Know Your Radio!

For awhile, I’ve been “threatening” to conduct a drill at an OCRACES meeting, asking all members to bring their handheld radios and be ready to program them to a previously unannounced simplex frequency, and then communicate with each other. I’ve also mentioned that members should know how to move their radios quickly to our 2-meter repeater’s output frequency, if the repeater should fail during an activation.

Well, that happened on October 24th, during our monthly net on OCRACES repeaters on five different bands. It wasn’t our 2-meter repeater that failed, though, but it was our 449.100 MHz repeater, which had been hit by lightning that previous weekend. I was running the nets from Loma Ridge, when I realized that I was not keying up the UHF repeater. I quickly programmed the Kenwood TM-V71A transceiver to transmit on the output, and was able to communicate with most of the County and City RACES members who were going to check in via the repeater. A couple of those who were going to check in told me later that they didn’t figure out how to transmit on the output, before the net ended. Unfortunately, I failed to activate the “PL” (CTCSS) subaudible transmit tone, and Robert Stoffel, KD6DAQ, who was on frequency with his CTCSS decoder activated, did not hear me at first on the output. He noticed, though, that his transceiver display indicated a signal on frequency, so he deactivated his CTCSS decoder and heard me. That’s a good example of knowing your radio!

Therefore, I suggest that we all review the functions of our radios. If our radio is not able to quickly go to the output of a repeater (such as by clicking a “shift” button or a “direct” button), then I suggest programming the output frequencies of our repeaters into your radio’s memory. Be sure to include tone activation and the appropriate CTCSS tone. Then, if the repeater fails (or if you are in an OCRACES caravan out of range of the repeater), you can communicate with the other members on the repeater output frequency (also referred to as “talkaround”).

Besides being able to program a frequency or repeater pair into your radio quickly, you should be familiar enough with your radio to avoid causing problems. For example, be careful not to punch a wrong button (instead of PTT) when checking into a net.

Make sure, if you have a Yaesu radio, that its “WIRES” mode is not activated, which would cause a DTMF “beep” to be sent instead of your voice at the beginning of your transmission (a common problem).

Be sure that the PTT switch on your handheld radio or mobile microphone is not jammed against something (such as between car seats or on a belt), causing accidental (“stuck mic”) transmissions.

If you are not line-of-site to the repeater when using a hand-held radio, position your radio for maximum received signal (“quieting”) before transmitting, for reliable repeater access.
City/County RACES & MOU Drill Goes Well

County of Orange RACES conducted the City/County RACES & MOU ACS Exercise on October 1, 2016, from the RACES Room at the Orange County EOC and at the OCRACES van at the “Career Fair” at the Sheriff’s Academy in Tustin. Also participating were 14 City RACES units (Anaheim, Buena Park, Costa Mesa, Cypress, Fountain Valley, Fullerton, Irvine, Laguna Beach, Laguna Woods, Los Alamitos, Mission Viejo, Orange, Seal Beach, and Westminster) and two MOU units (American Red Cross and Hospital Disaster Support Communications System, HDSCS).

At the EOC RACES Room were Chief Radio Officer Ken Bourne, W6HK, Sergeants Jack Barth, AB6VC, Ernest Fierheller, KG6LXT, and Tom Tracey, KC6FIC, Members Randy Benicky, N6PRL, Roger Berchtold, WB6HMW, Martin La Rocque, N6NTH, and Tom Wright, KJ6SPE, and Applicants Brian Ahn, KM6CXL, and Matt Luczko, KM6CAO. Also at the RACES Room was Ken Simpson, W6KOS, from HDSCS.

Operating from the OCRACES van, which was on display at the Sheriff’s Career Fair in Tustin, were OCSD Emergency Communications Manager Lee Kaser, KK6VIV, and Members Tom Riley, K6TPR, and Tony Scalpi, N2VAJ. Ken Bourne, W6HK, joined them after the drill.

OCRACES sent 15 messages plus four replies, and received 28 messages, during the “General” portion of the drill. OCRACES sent nine messages with attachments to each of the City RACES units on Winlink and received 15 messages (six with Notepad, Word, PDF, and WebEOC-form attachments). We did not have a simplex position in the RACES Room. In the next drill (May 6, 2017), we might send a couple of members up the hill outside the EOC with a simplex. Continued on page 3
radio.

HF propagation on 40 meters was quite poor during the drill. Net Control checked in eight City RACES Units and one MOU.

For the first time, we tried a DMR (Digital Mobile Radio) test during the drill. Robert Stoffel, KD6DAQ, ran the DMR net from another location, and used the N6GGS repeater on Santiago Peak (thanks to Pat Stewart, KA6P, one of the repeater owners). Robert had only three check-ins, via the Local talk group. That talk group was not available much of the time, due to considerable activity on the SoCal talk group, which shares the same time slot. If we try DMR again in the next drill, it has been suggested that we use the stand-alone (not network connected) WB6MIE repeater on Pleasant’s Peak, or perhaps conduct a DMR simplex test, either from Loma Ridge or from another high location such as Coastal Peak Park near Signal Peak.

Also in the next drill, we are considering the deployment of some members to various areas of the County to report on simulated conditions, such as damaged bridges, flooding, etc. We are also planning to rejuvenate member notifications via AlertOC.

Election officials have declared that RACES will not be used for ballot-transportation communications following the General Election on November 8, 2016. Instead, only encrypted communications on 800 MHz will be used. In the past, RACES members have communicated from the Collection Centers to the Vote Tally Center, reporting ballot-box precinct numbers as the boxes were to be transported to the VTC. Considering the unusual aspects of this election, we speculate that the need for higher security precluded the use of non-encrypted RACES communications for this election.

Next OCRACES Meeting: November 7th

The next County of Orange RACES meeting will be on Monday, November 7, 2016, at 7:30 PM, at OCSD Communications & Technology Division, 840 N. Eckhoff Street, Suite 104, in Orange. At this meeting, Control One Supervisor Gabriel Armijo will give us a detailed presentation about Control One and Sheriff’s Dispatch, which are at the Communications Center on Loma Ridge.

RACES Will Not Activate for Election Coverage

Election officials have declared that RACES will not be used for ballot-transportation communications following the General Election on November 8, 2016. Instead, only encrypted communications on 800 MHz will be used. In the past, RACES members have communicated from the Collection Centers to the Vote Tally Center, reporting ballot-box precinct numbers as the boxes were to be transported to the VTC. Considering the unusual aspects of this election, we speculate that the need for higher security precluded the use of non-encrypted RACES communications for this election.
Radio Rodeo: November 15th

RACES will participate again in Radio Rodeo on Tuesday, November 15, 2016, beginning at about 8:00 AM, at the Huntington City Beach parking lot in Huntington Beach. Known last year as the Multi-Agency Regional Radio Interoperability Training Exercise (MARRITE), the event will once again be called Radio Rodeo. It is hosted by the California Statewide Interoperability Executive Committee (CalSIEC) Southern Planning Area (SPA), consisting of the 12 counties comprising the southern section of the state.

The objectives of this communications exercise align with core capabilities for communications and will better prepare participating agencies to meet the challenges of more complex exercises in the future, or a real-world incident. The SPA will then apply the best practices and lessons learned from the preparedness exercise to improve its interoperable communications capabilities across the SPA region.

The primary goals of the Radio Rodeo include:

- Establish communications links between agencies’ systems
- Test interoperability across available radio frequencies and bands
- Communicate locally with all other participants
- Provide an opportunity for participants to exercise their vehicles and radio equipment
- Provide an opportunity for participants to view other vehicles and see the capabilities available in Orange County as well as neighboring agencies
- Include an amateur radio component for organizations that have an affiliated RACES program and vehicle
- Evaluate and troubleshoot any communications failures across the SPA

This interoperability training exercise is hosted in several counties simultaneously, with each County providing a local site for its participants. In past years, Orange, Riverside, San Diego, Santa Barbara, and Ventura Counties have participated. Participating agencies bring their communications vehicle to the Radio Rodeo site, set it up, and then participate in structured radio testing on all interoperability channels over all public-safety frequency bands. This is an opportunity for agency personnel to test the radio equipment and ensure proper programming and functionality of the radios. Over the past four years our Orange County sites have hosted vehicles operated by law enforcement, fire service, public works, and support organizations. Typically, about 20 vehicles of various sizes and capabilities participate each year.

Plaques Dedicated to KN6UX and WB6HAG

At the OCRACES meeting on Monday, October 3, 2016, at the Orange County EOC, wall plaques in the RACES Room were dedicated to deceased members Steve Sobodos, KN6UX, and Jim Carter, WB6HAG.

Steve’s wife Sue and their daughters Christi and Michelle attended the ceremony, with Sue’s granddaughters, and saw Chief Radio Officer Ken Bourne, W6HK, dedicate the plaques, which were designed and procured by Ken as well as by Ray Grimes, N8RG. Ken announced that Steve’s plaque honored his 19 years of service to RACES, part of that time as a Lieutenant. Steve was an expert in video recording techniques and photography, and used his expertise in transmitting images via amateur television to the EOC during emergencies and exercises. He was also an avid participant in the OCRACES hidden-transmitter hunts. Steve was a valued telecommunications engineer with the OCSD Communications & Technology Division. He was also a Level II Reserve Deputy and was the handler of K-9 Bloodhound Kenda in the Search & Rescue Reserve Unit. He passed away on January 11, 2011.

Jim Carter was also honored with a plaque for his many years of service to OCRACES, part of that time as a Sergeant and a Lieutenant. He also honored OCRACES by willing his amateur radio equipment to OCRACES, donated by his wife Alice. Jim especially served in the amateur television area. He also had been a sworn OCSD Reserve Sergeant and had served in the High-Tech Services Reserve Unit. He voluntarily returned to being a Professional Services Responder (PSR) and continued to serve OCSD, especially in the Bomb Squad. He passed away on June 25, 2016.
KM6CXL Hides in Fullerton

Brian Ahn, KM6CXL, was the fox on Monday, October 10, 2016, on the monthly cooperative T-hunt. He turned on the fox box immediately following the 2-meter OCRACES ACS net, hiding in Fullerton in the Amerige Heights Town Center at the northeast corner of Malvern Avenue and Gilbert Street.

Unfortunately, there was only one team participating in this hunt, consisting of Ken Bourne, W6HK, Ken’s son Bob, K6RBI, and Dennis Brunning, KC6NVX. Some of the other active hunters were out of town or battling colds. Nevertheless, Ken, Bob, and Dennis had a great time, and so did Brian the fox. The team started on a hunch at the West Fullerton Shopping Center (northwest corner of Orangethorpe Avenue and Brookhurst Street, and got a good bearing straight north. Once they reached the Amerige Heights Town Center, they drove around the parking lot for some time, due to signal “building bounces,” until they finally zoomed in on the fox toward the eastern side of the parking lot.

The next cooperative T-hunt will be held on Monday, November 21, 2016, immediately following the OCRACES 2-meter net (approximately 7:20 PM). The fox will transmit on the input (146.295 MHz) of the 146.895 MHz repeater. Hunters will compare bearings via the 449.100 MHz repeater, and are encouraged to beacon their positions via APRS throughout the hunt. The fox will be hiding in a city or sector of Orange County (to be announced a few days prior to the hunt) on paved, publicly accessible property. No fees will be required to drive directly to the fox.

The cooperative T-hunts are held on the third Monday of the month (except the second Monday in October). The hunts provide excellent practice in working together to find sources of interference quickly. The hunts are not official RACES events, so DSW (Disaster Service Worker) coverage does not apply. Please drive carefully!

Fox-hunt loops and beams are available from Arrow Antenna and HRO, including the Arrow Model FHL-VHF fox-hunt loop (covers 1 MHz to 600 MHz) and the Arrow Model 146-3 three-element portable hand-held yagi. The Arrow OFHA 4-MHz offset attenuator can be useful when close to the fox, to prevent receiver overload. An all-mode transceiver is quite useful, allowing hunters to switch to the SSB or CW mode for detecting extremely weak signals, or to switch in a built-in attenuator, reduce RF gain, or tune slightly off frequency when dealing with extremely strong signals. Some hunters use the DF2020T radio direction finder kit, which is a Doppler system available from Global TSCM Group, Inc. (http://www.kn2c.us). A very similar system is the MFJ-5005 Doppler direction finder. Other useful tools are the Foxhunt app for iPhones and the Triangulate app for Android phones. For some excellent information on T-hunting, see http://www.homingin.com.

Welcome Matt Luczko, KM6CAO

County of Orange RACES welcomes its newest member, Matt Luczko, KM6CAO. Matt was born in Utica, New York, and moved to California in March 1982. He worked for Hughes Aircraft until its closure in 1995, as Facilities Director and head of major construction. He then joined the ranks of the private sector, directing his skills toward major construction projects for Disney Adventure Park, Hoover Dam, Chapman University, and Whittier College, as well as Los Angeles and Orange County school bond projects, etc. After retiring in 2008, he started his own Construction Management Contracting firm.

Matt became a Professional Services Responder in the OCSD Reserve Bureau on March 20, 2012. He then became a member of the Search & Rescue Reserve Unit and is still active with the unit. He is an active member of Orange County Intelligence Assessment Center (OCIAC), where he met Randy Benicky, N6PRL. Randy rekindled Matt’s long-time interest in ham radio.

OCRACES UHF Repeater Takes Lightning Hit

The OCRACES 449.100 MHz repeater took a lightning hit during a recent thunderstorm, and will be out of service until replaced. Meanwhile, for UHF coverage, members may still use the 449.180 MHz repeater, which is on a lower site and with less coverage of South County. During Radio Rodeo on November 15, 2016, the 448.320 MHz repeater, will be available. That high-coverage repeater is intended for priority use by radio-amateur members of the California Public-Safety Radio Association (CPRA), but is also available for OCRACES use.
Laguna Woods RACES

On Wednesday, September 21, 2016, the Laguna Woods City Council issued a Proclamation declaring October 2016 as Amateur Radio Appreciation Month. The Council expressed its appreciation to radio operators, both in Laguna Woods and around the globe, for their long standing tradition of supporting their communities in responding to emergencies and spending many hours training. Laguna Beach RACES Radio Officers Jim Riedel, K6EEE, and Ernie Senser, W6ETS, accepted the proclamation. Both of these individuals are members of the Laguna Woods Amateur Radio Club. Jim is Vice President and Ernie is Treasurer.

The next meeting of the Laguna Woods Amateur Radio Club is Thursday, November 3, 2016, at 10:30 AM to 12:00 noon, in Clubhouse 1, Dining Room 3. Licensed amateur radio operators living in the Village are welcome to join the club at any time of the year. Members and Laguna Woods Village residents and their guests only may attend the meetings.

Mission Viejo RACES

Mission Viejo RACES-ARES added three new members since its last meeting.

In September, Mission Viejo RACES-ARES members provided, security and safety communications for the U.S. Armed Forces 2016 Honor Bowl held this year at the newly renovated Football Field at Mission Viejo High School. The games were streamed through NFHS Network.com and FoxSports West.

In October, Mission Viejo RACES-ARES had two booths at the South County Disaster Preparedness EXPO. One booth promoted Ham Radio, SOARA, RACES-ARES, ACS, OC Fire Watch, and distributed FEMA Disaster preparedness materials. In the other booth, they demonstrated ham radio emergency go-boxes and power packs. They also hosted Boy Scout Troop #618 and became control operators and instructed the scouts on how to make contacts. They then let the scouts make contacts with other scouts participating in the “59TH Jamboree On The Air” using the MVRACES call sign KE6SWE, operating HF from the Disaster Preparedness EXPO in Mission Viejo.

Newport Beach RACES

Gary Standard, K6GSX, has stepped down as Newport Beach RACES Chief Radio Officer.

Orange RACES (COAR)

Vern DeMars, KG6OXD, has resigned as COAR Radio Officer.

Seal Beach/Los Alamitos RACES

The next Seal Beach/Los Alamitos RACES meeting will be on Wednesday, November 9, 2016, at 7:00 PM.

Tri-Cities RACES

Steve Foster is now the San Clemente RACES Coordinator.
November 2016

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Upcoming Events:

- **November 7:** OCRACES Meeting, 840 N. Eckhoff Street, Suite 104, Orange, 1930-2130 hours
- **November 8:** General Election (no RACES involvement)
- **November 15:** Radio Rodeo, Huntington City Beach parking lot, 0800-1200 hours
- **November 21:** Cooperative T-Hunt on input of 2-meter repeater, 1920 hours
- **November 24:** Happy Thanksgiving!
- **November 28:** Five-band ACS nets and Cal OES Nets at OC EOC
- **December 3:** SKYWARN Recognition Day
- **December 5:** OCRACES Holiday Dinner, 1830 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 Frequencies

- **40 m:** 7250 kHz SSB (City/County/MOU Net—Saturdays, 1000 hours)
- **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*
- **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:** 1287.650 MHz, 1287.675 MHz, 1287.700 MHz, 1287.725 MHz, 1287.750 MHz, and 1287.775 MHz outputs, ~12 MHz inputs, 88.5 Hz PL

*Primary Net—Mondays, 1900 hours

RACES Program Coordinator (Emergency Comm’s Manager)
Lee Kaser, KK6VIV
714-704-8080

Chief Radio Officer (Captain)
Ken Bourne, W6HK
714-977-0073

Radio Officers (Lieutenants)
Scott Byington, KC6MMF
Harvey Packard, KM6BV

Assistant Radio Officers (Sergeants)
Jack Barth, AB6VC
Ernest Fierheller, KG6LXT
Bob McFadden, KK6CUS
Tom Tracey, KC6FIC

County of Orange RACES
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Meet Your County of Orange RACES Members!

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Scott Byington
KC6MMF

Harvey Packard
KM6BV

Jack Barth
AB6VC

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Randy Benicky
N6PRL

Roger Berchtold
WB6HMW

David Corsiglia
WA6TWF

Jim Dorris
KC6RFC

Nancee Graff
N6ZRB

Ray Grimes
N8RG

Walter Kroy
KC6HAM

Martin La Rocque
N6NTH

Matt Luczko
KM6CAO

Fran Needham
KJ6UJS

Ken Reilly
KR6J

Tom Riley
K6TPR

Brad Russo
KB6GPM

Tony Scalpi
N2VAJ

Joe Selikov
KB6EID

Robert Stoffel
KD6DAQ

Ken Tucker
WF6F

Tom Wright
KJ6SPE

Lee Kaser
KK6VIV