

October 2009



Newsletter of the County of Orange Radio Amateur Civil Emergency Service

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Captain's Corner

by RACES Capt. Ken Bourne, W6HK, Chief Radio Officer

Resource Typing

The ARRL is looking at the need for amateur radio resource typing to improve the capability to integrate into ICS and to create uniform standards for personnel and equipment. We in RACES need to do the same thing. Ventura County RACES Officer Dave Gilmore, AA6VH, suggests this as a topic at the next Southwest ACS meeting on October 17th. However, Ben Green, WD8CZP, Cal EMA Assistant Chief, Telecommunications, State ACS Program Coordinator, advises that we do not confuse what the ARRL is doing on amateur radio typing with what California Disaster Volunteer Corps classifies as Radio Operator Specialist, Communications Classification, Disaster Service Worker Volunteer Program (DSWVP). Ben says both are completely separate distinctions. The California Disaster Volunteer Corps typing is for all radio operators (amateur or otherwise) within the "Radio Operator Specialist" classification.

NIMS defines resource typing as "categorizing, by capability, the resources requested, deployed, and used in incidents. Measurable standards identifying resource capabilities and performance levels serve as the basis for categories. Resource users at all levels use these standards to identify and inventory resources."

In his search for information about NIMS resource typing for communications, Tom Tracey, KC6FIC, discovered an interesting Web page at <http://garlandr.s412.sureserver.com/graces/resourceTdata.html>. This page is on the Garland (Texas) RACES Web site, and provides amateur radio communications resource typing information. A link is provided to a concise Communications Resource Function ordering guide. Another link goes to "The Public Service, RACES, & ARES Communications Resource Functions Equipment Guide." The change from "Communications Resource Types" to "Communications Resource Functions" or CRF was presented recently at the Ham-Com convention, due to NIMS classifications using "Type" to describe a measure of minimum capability to perform that function (with a Type I implying a higher capability than a Type II), rather than function. This change is in the naming and does not affect the function descriptions and equipment lists for each, but aids in putting together Typed Response Individuals and Teams. This document is "a great resource tool for any public-service event or EmComm mutual-aid incident in staffing and assignments of amateur radio communicators." A link is provided to a check list to determine an individual's CRF. Links to PowerPoint presentations on resource typing for amateur radio are provided.

The Next
OCRACES
Meeting is

October 5, 2009

1930 Hours

840 N. Eckhoff St.,
Suite 104, Orange

Featured Speaker:

Steve Riches, N6SOG
OCSD Search & Rescue



Orange County Sheriff's Department
Communications & Technology Division

City/County RACES & MOU Drill: October 3rd

The next City/County RACES & MOU Drill is on Saturday, October 3, 2009, from 0900 to 1100 hours. The scenario for this drill is "Civil Unrest." This will be conducted as an ACS drill, to allow all MOU participants (such as the Hospital Disaster Support Communications System, Orange County Red Cross Communications, and Orange County SKYWARN) that do not have an MOU with all City RACES units to communicate with those Cities, which otherwise would not be allowed under the strict regulations of FCC RACES rules. Orange County RACES will be the coordinating agency for the ACS exercise. It is our hope that conducting the exercise in this manner will promote more communications between all participants.

All units should test as many forms of voice, video (ATV and SSTV), and data/digital (PSK31, Winlink, etc.) communications as they can during this drill. Messages should be prepared ahead of time that reflect the possible needs public-safety agencies might have during a civil-unrest incident. The ICS 213 message form should be used. This form is downloadable from the OCRACES Web site at <http://www.ocraces.org>.

The focus of this exercise will be communicating by voice, primarily between City and MOU EOCs, and secondarily with the County EOC. Those units that wish to test PSK31, Winlink, ATV and/or SSTV, and other modes may also do so. OCRACES will deploy its emergency communications response vehicle (ECRV) to Craig Regional Park in Fullerton for this exercise. ATV will be set up at the ECRV, and images will be received at the Orange County EOC.

To communicate with a City RACES unit, City and County RACES and MOU units will use the called City's primary frequency as listed in the January 2009 *Official RACES Guidebook* ("Yellow Book"). To communicate with County RACES, all stations will use the 52.62 MHz (-) repeater, 103.5 Hz PL, as the primary calling frequency, and the 146.895 MHz (-) repeater, 136.5 Hz PL, as the secondary frequency. City RACES units calling HDSCS will use the 146.970 MHz (-), 136.5 Hz PL, as the primary frequency. HDSCS might direct the calling station to another frequency, using the "frequency numbers" as shown on page 5 in the January 2009 *Official RACES Guidebook*. For Winlink, the RMS call sign is W6ACS-1. Frequency 1 is 145.05 MHz (1,200 baud), and Frequency 2 is 431.100 MHz (9,600 baud). The frequency for PSK31 is 7.070 MHz, at 1,200 Hz audio.

For those participating with ATV and/or SSTV, the exercise will identify video paths between City, County, and MOU EOCs, required antennas and transmitter power levels for providing P4 or better video to receiving stations, and a means to promote SSTV/ATV capabilities and methodology for multiple City operations during major events. Operations will be on the 449.180 MHz (-) repeater, 107.2 Hz PL, for SSTV signals and on 426.250 MHz simplex for ATV video signals. We will use 144.345 MHz simplex for coordinating ATV and SSTV transmissions, and for Cities and MOUs to contact OCRACES at 0900 to indicate their video participation. Each City should send video from a field site to their EOC and to the County EOC, and transmit video from inside their EOC to show their receiving station or their EOC operations board. On/off air times will be coordinated with OCRACES net control on 144.345 MHz. This exercise will identify which Cities can receive adjacent-city ATV/SSTV video and if multiple ground-level signals can coexist without causing multiple interference.

The scenario for this exercise is widespread civil unrest and gang uprisings resulting from a spiraling economic depression exacerbated by an extreme heat wave. Considering the scenario, participants are asked to prepare messages ahead of time that reflect the possible needs public safety might have such as shootings, fires, traffic gridlock, looting, road closures, rescue operations, shelter needs, potable water procurement, hospital damage, etc. Messages could also cover resources that a City might offer, such as care and shelter facilities or police/fire/public-works personnel and equipment. Having these messages already prepared will help expedite the flow of radio traffic during the two-hour exercise. The FEMA ICS 213 General Message Form should be utilized by all participants in this drill, and will help ensure common radio traffic-passing techniques. The form can be downloaded from the County of Orange RACES Web site at <http://www.ocraces.org>.

Each City RACES unit should send one message to OCRACES, three messages to at least four other Cities, one message to HDSCS, and one e-mail to OCRACES at RACES.EOC@ocgov.com. MOU units need to send one message to another MOU, to County EOC, and to at least four Cities, plus an e-mail to OCRACES. OCRACES will send one message to each City RACES and MOU unit, and to a neighboring County if directed by Cal EMA.

Next OCRACES Meeting: October 5th

The next OCRACES meeting is on Monday, October 5, 2009, at 7:30 PM, at OCSD/Communications, 840 N. Eckhoff Street, Suite 104, in Orange. Our featured speaker is OCSD Reserve Captain Steve Riches, N6SOG, who will give us a presentation on the Sheriff's Search and Rescue Reserve Unit (SRRU). Ready to respond 24 hours a day, the unit is dedicated to saving lives, reuniting families, and apprehending fleeing suspects throughout Orange County, and wherever else they are requested to serve. This reserve unit is comprised of sworn deputies and Professional Services Responders (PSRs). It manages urban and wilderness searches for missing persons, and has formal agreements with Cal EMA, the US Forest Service's Cleveland National Forest, and many other local agencies. Squad assignments include: K-9 Operations/Bloodhound Squad; Technical Search Squad; Technical Rescue Squad; Medical/Triage Squad; Command, Control & Logistics Squad; Administrative Squad; Off Road Enforcement Team; and Bike Patrol Team. Steve will talk about the qualifications and extensive training for being an SRRU member, and will give examples of some of the more exciting SRRU missions. He will also describe how the unit utilizes amateur radio (including repeaters and APRS). At this meeting we will discuss what kind of equipment OCRACES members should have in order to be of service to SRRU when the unit needs additional communications capabilities.

Also at this meeting we will review the October 3rd City/County RACES/ACS & MOU drill.

City/County RACES & MOU Meeting: Oct. 26th

The next City/County RACES/ACS & MOU meeting is on Monday, October 26, 2009, at 7:00 PM, at OCSD/Communications, 840 N. Eckhoff Street, Suite 104, in Orange. All City and MOU officers and coordinators are asked to attend and give brief (2 to 3 minute) reports of their activities since the last City/County meeting, including any participation in the Great California ShakeOut on October 15th. City and MOU officers are also urged to announce upcoming events, especially if members of other units are invited to attend or participate. All OCRACES members are also encouraged to attend this meeting.

At this meeting we will also review the October 3rd City/County RACES/ACS & MOU exercise, and discuss progress toward establishing a countywide Winlink system and our hopes for additional grant monies for desired equipment for enhanced City and County RACES communications.

Possible Activation for HCA Flu PODs

We are waiting to hear if RACES communicators are needed during the day on Friday, October 30, 2009. That is the day that Orange County Health Care Agency's Health Disaster Management Division will hold its 2009 Point of Dispensing (POD) Vaccination Exercise. In partnership with the cities of Garden Grove, Rancho Santa Margarita, and Santa Ana, along with other response organizations, this exercise will test mass dispensing/vaccination capabilities by providing free seasonal (no H1N1/swine) flu shots to the public at the following locations:

- ◆ Crystal Cathedral, 13280 Chapman Avenue, Garden Grove
- ◆ Cox Communications, 29947 Avenida de Las Banderas, Rancho Santa Margarita
- ◆ Santa Ana College, 1530 West 17th Street, Santa Ana

If we are activated, duty would be from 1130 to 1330 hours. Enough OCRACES members have already volunteered for the above three locations plus at least one HCA facility. Orange County EMS will let us know if we need to activate for this event.

Even if we are not activated, this is a good opportunity to receive your free flu shot.

OCRACES Activates for Severe Fire WX Patrol

On Monday, September 21, 2009, Orange County Fire Authority Battalion Chief/Deputy Fire Marshal Pat Antrim informed OCSD Emergency Communications Manager Marten Miller, KF6ZLQ, that OCFA had received notification that the National Weather Service had issued a Red Flag Warning effective from 0900 September 22nd through 2100 September 24th. The area affected by this warning included the Trabuco Ranger District of the Cleveland National Forest as well as the Santa Ana Mountain Canyons (Santiago, Silverado, Modjeska, and Trabuco), which is designated as Area 2 for OCRACES severe fire weather patrols. OCFA also recommended patrolling the Ortega Highway (patrol Area 3) during this period.

A Red Flag Warning means that critical fire weather conditions are expected. A combination of strong winds, low relative humidity, and hot weather will create explosive fire growth potential. High winds did not occur during our patrols, but the other conditions did exist.

RACES Capt. Ken Bourne, W6HK, and Tom Tracey, KC6FIC, patrolled Area 2 on Tuesday, September 22nd, from noon until 1730, and Randy Benicky, N6PRL, and Lee Anne Benicky, KI6VUH, patrolled Area 3. Marten Miller, KF6ZLQ, and Sgt. Chuck Dolan, KG6UJC, were net control. On Wednesday, September 23rd, Martin La Rocque, N6NTH, and Tom Tracey, KC6FIC, patrolled Area 2, and the Benickys patrolled Area 3. Chuck Dolan, KG6UJC, and Ken Bourne, W6HK, were net control. On Thursday, September 24th, Chuck Dolan, KG6UJC, and Nancee Graff, N6ZRB, patrolled Area 2, while Ken Bourne, W6HK, was net control.



Tom Tracey, KC6FIC (left), and Martin La Rocque, N6NTH, at Martin's vehicle during severe fire weather patrol in Area 2 on Wednesday, September 23rd

OCRACES Participates in SONGS Exercises

County of Orange RACES Radio Officer Harvey Packard, KM6BV, participated in the SONGS (San Onofre Nuclear Generating Station) FEMA Graded Exercise at the Loma Ridge EOC on Wednesday, September 23, 2009. This followed training courses he took for the exercise, and his participation in the SONGS Dress Rehearsal exercise on Wednesday, August 19th.

Great California ShakeOut: October 15th

As mentioned in the September 2009 *NetControl*, at 10:15 AM on October 15, 2009, Californians will participate in the largest earthquake drill ever! The purpose of the ShakeOut is to practice how to protect ourselves during earthquakes, and to get prepared at work, school, and home.

The Great California

**Shake
Out**

October 15, 2009
www.ShakeOut.org

This is your chance to Drop, Cover, and Hold On! Some Orange County Cities will activate their RACES units for this drill, but there will be no Orange County EOC activation. OCRACES members are encouraged to communicate with City RACES units that are active, if simulated mutual-aid check-ins and traffic are invited. For more information, read the article in last month's newsletter, and go to <http://www.ShakeOut.org>.

Watching The Web

**Web Sites of Interest to RACES Personnel
by RACES Capt. Ken Bourne, W6HK, Chief Radio Officer**

One Second After

<http://www.onesecondafter.com/>



Thanks to OCS Reserve Lt. David Corsiglia, WA6TWF, for leading me to this Web site by lending me the disturbing novel, *One Second After*, by Professor William R. Forstchen. I have editorialized a couple of times on the possibility of an EMP (electromagnetic pulse) attack and the effects it would have on our communications equipment. This book dramatizes how an EMP attack would affect our entire way of life, sending the United States back to the preindustrial age by knocking out the entire power grid, all communications systems and electronic equipment (except for old tube stuff), and all transportation (except very old cars that do not have electronic fuel injection).

A couple of pages on the <http://www.onesecondafter.com> Web site that everyone should read are “What is EMP?” and “Preparing for EMP.” The site also links to <http://empcommission.org>, which is the home page of the Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack.” The EMP Commission was reestablished via the National Defense Authorization Act for Fiscal Year 2006.

In the limited space remaining, I will quote just a little of the extensive information on the “What is EMP?” page, which Dr. Forstchen calls “*EMP 101, a Basic Primer & Suggestions for Preparedness*.” Dr. Forstchen asks us to visualize a nuclear bomb detonating 200 miles above the United States. “As it explodes it emits a powerful wave of gamma rays. As this energy release hits the upper atmosphere it creates an electrical disturbance known as the Compton Effect. The intensity is magnified. View it as a small pebble rolling down a slope, hitting a larger one, setting that in motion, until finally you have an avalanche. At the speed of light this disturbance races to the earth’s surface. It is not something you can see or hear, in the same way you don’t feel the electrical disturbance in the atmosphere during a large solar storm. For all electrical systems, though, it is deadly.”

Dr. Forstchen says the pulse striking the earth’s surface could have a power ranging up to hundreds of amperes per square yard. Wherever the energy strikes wires, metal surfaces, antennas, and power lines, it will travel along those metal surfaces. “A high-tension wire miles long will absorb tens of thousands of amps, and here is where the destruction begins as it slams into any delicate electronic circuits, meaning computer chips, relays, etc. In that instant, they are overloaded by the massive energy surge, short circuit, and fry.”

According to Dr. Forstchen, “Law enforcement will be powerless without radios, cell phones, and squad cars, unable to know where there is a crisis and how to react. The real horror show within hours will be in hospitals and nursing homes. They’re required by law to have backup generators, but those generators are hot-wired into the building so power can instantly kick in if the main system shuts down. That hot wiring means the EMP will take out the generators and their circuitry as well.”

Without transportation and refrigeration, food will quickly become unavailable. The infrastructure will not be repaired for months, if not years, and our nation may never recover. We need to be concerned about Iranian and North Korean missile and nuclear developments. Launching these weapons could be accomplished from a container ship in the Gulf of Mexico, for example. Perhaps Dr. Forstchen is scaring us in order to sell more copies of his book. Nevertheless, the book and the Web site give us much to think about. How could RACES units provide any kind of communications to assist in such a circumstance, especially with our solid-state radios destroyed?

RACES/ACS News from Around the County

"RACES/ACS News" provides an opportunity to share information from all City & County RACES/ACS units and MOU organizations in Orange County.

Please send your news to:

**w6hk@
ocraces.org**

Anaheim

The new Anaheim RACES Chief Radio Officer is Chris Peña, KE6GXA, who has been the RACES liaison for the Anaheim Police Department. Bob Templeton, KI6CWA, is the Assistant Radio Officer.

Newport Beach

Newport Beach RACES will hold its Monday October 14th meeting at the Orange County EOC on Loma Ridge at 7:00 PM. OCRACES member Tom Tracey, KC6FIC, and OCSD Emergency Communications Manager Marten Miller, KF6ZLQ, will give presentations on OCRACES and the EOC. Randy Benicky, N6PRL, and RACES Sgt. Chuck Dolan, KG6UJC, will lead the tour of the EOC and Control One.

Seal Beach/Los Alamitos

Seal Beach RACES Assistant Radio Officer Mike Maronta, KC6YNQ, gave a live ATV demonstration at the September 9th Seal Beach/Los Alamitos RACES meeting. The system runs on 426.25 MHz. It is housed in two Pelican cases and contains a TV camera, microphone, 35 amp-hour battery, switching power supply, battery charger, 4-watt transmitter, 25-watt amplifier, and cables. The system also includes a 9-foot tripod for the beam antenna. Mike plans to test around the city to verify coverage from the high-gain antenna on the PD roof.

Mike presented a quick "chalk talk" overview lesson at the meeting on how the Winlink system is set up. He showed how it connects with Loma Ridge at 9,600 baud on 431.100 MHz, and at 1,200 baud on 2 meters. Mike will train a small group who will then be responsible for training other members on how to use Winlink. All members were encouraged to study Winlink at <http://www.winlink.org>.

Seal Beach Radio Officer Alan Ginsburg, WA6TOI, announced that he is resigning after four years as Radio Officer for the City of Seal Beach, effective as of the next meeting.

Westminster

Westminster RACES participated in a CERT Emergency Preparedness Expo at the Westminster Mall on Saturday, September 20, 2009. They shared a booth with Seal Beach/Los Alamitos RACES. Members demonstrated VHF and HF communications to the public and handed out Westminster RACES brochures.

Red Cross / Orange County Chapter

Gordon West, WB6NOA, has offered to teach a series of ham classes at Red Cross in Santa Ana during the next couple of months. These are intended not only to help develop the current volunteer pool of groups but also to help develop and recruit potential volunteers. The dates for these classes are:

- ◆ Technician Class, October 3-4 (Saturday/Sunday)
- ◆ General Class, October 24-25 (Saturday/Sunday)
- ◆ Extra Class, November 6-8 (Friday evening/Saturday/Sunday)

The cost of the courses is materials only. Individuals interested in attending a class should contact Gordo directly at (714) 549-5000.

Orange County

Congratulations to OCRACES Radio Officer Harvey Packard, KM6BV, who has been inducted as an OCSD Professional Services Responder (PSR). We also congratulate OCSD/Communications Sr. Comm. Tech. Heide Aguirre, KB6YHJ, on becoming a PSR. She plans to be at the next OCRACES meeting.

October 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3 <i>City/County RACES/ACS & MOU Drill</i>
4	5 <i>OCRACES Meeting & Weekly ACS Net</i>	6	7	8	9	10 <i>Health & Safety Expo, Los Alamitos Base</i>
11	12 <i>Weekly ACS Net</i>	13	14 <i>Newport Beach RACES, OC EOC</i>	15	16	17 <i>Southwest ACS Meeting, Fontana</i>
18	19 <i>Weekly ACS Net</i>	20	21	22	23	24
25	26 <i>County/City RACES Meeting & ACS Net</i>	27	28	29	30	31

Upcoming Events:

- Oct 3: City/County RACES/ACS & MOU Drill, 0900-1100
- Oct 5: OCRACES Meeting, 1930, 840 N. Eckhoff St., Suite 104, Orange
- Oct 10: Survive and Thrive Run/Walk—Health & Safety Expo, Los Alamitos Joint Forces Training Base
- Oct 14: Newport Beach RACES Meeting, Orange County EOC, 1900
- Oct 17: Southwest ACS Meeting, San Bernardino County EOC, Fontana
- Oct 26: City/County RACES & MOU Meeting, 1900, 840 N. Eckhoff St., Suite 104, Orange
- Oct. 26: Southwest ACS Radio/Frequency Test, 2015



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

- 10 m: 29.640 MHz output, 29.540 MHz input, 107.2 Hz PL
 - 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: 1282.025 MHz output, 1270.025 MHz input, 88.5 Hz PL
- *Primary Net—Mondays, 1900 hours

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**“W6ACS ...
Serving
Orange County”**

Meet your County of Orange RACES Members!



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Scott Byington
KC6MMF



Harvey Packard
KM6BV



Ralph Sbragia
W6CSP



Marten Miller
KF6ZLQ



Robert Stoffel
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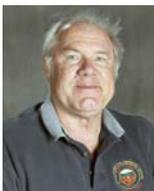
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