battery state of charge during operation and when recharging.
5. No fuses.
6. Modular design that could later incorporate additional/different radios or other features.
7. Support for power receptacles for other equipment; e.g., GPS, APRS, cell-phone charger, etc.
8. Weatherproof to the extent that it could be transported in light rain in the back of a pickup truck.

Sandoz provides an interesting discussion on his selection of batteries, which ended up being a pair of APC Model RBC6 12-AH batteries. His AC supply is a Samlex 1223.

The enclosure is a Model SPUD7 “Sportsman’s Utility Dry Box” manufactured by MTM Case Guard, featuring a weatherproof, rubber-gasketed top lid and heavy-thickness side-walls and bottom. The removable hinged top has a secondary compartment for small items. The box also has an accessory tray.

Details are provided on battery and power-supply mounting, as well as on mounting the radio. For switch, instrumentation, and connector mounting, Sandoz had a special multiple-pole mounting bracket fabricated. He provides a PDF keynote drawing that may be used by a sheet-metal fabricator for making a similar bracket. Wiring, breakers, and panel meter are discussed, including the use of Anderson Powerpoles.

### 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

### County of Orange RACES

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**Radio Officers**
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Jim Carter, WB6HAG  
Harvey Packard, KM6BV  
Joe Selikov, KB6EID

**Assistant Radio Officers**
Jack Barth, AB6VC  
Tony Sanchez, AE6QT  
Ralph Sbragia, W6CSP

**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.
**RACES News from Around the County**

**NEWPORT BEACH RACES**

Edward Karagozian Jr., K6JGN, Chief Radio Officer reports that Newport Beach RACES participated in Field Day at Mariner's Park. “We want to thank the Newport Beach Police Department for providing the great lunch,” said Ed. Newport Beach RACES also received newspaper coverage of their participation, when a photo and caption was included in the Daily Pilot. The photo featured Roy Shlemon, K6GVG, and Ed operating an HF radio. Ed also reported that Newport Beach RACES staffed the amateur radio booth at the Orange County Fair on Wednesday July 20th.

**ANAHEIM RACES**

Effective July 15, 2005 Wayne Barringer resigned his position with the Anaheim Fire Department and as Chief Radio Officer of Anaheim RACES. Here is a portion of an e-mail received from Wayne:

> “It has been a sincere pleasure to try and "make a difference" in both how Anaheim RACES is viewed by other Orange County RACES organizations and how it served the City of Anaheim. I owe so much to so many. To Robert Stoffel and Ken Bourne (Orange County) for their steadfast support with loads of humor. A really special note of thanks to Gene Thorpe (Fullerton) and Jim Reynolds (Buena Park) for keeping the lines of communication open. I would be remiss (and she would tell me so) for not mentioning April Moell (HDSCS), who extended the arms of friendship and removed a lot of barriers that existed prior to me getting the position. I can't forget Joe Selikov and Scott Byington ... and the entire OCRACES crew who always made me feel at home and provided me with lots of help. But mostly, more than any one of the people mentioned above, the members of Anaheim RACES provided me with space to makes mistakes (and we ALL know I made bunches), motivation to move forward against a whole lot of obstacles, and a gentle reminder (like a sledge hammer, of course), whenever I missed a deadline or messed up on the Net. I am so very proud, and deeply appreciative of all that you have done, on behalf of Anaheim RACES.”

**CITY/COUNTY RACES**

Catherine Deaton, District Director for the Federal Communications Commission, was our featured guest speaker at the June City/County RACES meeting. Catherine sent us this note after the meeting … “I really enjoyed speaking at the City/County RACES meeting, they are all wonderful, professional volunteers. What a terrific service RACES provides for the community.”
2-1-1 Comes to Orange County

2-1-1 is a free, accessible, 3-digit telephone number that enables callers to reach local community Information and Referral Services. 2-1-1 services commenced in Orange County on July 7, 2005. Some areas where 2-1-1 will be beneficial: Where to go for temporary sheltering; Help for substance abuse problems; Help for persons with disabilities; Assistance with care for elderly parents/relatives; Employment resources; Assistance for meal provisions; Providers of free or low-cost health care; And much more.

The Orange County Sheriff’s Department Emergency Communications Bureau has worked closely with the 2-1-1 Organization to facilitate a smooth transition without any conflicts with the 9-1-1 emergency system. 2-1-1 brings a great resource tool by providing a direct assistance referral number for the public. 2-1-1 is operated by Info Link of Orange County, a non-profit organization located in Costa Mesa. 2-1-1 is available 24-hours a day, 7 days a week. It is confidential and provides multilingual capabilities. Their direct number is (888) 600-4357 and their web site is www.211oc.org. 2-1-1 is not yet available on a cellular phone.
Meet your County of Orange RACES Members!

Ken Bourne  W6HK
Scott Byington  KC6MMF
Jim Carter  WB6HAG
Harvey Packard  KM6BV
Joe Selikov  KB6EID
Marten Miller  KF6ZLQ
Robert Stoffel  KD6DAQ

Jack Barth  AB6VC
Bill Borg  KG6PEX
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
Ralph Sbragia  W6CSP
Steve Sobodos  KN6UX
Tom Stroud  N6FDZ
Tom Tracey  KC6FIC