Fine-Tuning OCRACES

We have many challenges in 2009, with a nose-diving economy in the county, state, and nation. Tens of thousands of workers are losing their jobs, and are becoming desperate with regards to feeding and supporting their families. We are now hearing predictions of increased crime and possibly riots throughout the nation, if the economy continues to plummet, making it necessary for law enforcement and other public-safety agencies to enhance their communications systems. This necessity for improved communications includes RACES units. Accordingly, OCRACES, the city RACES units, and the MOU organizations, at the City/County RACES/ACS & MOU meeting on January 26, 2009, selected a scenario of “civil unrest” for our next City/County RACES/MOU drill on October 3, 2009. To prepare for this drill, and possibly for such conditions (or other conditions such as fires, floods, and earthquakes) that could occur earlier in the year, we must continue to update our equipment and fine-tune our operating procedures.

At our January 5th OCRACES meeting, we discussed fine-tuning our operations by reconfiguring our squads. We are now considering going from three squads (which function primarily as calling trees) into two squads with a more practical geographical and technical/operational configuration. That is, we would have a North Squad and a South Squad, each headed by a Radio Officer (Lieutenant). Each squad would have two Assistant Radio Officers ( Sergeants), one responsible for Operations and the other responsible for Technology. Responsibilities would include operations training and setting up of equipment.

Speaking of setting up equipment, we are going to be a very busy RACES unit if the UASI funding goes through, as expected. We will be working with the City RACES units to provide them with complete Winlink and TCI/IP-over-radio systems. I urge all members to get as familiar as possible with the technologies and operating procedures for these modes of operation. Another pending grant involves a new OASIS satellite trailer, which will be our responsibility to put together and make the system work.

And speaking of operating procedures, I urge all OCRACES members who have net duty to make sure you are using the latest roll-call roster, which is frequently updated (such as the roster enclosed with this newsletter snail-mailed to members). Remember that the repeater has a key-up delay, so “breathe” for a second after PTTing before speaking, so a station checking in hears your “Roger” acknowledgement. Also acknowledge each visitor or late check-in by stating their call signs (or at least suffixes), so they know whom you are acknowledging (and that a stronger station did not override them).
OCRACES to Host Red Cross at Loma Ridge

The American Red Cross / Orange County Chapter will hold its next Disaster Communications Activity Meeting at the Orange County EOC, Loma Ridge, on Tuesday, February 17, 2009, at 1900 hours. A brief presentation will be given by OCSD/Communications on the facility. OCRACES members will attend as hosts and conduct tours of the EOC, especially the RACES Room. Additionally, the meeting will cover some start-of-the-year Red Cross items, including planning for the May-Day event (at which OCRACES will exhibit its emergency communications response vehicle) and frequency-list changes.

Next Southwest ACS Meeting: February 7th

The next Southwest ACS meeting, at which Radio Officers from County RACES/ACS units in Southern California meet with the Cal EMA (formerly State OES) ACS Officer to study ways of enhancing mutual-aid communications, will be held on Saturday, February 7, 2009, from 0900 to 1200, at the Ben Clark Training Center, 16791 Davis Avenue, Building 3408, in the Fire Department Executive Conference Room, in Riverside, near the March Air Reserve Base.

OCRACES to Deploy Van to Vision Quest 2009

At the request of San Juan Capistrano RACES (Tri-Cities RACES) Radio Officer Joe Lopez, W6BGR, OCRACES will deploy its emergency communications response vehicle on Saturday, March 7, 2009, to O’Neill Regional Park to serve as net control and communications command post for the Vision Quest 2009 Santa Ana Mountains biking event. Lt. Scott Byington, KC6MMF, is leading our deployment. Funds raised by this event will be used to support the Warrior’s Society goals of maintaining the trails of the Trabuco District of the Cleveland National Forest and providing low-cost mountain biking events for the public. Joe serves as communications director for the society.

The ride is more than 56.5 miles, with more than 11,000 feet of elevation gain. It will begin from the Blackstar Canyon gate at 0530. Bikers will ride up Blackstar Canyon Road to the Main Divide Road, across the Main Divide Road to and down the Silverado Trail (Motorway) to Aid Station #1 at Maple Springs. At this point, they will follow Maple Springs Road to the Main Divide and Modjeska Peak and Santiago Peak and then down to the Holy Jim Trail. They will then ride down the Holy Jim Trail to Aid Station #2 at the parking area at the base of Holy Jim Canyon. They will then continue up Trabuco Road to the Trabuco Trail and the West Horsethief Junction. They will hike up the West Horsethief Trail to the Main Divide Road. From this point they will ride across the Main Divide Road to the Trabuco Trail and down the Trabuco Trail to the Trabuco Creek Trail and Road. They will then follow Trabuco Creek Road to the finish line at the intersection of Trabuco Creek Road and Trabuco Canyon Road.

The first cutoff time is 0930 at the bottom of the Silverado Trail and Maple Springs. The second cutoff time is 1130 at the intersection of Maple Springs Road and the Main Divide. The third cutoff time is 1200 at the bottom of Holy Jim Trail. Communications are critical at these times, to ensure mountain-biker safety.

Tri-Cities RACES members will be stationed at West Horsethief, Four Corners, Trabuco Trail, and Main Divide. Some of the OCRACES portable APCOR repeaters might be used to enhance radio coverage.
The Baker to Vegas Challenge Cup Relay is rapidly approaching (March 14-15, 2009). Lt. Ralph Sbragia has submitted the necessary forms, and advises that a “cable party” will be conducted in early February, at which OCRACES members will assist with checking and remaking cables to interconnect vehicles with radios with TNCs with GPS receivers with antennas, etc. Lt. Scott Byington, KC6MMF, has arranged for rooms in Pahrump during B2V. OCRACES members are needed to help with setting up the equipment and operations in Pahrump, as well as with installations at Baker and before the event at Eckhoff. Randy Benicky, N6PRL, is our liaison with the teams.

Preparing for Baker to Vegas

OCRACES members are requested to participate in at least the first day of Field Day on Saturday, June 27, 2009, at Craig Park. We still need band captains (who will supply radios, antennas, computers, and operators for each band), a van driver, a responsible person for site registration, a food committee, a publicity person, etc. Thanks to Sgt. Jim Carter, we have a nice three-element tri-band beam for Field Day. Those who wish to participate throughout the night and into the next day, Sunday, June 28th, are welcome to do so. Help from other members who do not stay the night but who return by 11:00 AM on Sunday to dismantle our operations will be appreciated.

Getting Ready for Field Day

OCRACES members are requested to participate in at least the first day of Field Day on Saturday, June 27, 2009, at Craig Park. We still need band captains (who will supply radios, antennas, computers, and operators for each band), a van driver, a responsible person for site registration, a food committee, a publicity person, etc. Thanks to Sgt. Jim Carter, we have a nice three-element tri-band beam for Field Day. Those who wish to participate throughout the night and into the next day, Sunday, June 28th, are welcome to do so. Help from other members who do not stay the night but who return by 11:00 AM on Sunday to dismantle our operations will be appreciated.

OCSD/Communications 75th Anniversary

Orange County Communications, now the Communications Division of the Orange County Sheriff’s Department, will celebrate its 75th anniversary on Monday, March 2, 2009. As part of the celebration, OCRACES will display its emergency communications response vehicle just outside the northwest corner of the Service Bay. We will operate a special-event amateur radio station from the vehicle, using the W6OCC/75 call sign. A 40-meter dipole is being installed above the Service Bay for that purpose. We will also operate on 20 meters with the vehicle’s screwdriver antenna. OCSD/Communications Engineering Technician II Gina Pressler designed a beautiful QSL card to be sent to those who contact our station.

OCSD/Communications Assistant Director Ray Grimes, N8RG, who manages the Engineering Section, is working on an anniversary display of radio equipment from the early days of the Division. He asks us to be on the lookout for old amateur radio equipment such as Gonset Communicators, Viking II transmitters, Hammarlund receivers, etc., especially with Civil Defense decals, that could be used in the display. Please contact Ray if you have any old equipment for the display. We are also looking for old OCRACES newsletters, photographs, and other material, plus assistance with mounting old photos on poster boards for the RACES display that will be in the large conference room during the event, along with other exhibits. A background video will be playing in this room, along with old radio audio. Additional exhibits will be in the Engineering library and in the Service Bay.

Although March 2nd is a work day, we hope many OCRACES members will be available to participate in this celebration. We are also needed to assist with parking. Open House is from 0900 to 1500. Formal presentations will begin at 1300. Tours will be given of the facility. as well. All current and former employees, all public-safety organizations, and the press are being invited to attend.
**State Launches Cal EMA on January 1st**

The California Governor’s Office of Emergency Services (OES) merged with the Governor’s Office of Homeland Security (OHS), effective January 1, 2009, to form the cabinet-level California Emergency Management Agency (Cal EMA), thus strengthening the state’s ability to respond to emergencies and natural disasters. Governor Arnold Schwarzenegger announced Matthew Bettenhausen as acting Cal EMA secretary.

Bettenhausen has served as OHS director since 2005. Additionally, he is currently co-chair of the National Homeland Security Consortium and vice-chair of the National Governors Association Homeland Security Advisors Council. The Governor also announced Francis "Cookie" McCarton as undersecretary. He has more than 22 years of experience working in emergency prevention and response. McCarton has worked for OES where he has served as chief deputy director since 2007 and previously served as deputy director from 2004 to 2007.

On December 4, 2008, State Assembly Member Kevin Jeffries introduced AB 54 to enact legislation to transfer the Department of Forestry and Fire Protection, the Office of the State Fire Marshal, the State Board of Fire Services, the Department of the California Highway Patrol, the Office of Traffic Safety, the California Conservation Corps, and the Emergency Medical Services Authority to the office of the Governor under Cal EMA.

**New Ham Magazines Are Free Online**

*Ham-Mag* says it’s the first free and monthly “E-magazine” for ham radio operators. The January and February 2009 issues have now been released, and may be downloaded from the publisher’s Web site at http://www.ham-mag.com. The magazine is published in France, and is available in English. It is very colorful and informative. The January issue contains articles on how to build a 6-meter half-wave vertical antenna, earphones and microphones for contesting, how to build an HF wavemeter, DX news, dictators and amateur radio, a Romanian school club station, working satellites with your HT, and more. The February issue contains articles on the amateur’s code, categories of poor operators, how to build a compact three-transistor regenerative general-coverage receiver with fixed feedback, DX news, DX calendar, other ham news, history of radio, how to build an antenna azimuth indicator, a digital-mode interface (FSK/AFSK) for sound cards, portable EME operation, audio interconnection from RX/TX to PC, and more.

If you have been subscribing to *WorldRadio* magazine, you are probably aware that the publication has been purchased by CQ Communications, Inc., the publisher of *CQ* magazine. It is now available to all without charge as *WorldRadio Online*, and the first issue, February 2009, is posted on the CQ Web site. To download and view the issue, go to the CQ home page at http://www.cq-amateur-radio.com and click on the “WorldRadio Online” box. You will need Adobe Acrobat Reader in order to read WorldRadio Online. If you do not have it, scroll to the bottom of the welcome page and you will find a link for a free download. To sign up for the free *WorldRadio Online* e-mail alert list, which will provide detailed previews of each issue, go to http://mailman.sunserver.com/mailman/listinfo/WorldRadio-L and register. The first issue is highly colorful, contrary to the black-and-white newspaper-print versions that were previously mailed to subscribers. Feature articles in the February issue include “SS American Victory Still Sails the High Seas” and “Knots to You,” an article detailing how to tie four different knots, including the bowline, rolling hitch, sheet bend, and clove hitch (useful in antenna and tower work, etc.). Columns include “RULES & REGS: The Rules Say,” “DX WORLD: The TO5DX Experience,” “MARS: Are We Ready?,” “HF MOBILE: Ten Years!,” “EMERGENCY COMMUNICATIONS: Self Regulation Creates Safe Communication,” “Trail-Friendly RADIO: Into the Field: Shining Light on a New Theme,” “WITH THE HANDIHAMS: No antenna? No Problem,” “10-10 INTERNATIONAL,” “AMATEUR SATELLITES: A New Vision Statement for AMSAT-NA,” “TRAFFIC: Public Relations,” “PROPAGATION: Polar Mesosphere Summer Echoes,” and “AERIALS: Tuned Antenna.” Departments include “WorldRadio Online Newsfront,” “Visit Your Local Radio Club,” contest and hamfest calendars, “VE Exams,” and “WorldRadio Online Mart.”
Watching The Web

Web Sites of Interest to RACES Personnel
by Ken Bourne, W6HK, OCRACES Chief Radio Officer

National Electronics Museum
http://www.nationalelectronicsmuseum.org/

Thanks to Gary Gray, W6DOE, for bringing our attention to the Web site of the National Electronics Museum (formerly the Historical Electronics Museum). The museum, located within minutes of Baltimore Washington International (BWI) Airport and the BWI Rail Station, offers visitors free access to electronic marvels, from telegraph and radio to radar and satellites. Included is a wide variety of both static and interactive displays, as well as a research and lending library that is open to the general public, with holdings that focus on all aspects of electronics history.

Besides its wide variety of displays, the museum also has a complete amateur radio station, K3NEM (also licensed as W3HEM and W3GR).

The museum is organized into 12 related exhibit galleries. The Fundamentals Gallery provides a basic understanding of electricity, magnetism, and the electromagnetic spectrum. Through hands-on exhibits the visitor gains a better understanding of the invisible electrical world around us.

The Communications Gallery includes the development of the Morse telegraph and the first Bell telephone, Marconi’s pioneering wireless experiments, reproduction of an early amateur radio spark-gap “shack,” and an operational amateur radio station capable of worldwide communications by voice, Morse code, digital modes, and television.

In the Early Radar Gallery, visitors learn how the British built a radar to detect enemy aircraft in the late 1930s. They see the type of radar that detected the attack on Pearl Harbor on December 7, 1941. They see the American radar-controlled anti-aircraft gun that fired shells packed with electronics to shoot down the buzz bombs launched against London in World War II. They also see descriptions of Allied and German radars used in World War II.

In the Cold War Radar Gallery, visitors see a U.S. Navy shipborne fire-controlled radar. They see how radar led to the household microwave oven. They learn how Doppler radar would be used to direct American missiles toward Soviet bombers. They see how the Doppler effect was adapted to measure the speed of automobiles. They see Air Force and Navy airborne fire-control radars. They also learn how side-looking radars developed in the 1950s could map the ground in all kinds of weather.

In the Modern Radar Gallery are TPS-43 and TPS-70 ground-based tactical surveillance radars, an AWACS antenna including a mock-up of the radome, radar tracks of incoming flights at BWI Thurgood Marshall Airport, and a hands-on demonstration of phased-array beam steering.

In the Countermeasures Gallery, visitors see World War II Army Air Force and U.S. Navy jamming and receiving gear, hear an enemy SA-2 (SAM) missile lock on to its target, learn how chaff and decoys are used to fool enemy radar, and examine modern multiconfigurable countermeasure pods.

The Under Seas Gallery includes fundamentals of underwater sound transmission, air-dropped sonobuoys, interactive demonstration of passive and active underwater sounds, display of antisubmarine warfare systems and future Bow Conformal SONAR arrays, and a “shadowgraph” towed vehicle for imaging mines using acoustics.

In the Electro-Optical Gallery, visitors see the famous Norden bombsite of the World War II era, explore the inner workings of the Pave Spike system (designed to be attached under the wing of an F-4 Phantom aircraft), and see themselves in infrared.

The Space Sensor Gallery includes the Lunar TV Camera, AIMP and Ariel II satellites, early weather satellite sensors, the evolution of navigation satellites, and the development of amateur radio OSCAR satellites.

On the museum’s Web site is the Web Gallery, which describes unusual vacuum tubes such as acorns, doorknobs, lighthouses, mushrooms, rockets, peanuts, and pencils.

Also on the Web site is the World War II Radar Kiosk, allowing searches by radar type and country of origin, resulting in pictures and detailed descriptions of the systems.
RACES/ACS News from Around the County

**Fullerton**

Fullerton RACES Radio Officer Gene Thorpe, KB6CMO, reports that about 35 amateur radio operators are needed for the Fullerton Junior Tennis Tournament on January 31, February 1, and February 7-9, 2009. Hours are from 0730 to about 1600. Eight sites will be manned, with 1,800 players covering north Orange County. Call Gene at (714) 680-4258 or e-mail him at kb6cmo@arrl.net.

**Huntington Beach**

Huntington Beach RACES recently updated their primary 2-meter repeater. The existing repeater, over 20 years old and in service for over eight years at City Hall, failed in December 2008. Recognizing the importance of reliable amateur radio communications in and out of the city limits, the Huntington Beach Fire Department purchased a Yaesu VXR-7000 for the city’s RACES program. Installation of the new equipment was completed in early January 2009 and is fully operational. Both the RACES and CERT programs use the repeater, identified by the KH6FL call sign. HBRACES thanks HBFD for its ongoing support of the RACES and CERT programs.

Longtime Emergency Services Coordinator Glorria Morrison, KE6ATG, retired in December 2008. The city is currently in the process of filling this important position. Huntington Beach Fire Chief Duane Olson is scheduled to address RACES communicators at their first meeting of 2009 on February 9th. Chief Olson is anxious to personally reiterate that the city is keenly aware of the importance of amateur radio communications to Huntington Beach’s emergency response plans. Even with the recent retirement of Glorria, the city is committed to the continued success of the RACES and CERT programs.

**Newport Beach**

Newport Beach RACES provided APRS tracking of boats in the city’s Christmas Boat Parade, held on December 17-21, 2008. OCRACES Lt. Ralph Sbragia provided three APRS beacon boxes from our “Baker to Vegas cache” to NBRACES Chief Radio Officer Gary Standard, K6GSX, for the event, and assisted with programming and checking for reliable operation. Gary reported that the three units were tested successfully the week before the parade. Two units were used on two parade-marshals boats on the night of December 18th for a “real world” evaluation as to the benefit of APRS. NBRACES Assistant Radio Officer Larry Somers, KB6FW, reported that he was receiving updates every minute. Gary said, “Everything ran smoothly and reliably and the Boat Parade officials would like to plan on using six to eight units for next year’s parade on all nights.”

The Newport Beach Fire Department CERT Program is sponsoring a ham radio operator class, taught by Gordon West, WB6NOA, on Saturday, February 7, and Sunday, February 8, 2009, from 8:00 AM to 5:00 PM both days. Participants must attend both classes. This is an opportunity for those looking to get their Technician licenses. The location is at the Newport Beach Santa Ana Heights Fire Station #7, 20401 Acacia, off Irvine Avenue, on the corner of Mesa and Acacia. There is a subsidized $65 fee for this class to cover testing costs, course materials, and lunches on both days. For more information, contact Matt Brisbois, KI6RBS, at (949) 644-3112 or e-mail mbrisbois@nbfd.net.

**Seal Beach/Los Alamitos**

Seal Beach/Los Alamitos RACES Assistant Radio Officer Tom Rothwell, K6ZT, advises that the Los Alamitos Race on the Base will be held on Saturday, February 21, 2009, at the Joint Forces Training Base in Los Alamitos, and that amateur radio communications assistance is requested. Tom is compiling a list of volunteers. Los Alamitos RACES Radio Officer John Unrath, K6JHU, will lead the event.
February 2009

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Upcoming Events:
- **Feb 2:** OCRACES Meeting, 1930, 840 N. Eckhoff St., Suite 104, Orange
- **Feb 7:** Southwest ACS Meeting, 0900-1200, Ben Clark Training Center, Riverside
- **Feb 14:** RACES/MOU Breakfast, 0800, Katella Grill, Orange
- **Feb 17:** American Red Cross / Orange County Chapter Communications Meeting, 1900, OC EOC / Loma Ridge
- **Mar 2:** OCSD Communications Division 75th Anniversary
- **Mar 7:** Vision Quest
- **Mar 14-15:** Baker to Vegas
- **Jun 27-28:** Field Day

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

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

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It’s Where It’s @!

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Serving
Orange County”

Meet your County of Orange RACES Members!

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

Jack Barth
AB6VC
Jim Carter
WB6HAG
Ernest Fierheller
KG6LXT
Randy Benicky
N6PRL
Bill Borg
KG6PEX
Chuck Dolan
KG6UJC
Nancee Graff
NIZRB
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Tom Tracey
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