

November 2004



Newsletter of the County of Orange Radio Amateur Civil Emergency Service



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Captain's Corner

by Ray Grimes N8RG, Chief Radio Officer

The wildfire season abruptly ended with the start of the rainy season. The threat has shifted from fire to floods. The burned areas from last year are now threatened by severe flooding and mud slides. The recent coastal flooding in Orange County should serve as a wakeup call that our delicate urban infrastructure can be overwhelmed by extreme weather conditions. This would be a good time to remember that flooding is possible throughout much of the Orange County basin. We need to assess our homes and workplaces to assure that heavy rain and water won't produce a safety hazard. Electrical extension cords should never be used for permanent outdoors installations, and AC power strips should not be placed directly on floors. A shock hazard is ever present when wet. Base radio antenna installations should be secured so that they will withstand heavy winds. Though an extreme example, the recent Florida hurricanes wreaked major destruction that destroyed all but the most robust communications site installations. These are the times when Amateur Radio would be most needed.

Scott's presentation and outstanding WinLink report document sold this advanced concept to the department. WinLink offers some very appealing benefits, such as rapid data and text messaging communications using standard formats such as Word or Outlook, featuring redundancy, high reliability, and a level of protection against interception by the casual scanner listener. WinLink promises to provide non-encrypted semi-secure message delivery that could be used to convey messages of high-importance and high-sensitivity (such as incident casualty and medical resources reports, etc.) at a speed and accuracy that have not previously been available over a public access network. Very nice job Scott! We will hear more about this at our November meeting.

I would also like to thank everyone for their participation in the annual City/County RACES exercise, and we have photos of the event throughout this newsletter. And finally, for those working Election Night, our training will be provided at the November 1st OCRACES meeting. See you there!



I wish to offer a special thanks to Scott Byington KC6MMF, for his 'WinLink for OCRACES' presentation made to OCSD Communications staff recently.

The Next
OCRACES
Meeting is

November 1st
1930 Hours

840 N. Eckhoff St.
Orange, CA



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

November 1st OCRACES Meeting

Our November 1st meeting will start at 1930 hours at 840 N. Eckhoff Street in Orange.

HDSCS RESPONDS TO 16-HOUR FAILURE

By April Moell, WA6OPS

In the late afternoon of October 6, 2004, construction equipment accidentally excavated two trunk lines serving Tustin Hospital and Medical Center (see photo below). A 400-pair cable was completely severed and an adjacent 200-pair cable was damaged. Suddenly, all telephones within the 177-bed facility could not place or receive outside calls. The accident also took down the hospital's links to the community for e-mail, fax, fire alarms and paging.

Following established procedures, Rob McFarland, the hospital's Director of Safety, used his Call-Up List to directly notify the Orange County Hospital Disaster Support Communication System (HDSCS) at 5:28 PM. April Moell received the call and sent seven members to the facility. The Amateur Radio response was rapid, considering that the activation occurred at the peak of rush hour and the hospital is located near the intersection of the crowded 55 and 5 freeways. The HDSCS first responders met with Mr. McFarland, who requested that they deploy to the emergency Command Post, switchboard, Medical/Surgical unit, Pediatric unit, Intensive Care Unit, and the new Emergency Department.

Meanwhile, WA6OPS and two other base station operators prepared to make and receive phone calls on behalf of the hospital. Message traffic began to flow immediately after the operators got on station, as hospital staff members re-established links with their patients' physicians on the outside. When phone company workers stated that repairs would take at least six hours, HDSCS began calling more members to provide relief to the first responders. By 9:30 the next morning, the last telephone pair was spliced and the outage was declared to be over.



Damaged phone cables at the construction site next to Tustin Hospital Medical Center.

This was the 85th activation for a hospital communications failure in the history of HDSCS and the fifth emergency activation in 2004. Responders to the hospital were: Paul Broden K6MHD, Scott Carpenter KØSMC, Bruce Chappell KE6TSM, Louie DeArman K6SM, Gale Fajardo KB6MOH, Gale Fajardo Jr. KD6AYP, Tom Gaccione WB2LRH, Craig Johnson, NØCCJ, Dennis Kidder WA6NIA, Jeff Kotrys KE6HER, Fred Lochner WA6FRA, Dave Moford W7KTS, Jon Schaffer W6UFS, Marshall Shipley KG6SKD, Ken Simpson W6KOS, Clay Stearns KE6TZR, Jay Thompson W6JAY, Richard Thompson WA6NOL, Fred Wagner KQ6Q, and Al Way KC6LNP. Net Controls and Base Station call handlers were: Jean Creason KC6PPY, April Moell WA6OPS, Joe Moell KØOV and Cheryl Simpson KD6MWZ.



ACCESS BPL UPDATE by Ray Grimes, N8RG

Access BPL, or “Access Broadband Over Power Lines” became a topic of interest earlier in the year. The issue, as you may recall, is that U.S. utility companies want to provide high-speed broadband Internet and data services over power line RF carrier, strongly competing with DSL and cable modem. Access BPL will also provide improved power grid monitoring and control techniques, though power grid monitoring and control has existed in simpler forms for many years. The ham radio community, along with several federal and local government agencies and a number of telecommunications lobby groups expressed great concern to the FCC that widespread HF band interference is likely from BPL, and in fact, has already occurred from some domestic BPL trial systems. Michael Powell, the FCC Chairman, supports Access BPL, and is driving FCC approval. Powell envisions affordable Internet high-speed broadband service access for most every American, so long as they are connected to the utility power grid.

The pressure applied by the ARRL and the telecommunications community in general appears to have made a difference in driving policy that hopefully will protect the HF spectrum. There is now language in FCC Report and Order FCC-04-245, October 14, 2004 that addresses potential RF interference and possible remedies. The FCC adopted changes to Part 15 of the Rules to assure that BPL operations do not cause harmful interference to licensed radio services. The FCC concluded that technology is sufficiently available to assure that BPL does not cause harmful interference, and that BPL can co-exist as an unlicensed FCC Part 15 service. The modified FCC Part 15 Rules provide specific technical and administrative requirements for Access BPL equipment to ensure that interference does not occur, and should it occur, to provide for “timely” resolution of that harmful interference “without disruption of service to Access BPL subscribers”. The Order also sets forth procedures to measure the radio frequency energy emitted by Access BPL equipment.

Specifically, the Order by the Commission:

- ◆ Sets forth rules imposing new technical requirements on BPL devices, such as capability to avoid operating BPL on certain frequencies, and to remotely adjust or shut down any unit.
- ◆ Establishes “excluded band frequencies” to protect aeronautical and aircraft communications, and establishes “exclusion zones” in locations close to sensitive operations.
- ◆ Establishes consultation requirements with public safety agencies, federal government sensitive stations, and aeronautical stations.
- ◆ Establishes a publicly available Access BPL notification database to facilitate an organized approach to identification and resolution of harmful RF interference. Changes the equipment authorization for Access BPL systems from verification to certification. Improves measurement procedures for all equipment that use RF energy to communicate over power lines.

There is still much concern and doubt in the ham radio community about the FCC’s ability to assure a “friendly” HF spectrum in the presence of Access BPL. While FCC Part 15 Rules provide steps to mitigate harmful RF interference, there are no clear penalties if a utility company fails to act in a timely and effective manner on an interference complaint. Even so, a nominal monetary fine for harmful interference could be viewed as the cost of doing business to a large utility. The ARRL cites one example of a utility company in Iowa that took 8 months to correct a BPL interference problem, and only acted to shut down operations when their trial period ended. The ARRL is considering applying pressure on Congress to draft legislation that would better protect amateur radio operators. There is doubt though, that the ham community will win over a new technology that promises to put Internet services within the reach of most all Americans, and will create jobs and new revenues.

NWS TO HOST WINTER WEATHER WORKSHOP

By Ed Clark – 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 another Winter Weather Workshop this year for Orange County.

The purpose of the workshop is to provide a brief update of the National Weather Service operations, our web page and digital forecasts, a review of products, services, and definitions, as well as a review of last winter's weather, and of course a winter weather outlook will be presented. A weak El Nino may be developing.

The Orange County workshop will be held at the County's Storm Center, 1750 S. Douglass Road in Anaheim (799-D2) at 9:30 a.m. on Tuesday, November 16, 2004. The workshop is open to any RACES organization. However, an RSVP is a must, as space is limited. 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.

CITY/COUNTY RACES EXERCISE

The annual City/County RACES exercise was held Saturday, October 2, 2004 from 0900-1100 hours. Here are images of the activity at the Orange County Emergency Operations Center at Loma Ridge. OCRACES had personnel staffing the RACES Radio Room inside the EOC and the RACES Communications Vehicle that was parked in the EOC parking lot.



“WATCHING THE WEB”

Web Sites of Interest to RACES Personnel

By Ken Bourne, W6HK
Radio Officer, County of Orange RACES

Huntsville/Madison County (Alabama) RACES has a nice Web site at <http://www.hmcraces.org>. Buttons are provided to click onto the following informational pages: *What is RACES* details when and why RACES was established, and why it continues to exist. A link is provided to the national RACES Web site at <http://www.races.net>.

What we do shows whom Huntsville/Madison County RACES supports (local emergency management) and what is connected via radio communications. The RACES unit provides auxiliary

communications, EOC assistance, stream monitoring, SKYWARN net control, and liaison to SKYWARN for Madison County when the county's emergency net is called within the EOC.

How we operate describes the RACES radio room in the HMC EOC, equipped with HF, VHF, and UHF equipment. A 2-meter repeater is also described. Other pages are devoted to news (including meeting announcements), how to join, calendar, photo album, links, and members-only access. For additional information about HMC RACES, go to the Huntsville-Madison County EMA Web site, specifically to <http://www.madisoncountyema.com/RACES.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

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ACES News from Around the County

News, Information, Special Events ...

"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

CITY/COUNTY RACES – The last City/County RACES meeting of 2004 was held Monday, October 25. We had a record 46 attendees on hand to critique the City/County exercise, hear the latest RACES news from individual organizations, and also have a first-hand account of disaster communications from Anaheim RACES Chief Radio Officer Wayne Barringer, KB6UJW. Wayne



responded to assist with RACES communications after Hurricane Charley hit Florida. His presentation, complete with many photos showing how Amateur Ra-



dio played a major and critical role in passing message traffic, was truly eye-opening. "Wayne's goal was to help motivate others to be ready before it's too late, and I think he was successful in doing just that" said OCRACES Program Coordinator Robert Stoffel. Our

next City/County RACES meeting will be Monday, January 31, 2005 at 1900 at our usual meeting location, 840 N. Eckhoff Street in Orange.

COSTA MESA RACES – Costa Mesa RACES (MESAC) participated in the SONGS reception and decontamination exercise held October 21, 2004. The new reception and decon-



tamination site is at the Orange County Fairgrounds, and MESAC will be the RACES first call when activation of this site is necessary. Five MESAC members participated in the training, and will staff the communications function at the November FEMA graded exercise.

Participating were Mike Oviatt KE6IWM, Lynn Bosen KF6WES, Brad Russo KB6GPM, Gordon West WB6NOA and Robert Watts KG6UMZ. (Photos courtesy of Ron Eggers).



November 2004

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

UPCOMING EVENTS:

- **November 1:** OCRACES monthly meeting, 840 N. Eckhoff Street, Orange, 1930 hours
- **November 2:** Election – RACES activation
- **November 18:** Statewide EMS Exercise, RACES activation
- **November 25:** Happy Thanksgiving!
- **December 13:** OCRACES Holiday Dinner
- **December 15:** OCSD/ Communications holiday lunch – OCRACES members welcome!

All City/County RACES Exercise Photos in this Newsletter Courtesy of Ray Grimes and Steve Sobodos



County of Orange RACES

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It's Where It's @!

Questions or Comments?
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County of Orange RACES History

The *Radio Amateur Civil Emergency Service (RACES)* was created in the early 1950's by the Federal government. On December 1, 1953, by resolution of the Orange County Board of Supervisors, the Orange County Communicators Club was authorized to become part of the *Orange County Civil Defense*. For the next 30 years, the *RACES* organization in Orange County was a group of Amateur Radio communicators that supported not only Orange County but also cities in the County during a time of emergency. In the mid-1980's, the cities in Orange County realized the benefits of Amateur Radio and began to form their own *RACES* organizations. Today, County of Orange *RACES* is recognized as one of the leading *RACES* organizations in the state. Our *RACES* program is administered by *OCSD/Communications* under the leadership of Emer-

gency Communications Coordinator Robert Stoffel, *KD6DAG*, and Chief Radio Officer Ray Grimes, *N8RG*. Our volunteers provide disaster, emergency and special event communications support to *Orange County Public Safety* agencies, and meet monthly for training and special activities. *RACES* supports the County by using various modes of Amateur Radio communications including voice, Morse Code, amateur satellite, amateur television, slow-scan television and various digital modes. County of Orange *RACES* has a dedicated radio room at the Operational Area Emergency Operations Center (EOC) and an emergency response communications vehicle that provides both Amateur Radio and Public Safety communications support at any emergency, disaster or special event location.



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