Could our 911 System Fail?

We have often talked about how amateur radio and RACES would step in during a disaster when cellular telephone sites were knocked out or overloaded during a major disaster, such as a great earthquake. What if, on top of the failure of cell sites, people could not call 911? Could that really happen? Well, it did, in late June this year, when a derecho (a thunderstorm with straight-line winds typically at hurricane force) formed in Iowa and destroyed much in its path from Illinois to the mid-Atlantic states. The winds, sometimes at 92 mph, caused 22 fatalities and many injuries. About 3 million people lost electric power. Millions of people could not call 911, sometimes for days, because of failures in carrier networks and public-safety answering points (PSAPs). Now similar situations have resulted because of Hurricane Sandy. A derecho or hurricane is highly unlikely in Southern California. The destruction of Santa Ana winds and resulting fire storms, even though they often reach hurricane force, do not disrupt 911 service to the extent of the derecho and Hurricane Sandy. But what if a magnitude 8 earthquake were to hit our immediate area? Or what if terrorists were to hack into our telephone networks and power grid (as feared by Homeland Security) and even disrupt 911 calls for days? Are we as RACES members ready to respond to something like that?

At the Association of Public-Safety Communications Officials (APCO) Conference this August, David Turetsky, chief of the FCC’s Public Safety and Homeland Security Bureau, stated, “Here is the bottom line: We should not—and do not—find it acceptable for 911 to be available reliably under normal circumstances where a range of emergencies takes place, but not available when a natural disaster occurs. That’s simply unacceptable. Our networks need to be just as reliable or resilient when there is an enhanced need for emergency assistance as when there is not.” In September, the House Subcommittee on Emergency Preparedness, Response and Communications examined the derecho’s impact on the 911 system.

Verizon Communications was unable to complete 911 calls because backup-power supplies failed at two key PSAPs, impacting more than a million people in Virginia for at least several hours. There was also a lack of communications between the PSAPs and the carriers.

The FCC’s Turetsky said, “There shouldn’t be a central office that has all of the 911 circuits going through it—without diversity—for a single area. A central office going out shouldn’t wipe out 911 service for 1 million or 2 million people.

Carriers might be required to provide backup-power supplies throughout commercial networks, and to provide agencies with internal network-outage reporting to help determine restoration.

While the FCC and Congress are looking for ways to harden the 911 system, we in RACES must be prepared to respond with backup communications for days or even weeks following a major disaster.
City/County RACES & MOU Units Hold Drill

City and County RACES units and American Red Cross and Hospital Disaster Support Communications System (HDSCS) participated in the City/County RACES & MOU Drill on Saturday, October 6, 2012. Drill traffic was geared toward the scenario of a massive and extensive power outage affecting the entire county. The ICS 213 message form was used by all agencies, in most cases modified to incorporate message blocks of five words per line. At the EOC RACES Room on Loma Ridge for the exercise were OCSD Emergency Communications Manager Delia Kraft, KF6UYW, OCSD 800 MHz CCCS Next Generation Project Manager Marten Miller, KF6ZLQ, Chief Radio Officer Ken Bourne, W6HK, Radio Officer Harvey Packard, KM6BV, Assistant Radio Officer Ernest Fierheller, KG6LXT (in charge of station assignments), John Bedford, KF6PRN, Randy Benicky, N6PRL (working with Marten Miller on the simplex net), Bill Borg, KG6PEX, Jim Dorris, K6RFC (on the Winlink station), Martin La Rocque, N6NTH, and Applicants Sue Mickelson, KJ6LCJ, Fran Needham, KJ6UJS, Tom Riley, K6TPR, and Robert Unetic, KJ6VQW. Also participating in the drill from the OCRACES Van at the 2012 Survive and Thrive Run/Walk Health & Safety Expo (see article below) were Radio Officer Scott Byington, KC6MMF, Assistant Radio Officer Chuck Dolan, KG6UJC, Marty Oh, KJ6RWE, and Kenan Reilly, KR6J.

OCRACES Brings Van to Health & Safety Expo

OCRACES exhibited its emergency communications response vehicle at the 2012 Survive and Thrive Run/Walk Health & Safety Expo at the Orange County Sheriff’s Regional Training Academy in Tustin on Saturday, October 6, 2012, from 7:00 AM until noon. Assistant Radio Officer Chuck Dolan drove the van to the Expo in time for setup at 6:30 AM. Joining him there were Radio Officer Scott Byington, KC6MMF, Marty Oh, KJ6RWE, and Kenan Reilly, KR6J. They also participated in the City/County RACES & MOU Drill (see article above) from 9:00 AM to 11:00 AM.

Next OCRACES Meeting: November 5th

The next County of Orange RACES meeting will be at 7:30 PM on Monday, November 5th, 2012, at OCSD Communications & Technology Division, 840 N. Eckhoff Street, Suite 104, in Orange. At this meeting we will receive training for the next evening, Tuesday, November 6th, during which County and City RACES and MOU members will provide communications between 33 Collection Centers and the Vote Tally Center, after the polls close for the Presidential Election (see article below).

RACES to Support Election Ballot Collection

As mentioned by OCSD 800 MHz CCCS Next Generation Project Manager Marten Miller, KF6ZLQ, in the October 2012 issue of NetControl, OCSD/Communications will coordinate ballot transportation for the Presidential Election on November 6, 2012, and will depend on RACES support for communications between the 33 Collection Centers and the Vote Tally Center (VTC). RACES and MOU members will record the precinct numbers of the boxes being loaded into the vans, and transmit those precinct numbers to Net Control when the vans depart from the Collection Centers en route to the VTC. The precinct-number data will be entered directly into the Registrar of Voters Web site by CP staff for public interest. Multiple boxes will be transported from each precinct. We will use three repeaters for this election, with the Collection Centers divided between the three repeaters. A Net Control operator will be assigned to each repeater channel.

The Collection Centers are in the following locations: Anaheim—PD parking lot, Canyon Hills, Buena Park, Costa Mesa, Santa Ana, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Irvine, Laguna Beach, Laguna Woods, La Habra, Los Alamitos, Orange, Rancho Santa Margarita, Placentia, San Clemente, Saddleback, Tustin, Westminster, Laguna Niguel, Aliso Viejo, San Juan Capistrano—South Coast Christian Assembly, Anaheim—West Anaheim Youth Center, Corona Del Mar—Episcopal Church, Orange—Handy School, Huntington Beach—Boeing, Irvine—University High School, Mission Viejo City Hall, Placentia—Sierra Vista Elementary School, and Santa Ana—Saddleback High School. The Collection Centers still in need of communications coverage by a RACES unit as this issue of NetControl goes to press include Orange, Aliso Viejo, Corona Del Mar—Episcopal Church, Orange—Handy School, and Placentia—Sierra Vista Elementary School. OCRACES communicators will also work at the Vote Tally Center, including four traffic-control operators, three Net Control operators, and one relief operator.

Collection Center activity for each election begins at 8:00 PM and most are closed around 11:00 PM. Vote Tally Center activity begins at 7:30 PM with setup, and ends around midnight. Communicators should arrive at the Collection Center location no later than 8:00 PM on election night. They should be in some form of uniform or jacket that identifies with RACES or other organization. This will assist the Collection Center personnel and van drivers in identifying the communicator. A briefing will be provided at the November 5, 2012, OCRACES meeting, 7:30 PM, 840 N. Eckhoff Street, Suite 104, in Orange (see article above). Please e-mail Marten.Miller@comm.ocgov.com with names and e-mail addresses of those who will work the event.

FCC Proposes Amateur Rule Amendments

The Federal Communications Commission is proposing to amend the Amateur Radio Service rules (Notice of Proposed Rulemaking—WT Docket No. 12-283—to grant examination credit for expired and beyond-the-grace-period-for-renewal amateur radio operator licenses; to shorten the grace period during which an expired amateur license may be renewed to 180 days; to revise the time a call sign is not available to the vanity call sign system correspondingly; and to reduce to two the number of volunteer examiners needed to administer an amateur license examination. The Commission also asks for comment on amending the rules to permit remote test administration, and proposes to amend the Amateur Radio Service rules to allow amateur stations to transmit certain additional emission types. §97.3(c)(5) would be amended to allow emission type FXE as a phone emission and §97.307 would be amended to allow emission type FXD as a data emission. This proposed rule change would encourage licensees to more fully utilize time division multiple access (TDMA) technologies in experimentation and promote more efficient use of the radio spectrum currently allocated to the amateur service. Comments must be filed on or before December 24, 2012; reply comments must be filed on or before January 22, 2013.
OCRACES exhibited its emergency communications response vehicle at the California Statewide Interoperability Executive Committee Southern Planning Area “Radio Rodeo” in the Knott’s Berry Farm Hotel parking lot in Buena Park on Tuesday, October 9, 2012. Other Orange County Sheriff’s Department mobile communications vehicles included Samantha II, Incident Support Trailer, and OASIS trailer. Three counties participated in Radio Rodeo, including Orange, Riverside, and San Diego. Each set up at a central location with individual agencies testing the equipment inside the various mobile communications vehicles. Other agencies at the Knott’s location included the Anaheim Police Department, Cal EMA (MCV-1), Caltrans, Huntington Beach Police Department, Newport Beach Police Department, Orange County Medical Services, Orange County Fire Authority, Santa Ana Police Department, and West-Comm. Additionally, the AT&T Remote Mobility Zone Unit was on site for demonstration. All vehicles, including the OCRACES van, participated in interoperability testing on many public-safety frequencies from 0900 to 1100. Participating from OCRACES were Chief Radio Officer Ken Bourne, W6HK, Radio Officer Harvey Packard, KM6BV, Assistant Radio Officers Jim Carter, WB6HAG, and Chuck Dolan, KG6UJC, Marty Oh, KJ6RWE, Tom Tracey, KC6FIC, and Applicant Tom Riley, K6TPR. Jim Carter and Chuck Dolan thoroughly checked the public-safety radio programming the day before the event. Also on display was the Orange County Sheriff’s Museum & Education Center 1962 Chrysler Newport replica Sheriff’s patrol car, by Ray Grimes, N8RG.

Welcome to Delia Kraft, KF6UYW

Delia Kraft, KF6UYW, joined the OCSD Communications & Technology Division as its new Emergency Communications Manager on October 5, 2012. Delia is assuming the role previously held by Marten Miller, KF6ZLQ, as Marten is transitioning to a project management role for the next-generation 800-MHz radio system. As a licensed amateur radio operator, Delia is looking forward to managing our RACES program. Delia brings 23 years of public-safety communications experience to the position, including work in both the fire and law-enforcement fields that includes 9-1-1 call taking, dispatching, training, and supervising. She previously held the position of Supervising Communications Coordinator at Control One.

Delia was recognized by the California Public Safety Radio Association (CPRA) as Supervisor of the Year in 2011. She is currently serving as the 9-1-1 County Coordinator for the County of Orange, teaches the POST Dispatcher Basic Course, and serves on the Public Safety Dispatch Advisory Council. Delia holds the distinction of being the only person in Orange County who possesses the National Emergency Number Association (NENA) certification of Emergency Number Professional (ENP). She is a member of both NENA and the Southern California Public Safety Dispatchers organization, and has held various officer positions in the California CLETS Users Group. Delia received her AA degree from Golden West College and also completed NENA’s Center Manager Certification Program, the Cal State Fullerton Emergency/Recovery Management Certificate Program, and 12 college semester units focused on Emergency Management. Delia lives in Anaheim and is married to Brian.

Delia can be contacted at delia.kraft@comm.ocgov.com or 714-704-7979.
Antennas Installed for EOC RACES Room

Thanks to Kenan Reilly, KR6J, who worked several days on installing the new antennas for the EOC RACES Room at Loma Ridge. All six positions on the south wall of the RACES Room are now operational, except we do not have a 10-meter antenna for the Yaesu FT-8900 quad-band radio. Kenan built the Cushcraft AR-10 Ringo 10-meter antenna, but so far we do not have room on the roof rails for that antenna. However, the FT-8900 is now connected to a tri-band antenna for 6, 10, and 2 meters. We will use that radio for EOC-to-EOC communications on our 6-meter repeater during drills and activations. 6 meters might also be useful for communicating into the canyons. Once the 10-meter antenna is installed, an antenna switch will be used to switch between the tri-band antenna and the 10-meter antenna. The Hy-Gain DX-88 HF vertical antenna for the Elecraft K3 loads up on all bands except 160 meters, even though a 160-meter add-on kit was installed. It even works on 6 meters, although the SWR is high at the low end of the band. The K3 includes a 2-meter transverter, but so far we have not found room on the roof for our 2-meter horizontal loop antenna. San Diego County RACES wants to run tests with us on 2 meters SSB, once we are operational on that band with the K3. The ATV rotatable beam antennas on the roof rails still need to be reconnected.

OCRACES Shows Van at OCFA Open House

OCRACES exhibited its emergency communications response vehicle at the Orange County Fire Authority Open House, Regional Operations & Training, in Irvine, on Saturday, October 13, 2012, from 1000 to 1500. Setup began at 0830, after Jim Dorris, KC6RFC, drove the van from Eckhoff to the event. Other OCRACES personnel at the event included Chief Radio Officer Ken Bourne, W6HK, Assistant Radio Officer Chuck Dolan, KG6UJC, John Bedford, KF6PRN, Marty Oh, KJ6RWE, and Applicant Tom Riley, K6TPR. Many families visited our van, and their children enjoyed learning about amateur radio.

At the OCFA Open House with the OCRACES van are (left to right) Jim Dorris, KC6RFC, John Bedford, KF6PRN, Capt. Ken Bourne, W6HK, Applicant Tom Riley, K6TPR, Marty Oh, KJ6RWE, and Sgt. Chuck Dolan, KG6UJC.

Holiday Dinner: December 3rd at Katella Grill

The OCRACES Holiday Dinner will once again be held at the Katella Grill in Orange on Monday, December 3, 2012, at 6:30 PM. Dinner selections will be made individually from the restaurant’s menu. Due to that event there will not be an OCRACES 2-meter net that evening.

Onyx Peak Packet Node Restored

ARES Los Angeles Assistant Section Emergency Coordinator Eric Christensen, K6EJC, who is a Los Angeles County DCS Member, advises that Rick Fearns, K6VE (owner of the original Los Angeles packet system) has repaired and restored the 145.05 MHz packet node on Onyx Peak. It is available for ARES and DCS/RACES use and general ham use. It identifies with the BGBEAR mnemonic. The call sign is AA6HF-5. It is hardwired to #BEAR, which is on 145.030 MHz. The site sees Ridgecrest and Palm Springs, as well as Potosi in Las Vegas and most of Los Angeles and Orange County. It has been several years since OCRACES was involved in packet communications. We used to have a packet bulletin board on Loma Ridge. Now that Outpost Software is available, we might get involved in packet again. The Onyx system would provide our members a means of checking their own packet station operation.
Huntington Beach RACES

Huntington Beach RACES Chief Radio Officer Steve Graboff, M.D., W6GOS, submitted the following pictures of their “very successful” 2012 800-MHz failure Shadow Drill. This year was exceptionally busy and HBRACES was again successful in dispatching and providing tactical communications for all of the HB Fire rigs and personnel, simulating a complete failure of 800 MHz communications and failure of Metronet dispatch. Incoming fire and medical aid calls were intercepted by RACES communicators at the HBPD 911 communications center and relayed to the FDOC over a 440-MHz link. Fire dispatch and unit tactical communications took place on a separate 2-meter net. The exercise occurred during a busy Saturday 12 PM to 8 PM shift.

Laguna Beach RACES

Laguna Beach Emergency Communications Team (LBECT) Chief Radio Officer John Kountz, WO1S, reports that Laguna Beach RACES conducted an experiment with other City RACES units after the simplex portion of the October 6th City/County RACES & MOU Drill. John observed that 50-milliwatt transmissions were heard by Huntington Beach and Anaheim RACES. For this test, the Laguna Beach location was 940 feet above sea level and set back from the surf line about 2 miles.

Newport Beach RACES

Newport Beach RACES has been granted the call sign N6NBR. The new call sign will be used on the VHF and UHF Winlink RMS nodes as well as for voice communications in future drills.

Tri-Cities RACES

San Juan Capistrano RACES Radio Officer Joe Lopez, W6BGR, requested and received assistance from various RACES units to participate with Tri-Cities RACES in the San Onofre Nuclear Generating Station (SONGS) siren test on Wednesday, October 24, 2012, from 10:00 AM until noon. Participants were in place at their assigned siren by 9:30 AM, for polling by Net Control. Each emergency siren within the 20-mile radius of SONGS was tested three times, plus a public-address system test. Three separate Net Controls (San Clemente, San Juan Capistrano, and Dana Point) called the volunteers for a siren report on how it was heard or if it was heard at all. Tri-Cities RACES has been assisting those three cities and Southern California Edison with confirming that these towers work and helping them get the word to Edison repair technicians when they are not. Participating from OCRACES was Chief Radio Officer Ken Bourne, W6HK.
**November 2012**

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**Upcoming Events:**

- **Nov 5:** OCRACES Meeting, 1930, 840 N. Eckhoff Street, Suite 104, Orange. Training for Nov. 6 ballot transportation communications
- **Nov 6:** Communications from Collection Centers to Vote Tally Center after Presidential Election polls close, 2000
- **Nov 22:** Thanksgiving Day
- **Nov 26:** Southwest ACS Frequency and Radio Test, 2015
- **Dec 3:** OCRACES Holiday Dinner, 1830, Katella Grill, 1325 W. Katella Ave., Orange
- **Jan 7:** OCRACES Meeting, 1930, 840 N. Eckhoff Street, Suite 104, Orange. D-STAR presentation by Ed Kane, W6ONT
- **Jan 28:** City/County RACES & MOU Meeting, 1915, 840 N. Eckhoff Street, Suite 104, Orange

**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.**

**Mission Statement**

**County of Orange RACES Frequencies**

- 10 m: 29.640 MHz output, 29.540 MHz input, 107.2 Hz PL (off the air)
- 6 m: 52.620 MHz output, 52.120 MHz input, 103.5 Hz PL
- 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: Off the air until reprogrammed to new coordinated frequencies

*Primary Net—Mondays, 1900 hours

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<thead>
<tr>
<th>RACES Program Manager</th>
<th>Chief Radio Officer (Captain)</th>
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<tbody>
<tr>
<td>Delia Kraft, KF6UYW</td>
<td>Ken Bourne, W6HK</td>
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<tr>
<td>714-704-7979</td>
<td>714-997-0073</td>
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<th>Radio Officers (Lieutenants)</th>
<th>Assistant Radio Officers ( Sergeants)</th>
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<tr>
<td>Scott Byington, KC6MMF</td>
<td>Jack Barth, AB6VC</td>
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<td>Harvey Packard, KM6BV</td>
<td>Chuck Dolan, KG6UC</td>
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<td>Ralph Sbragia, W6CSP</td>
<td>Jim Carter, WB6HAG</td>
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<td>Ernest Fierheller, KG6LXT</td>
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**County of Orange RACES**

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Meet your County of Orange RACES Members!

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KC6MMF

Harvey Packard  
KM6BV

Ralph Sbragia  
W6CSP

Della Kraft  
KF6UYW

Marten Miller  
KF6ZLQ

Robert Stoffel  
KD6DAQ

Jack Barth  
AB6VC

Jim Carter  
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Jim Dorris  
KC6RFC

Nancee Graff  
N6ZRB

Ray Grimes  
N8RG

Walter Kroy  
KC6HAM

Martin La Rocque  
N6NTH

Brian Lettieri  
K6VPF

Marty Oh  
KJ6RWE

Kenan Reilly  
K6J

John Roberts  
W6JOR

Joe Selikov  
KB6EID

Tom Tracey  
KC6FIC

Brian Turner  
K6WZS