December 2016



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OCRACES Holiday Dinner

December 5, 2016 1830 Hours

Ricardo's Don José 1230 E. Katella Ave., Orange

No regular meeting or net



Orange County Sheriff's Department Communications & Technology Division



Newsletter of the County of Orange Radio Amateur Civil Emergency Service

Captain's Corner by RACES Captain Ken Bourne, W6HK, Chief Radio Officer

OCRACES Van Decommissioned

After many years of operation and because of its condition and safety issues, our beloved emergency communications response vehicle is being decommissioned. This is sad, after countless hours of work went into building it and using or displaying it at major events, such as Field Day, Radio Rodeo, HRO Ham Jam, Army Reserve Exercise, ARRL Southwestern Division Convention (HAMCON), Fullerton Airport Day, ham license classes, OCSD Search & Rescue Reserve Unit exercise and various other emergency preparedness exercises, OCFA Open House, etc.

The project for building the van started in September 2002, with weekly design meetings. Actual van construction began in March 2003. It was dedicated on March 1, 2004. The core committee for building the van consisted of Jack Barth, AB6VC, Scott Byington, KC6MMF, Jim Carter, WB6HAG (SK), Ray Grimes, N8RG, Martin La Rocque, N6NTH, Harvey Packard, KM6BV, Joe Selikov, KB6EID, John Roberts, W6JOR, and Tom Stroud, N6FDZ. I had recently returned from serving five years in State OES ACS and joined the van committee, but the above members put in much more work on the van than I did. I am in awe of what they accomplished. Jim was the original Project Manager and Scott led the effort and made his shop in Tustin available for the project. Scott's sheetmetal work and overall design was amazing. Kudos also to Joe on engineering the van's electrical system. Jim put together the



van's visual communications system. Vehicle committee members were honored at the Orange County Board of Supervisors Eighth Annual Volunteer Recognition program on April 21, 2004, at the Hall of Administration.

Others who became members after the original work was done have devoted a considerable amount of time on the van. These include Fran Needham, KJ6UJS, Ken Tucker, WF6F, Brad Russo. KB6GPM, David Corsiglia, WA6TWF, and Tom Riley, K6TPR. Several members became certified drivers of the van, but Fran and Tom were the most active drivers. The van's awning was a particular challenge, but was mastered by Harvey and Tom. Every OCRACES member has spent at least some time working on and/or serving with the van, and their efforts are appreciated.

Our van will eventually be replaced, perhaps by a trailer rather than an enginedriven vehicle. Meanwhile, the Irvine RACES vehicle has been made available to us according to IDEC Operations Captain Peter Gonzalez, KC6TWS, if we should ever need a communications response vehicle during an emergency. Thanks IDEC!!!

OCRACES Participates in Radio Rodeo



Some of the vehicles on display at Radio Rodeo at Huntington City Beach.

County of Orange RACES participated again in Radio Rodeo on Tuesday, November 15, 2016, at the Huntington City Beach parking lot in Huntington Beach. The event was sponsored by the California Statewide Interoperability Executive Committee (CalSIEC) Southern Planning Area (SPA). This interoperability training exercise was hosted in several counties simultaneously, with each providing a local site for participants. Participating agencies brought their communications vehicle to the Radio Rodeo site, set it up, and participated in structured radio testing of all interoperability channels over all public-safety frequency bands, as well as on RACES frequencies in the 2-meter and 70-centimeter bands. This was an opportunity for agency personnel to test the radio equipment and ensure proper programming and functionality of the radios.

The primary goals of the Radio Rodeo included:

• Establish communications links between agencies' systems



Kenan Reilly, KR6J (center), and Brad Russo, WB6GPM (right), were busy setting up equipment in the Field Support Trailer



OCSD's impressive Samantha II Mobile Communications Center at Radio Rodeo.

Radio Rodeo Continued from page 2

- Test interoperability across available radio frequencies and bands
- Communicate locally with all other participants
- Provide an opportunity for participants to exercise their vehicle 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

Leading the Radio Rodeo effort were OCSD/Communications Program Support Manager Delia Kraft, KR6AFT, and Emergency Communications Manager Lee Kaser, KK6VIV. Assisting was "Mr. Radio Rodeo" himself, Robert Stoffel, KD6DAQ, who was the Division's Director before the current Director Dave Fontneau.

Participating agencies included Anaheim RACES, California Department of Transportation, Costa Mesa Police Department and Costa Mesa RACES (MESAC), Garden Grove Police Department, Huntington Beach Marine Safety Division, Huntington Beach Police Department, Huntington Beach RACES, Laguna Beach Police Department and Laguna Beach RACES (LBECT), Irvine RACES (IDEC), Los Angeles County Sheriff's Department and Los Angeles County Disaster Communications Service (LACDCS), Mission Viejo RACES, Orange County Emergency Medical Services, Orange County Fire Authority (two MCPs), Orange County Sheriff's Department (OCRACES, Samantha II, Field Support Trailer, OA-SIS Trailer, and Duke), Orange Police Department and Orange RACES (COAR), Santa Ana School Police Department, and West Cities Police Communications Center (West-Comm), which serves Cypress, Los Alamitos, and Seal Beach.

OCRACES did not have its van at Radio Rodeo, since it is now out of service and decommissioned. However, OCRACES was net control for the RACES component from a table outside the Field Support Trailer, set up by Kenan Reilly, KR6J, and Brad Russo, KB6GPM. Chief Radio Officer Ken Bourne, W6HK, ran the net, and Fran Needham,

KJ6UJS, observed. Randy Benicky, N6PRL, operated from Samantha II. On-site RACES testing included not only Samantha II but also Anaheim RACES (AF6XY), MESAC (KJ6PFW), IDEC (N6IPD), LBECT (K6WHC), COAR (W6OPD), Mission Viejo RACES (KE6BXT), and LACDCS (K6CPT).

OCRACES net control also conducted RACES testing with Riverside County RACES and San Diego County RACES

on the Cactus Intertie system, Also checking in on Cactus were Yuma County (Arizona) RACES (NØRHZ) and Colorado State RACES (WA4HND). Contact was also made with Riverside County RACES on the OCRACES 448.320 MHz and 449.180 MHz repeaters and on the Riverside County RACES 447.700 MHz repeater. Don Hill, KE6BXT, and Joe Ayers, AE6XE, from Mission Viejo RACES, set up a mesh network and communicated with Riverside County RACES via a node on Pleasants Peak.

OCRACES Holiday Dinner: December 5th

The annual OCRACES Holiday Dinner will be on Monday, December 5, 2016, at 6:30 PM, at Ricardo's Don José, 1230 E. Katella Avenue, in Orange. There will be no regular meeting or net that evening.



Fran Needham, KJ6UJS (left), and Ken Bourne, W6HK, at OCRACES table.



Randy Benicky, N6PRL (left), checks with Ken Bourne, W6HK, before heading to Samantha II.



Mission Viejo RACES mesh network setup at Radio Rodeo.

HDSCS Participates in Medical Health Drill by April Moell, WA6OPS, Coordinator, Hospital Disaster Support Communications System

The annual California Statewide Medical Health Exercise took place on Thursday, November 17, 2016. HDSCS members participated with 16 emergency receiving hospitals, one behavioral medicine facility, and the HEOC, a facility of Orange County Healthcare Agency. The drill scenario involved a freight train that derailed, striking two buses of children and other vehicles, which created a mass-casualty incident. With buses of minor children without parents, not only was there a large surge of pediatric patients at the hospitals, but there were the additional problems of permission for treatment, patient tracking, and reunification of families. While initially there were no system failures, all of the communications systems overloaded from time to time.

One of the goals was getting the hospitals to activate HDSCS according to the paging instructions on the Call-Up procedures sheet given to each hospital. In addition, our members received their assignments just a few hours before the event. Instead of going into the hospitals and setting up prior to the drill start, they staged nearby and only went inside after the hospitals activated HDSCS by paging system or telephone. This teaches our members what it is like to gain entrance to the hospital, get to Command Centers, and get on the air quickly with their portable equipment under stressful conditions. It also helps the hospital staff and communicators to learn how to deal with the fact that fellow communicators are not all in place at the same time, sometimes necessitating holding of traffic until a communicator gets on site at a particular hospital. It reinforced to the hospitals how important it is to activate the HDSCS as soon as they are aware of an incident. In the individual Hospital Command Centers, our members were shoulder-to-shoulder with members of the Hospital Incident Management Team.

Not all problems were simulated in this drill. At one point a hospital used the HDSCS net to alert other hospitals and the HEOC that their Internet was not working consistently and that would mean some messages would be sent by other means. About halfway through the exercise, a power outage occurred near Foothill Regional Medical Center, due to a damaged power pole. The hospital went on generator power and HDSCS members readied to bring in additional communicators if a telephone outage occurred. Because of all the traffic on ReddiNet, the HEAR, and phone lines, the nearby trauma center, using the HDSCS network, queried the affected hospital as to the possibility of transfers, as well as ability to take new patients. Because of the possibility of loss of phones, an HDSCS communicator from a hospital that was participating on a minimal level and planning to secure early was released from that assignment and moved to the hospital with the power problem. His portability and flexibility was crucial in doing this. All of the HDSCS responders involved have attended our specialized training sessions and took time off to support the valuable mission as dedicated volunteer medical communicators.

ARRL Evaluating Revised CA Driving Law

California has upped its game in cracking down on distracted driving, and radio amateurs in our state are concerned that a recent revision to the state's Motor Vehicle Code could affect amateur radio mobile operation. The old law, which included an amateur radio exemption, already prohibited motorists from using electronic wireless communication devices to write, send, or read a text-based communication while in motion, unless the device was configured for voice-operated and hands-free operation. The revised law does not exempt amateur radio.

Assembly Bill 1785, signed into law on September 26, 2016, by Governor Jerry Brown, prohibits a motorist from driving "while holding and operating" a hand-held wireless telephone or a wireless electronic communication device, as defined by the code. But it authorizes a driver to operate such devices mounted on a vehicle's windshield like a GPS or on the dashboard or center console "in a manner that does not hinder the driver's view of the road," if the driver can activate or deactivate a feature or function "with the motion of a single swipe or tap of the finger."

The language defining devices covered by the law does not accurately specify what activity is prohibited, leaving its application subject to misinterpretation by individual law enforcement officers, but it does not specifically proscribe use of mobile amateur radio equipment for voice communications. The list of covered devices includes, but is not limited to, "a broadband personal communication device, a specialized mobile radio device, a handheld device or laptop computer with mobile data access, a pager, or a two-way messaging device." A first offense would incur a \$20 base fine and \$50 for subsequent offenses.

Initial wording of the legislation was not considered to be a threat to amateur radio operation, but the measure's language changed substantially as it worked its way through the California General Assembly.

ARRL General Counsel Chris Imlay, W3KD, said there are two principal ways to protect amateur radio in this type of legislation. "One is by sufficiently narrowly defining prohibited activity so as to exclude amateur radio," he said. "The other is to create specific exemptions where the definitions are confusing. This new statute is an example of bad legislative draftsmanship. It creates a motor vehicle law with citations issued for certain activity that includes the words 'but is not limited to' in the language defining the violation."

In addition to scrutinizing the language of the revision, ARRL will be consulting with Field Organization officials in California to determine its next steps.

KC6TWS Hides in Tustin

IDEC Operations Captain Peter Gonzalez, KC6TWS, was the fox on Monday, November 21, 2016, on the monthly cooperative T-hunt. He turned on the fox box immediately following the 2-meter OCRACES ACS net, hiding in "The District" parking lot near Barranca Parkway and Jamboree Road in Tustin.

First to find the fox was Richard Saunders, K6RBS, from Mission Viejo. Next was Ron Allerdice, WA6CYY, from Mission Viejo. Third was Joe Moell, KØ-OV, from the Hospital Disaster Support Communications System (HDSCS). Bearings were compared on the 448.320 MHz repeater (not on the usual 449.100 MHz repeater, due to a recent lightning strike). Sharing bearing information



Posing with the fox box (yellow container at left) are (left to right) Joe Moell, KØOV, Richard Saunders, K6RBS, Peter Gonzalez, KC6TWS (the fox), Ron Allerdice, WA6CYY, and Bob Bourne, K6RBI.

mation usually makes the hunt go quickly, but, in this case, it foiled the fourth team, Ken Bourne, W6HK, and his son Bob, K6RBI. They started at the Tustin Sports Park near Jamboree Road and Irvine Boulevard, and got a bearing straight down Jamboree. They heard Ron, WA6CYY, say the fox's signal was very strong near Costco, Target, and Chick-fil-A, all of which are in the Tustin Marketplace. So, where did they head? The Tustin Marketplace, of course! However, the fox was very weak on their loop, so they figured they had a bad cable. After changing cables, the signal was still weak. Ken and Bob were exasperated and called the fox, who verified he was near Costco, Target, and Chick-fil-A, but also said he was near Whole Foods. Ken and Bob didn't know where Whole Foods was, so the fox told them to head north in the parking lot. After not finding Whole Foods, they called the fox again, who then indicated he was in "The District," several miles south of where they were! After arriving at "The District," Ken and Bob saw Costco, Target, Chick-fil-A, and Whole Foods. The fox now was strong on the loop, and they quickly found him near Whole Foods. Although it was exasperating, it was fun and a learning experience. Using a Doppler system, in this case, would have been a much better initial indicator than a beam and a loop. They also should have checked APRS indications, which they did not do, even though they were beaconing on APRS.

The next cooperative T-hunt will be held on Monday, December 19, 2016, immediately following the OCRACES 2meter 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 448.320 MHz repeater (while the 449.100 MHz repeater is down), 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. We are looking for a volunteer to be the fox, and a "fox box" will be available.

The cooperative T-hunts are usually held on the third Monday of each month. 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 foxhunt 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.

RACES/MOU News from Around the County

"RACES/MOU 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 NetControl Editor Ken Bourne, W6HK, at:

w6hk@ ocraces.org

Brea RACES

Lisa Keyworth, Emergency Preparedness Analyst, Brea Fire Department, is now the Brea RACES Program Coordinator. She has taken the place of Anna Lee Cave, N6ANA, who recently retired.

Cypress RACES

Cypress RACES Chief Technology Officer Ed Kane, W6ONT, reported about a recently completed drill wherein each RAC-ES team member acted as a net control operator and, in turn, set up an operating station in a local city park. Individual team members, using a "go box" comprised of an Icom IC-2820 dual-band VHF/UHF transceiver and a dual-band antenna, set up this ad hoc field operation. Then at 6:30 PM most every Monday evening, this team member and an assistant conduct a Cypress RACES weekly net on 144.410 MHz analog simplex. Immediately following a roll call at 6:30 PM, the roll call is repeated this time through their stand-alone D-STAR repeater operating on 446.850 (-5) MHz. Visitors from other RACES units are always welcome, says Ed.

<u>Hospital Disaster Support</u> <u>Communications System (HDSCS)</u>

On Tuesday, November 22, 2016, shortly after the noon hour, the HDSCS group page signaled a 3-digit number, alerting the coordinators that a problem might exist at Saddleback Memorial Hospital in Laguna Hills. Coordinators keep hospital info sheets with them that have hospital phone numbers and that of the disaster coordinators. Attempts to call into the hospital were met with rapid busy signals, indicating a possible problem with the phone system. Using the HDSCS roster sheets and the "first wave sheets" identifying the members that are most likely to be available for a particular hospital, two coordinators started calling to activate those that could to go to check on the hospitals. Another coordinator quickly put out an "ALERT" message to all members, asking them to indicate their potential availability for the rest of the day.

Fortunately, as the first responder was about to go out the door and others were on standby awaiting direction, a phone call came in to the HDSCS coordinator from the hospital's assistant disaster coordinator, announcing that the phone system was up and functioning. She did not yet know why the main trunk line had failed and was concerned about additional problems. After some discussion it was decided that HDSCS and the hospital contact would stay in touch over the next hour to verify all internal and external lines were functional and lead radio operators would stay in "jump team" status. Those on jump team committed to monitor on designated frequencies ready for immediate activation should that be needed.

Orange County SKYWARN

Per request of the National Weather Service, SKYWARN was activated for Orange County at 12:00 AM on Monday, November 21, 2016, due to expected significant weather overnight, including thunderstorms and flash floods. Eric Hutchins, K7ELH, of Southwest California SKY-WARN, requested spotters to use the online reporting tool to report any significant weather. NWS de-activated SKYWARN at 4:17 AM.

OCSD Communications & Technology

OCRACES members are invited to the OCSD Communications & Technology Division Holiday Luncheon at 11:30 AM on Tuesday, December 20, 2016, at Prime Cut Café, 1547 W. Katella Avenue, in Orange. The cost is \$20 per person. Please RSVP by December 9th to Lidia Verduzco at lidia.verduzco@comm.ocgov.comm, or 714-704-7910.

Cal OES Southwest ACS

Southwest ACS will begin meeting again, at least twice a year, according to Arnie Lewin, W7BIA. The first meeting will be on Saturday, January 7, 2017, at 0930, at Southern Region OES Headquarters on the Los Alamitos Joint Training Base.

December 2016

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3 Weekly 40 m ACS Net & SKYWARN Recognition
4	5 OCRACES Holiday Din- ner (no net, no meeting)	6	7	8	9	10 Weekly 40 m ACS Net
11	12 Weekly 2 m ACS Net	13	14	15	16	17 Weekly 40 m ACS Net
18	19 Weekly 2 m ACS Net & Cooperative T-Hunt	20 OCSD Comm's Division Luncheon	21	22	23	24 Christmas Eve (no 40 m ACS Net)
25 Merry Christmas!	26 Christmas Holiday Ob- served, no nets	27	28	29	30	31 New Year's Eve (no 40 m ACS Net)

Upcoming Events:

- December 3: SKYWARN Recognition Day
- December 5: OCRACES Holiday Dinner, 1830 hours, Ricardo Don José, 1230 E. Katella Avenue, Orange; no regular meeting, no net
- December 19: Cooperative T-Hunt on input of 2-meter repeater, 1920 hours

 December 20: OCSD Communications & Technology Division Holiday Luncheon, 1130 hours, Prime Cut Café, 1547 W. Katella Avenue, Orange; \$20 per person; RSVP to lidia.verduzco@comm.ocgov.com or 714-704-7910 by December 9th

- December 25: Merry Christmas!
- December 26: Christmas Holiday Observed, no nets
- January 1: Happy New Year!

Chief Radio Officer (Captain)

Assistant Radio Officers (Sergeants)

Ken Bourne, W6HK

Jack Barth, AB6VC Ernest Fierheller, KG6LXT

Tom Tracey, KC6FIC

Bob McFadden, KK6CUS

714-997-0073

• January 2: New Year's Holiday Observed, no net





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* 2 m: 146.595 MHz simplex 1.25 m: 223.760 MHz output, 222.160 MHz input, 110.9 Hz PL 70 cm: 448.320 MHz output, 222.160 MHz input, 110.9 Hz PL 70 cm: 448.320 MHz output, 443.320 MHz input, 141.3 Hz PL (private) 70 cm: 449.100 MHz output, 444.100 MHz input, 110.9 Hz PL (out of service) 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

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

County of Orange RACES

OCSD/Communications & Technology 840 N. Eckhoff St., Suite 104, Orange, CA 92868-1021 Telephone: 714-704-8080 • Fax: 714-704-7902 E-mail: ocraces@comm.ocgov.com

County of Orange RACES

OCSD/Communications & Technology 840 N. Eckhoff St., Suite 104, Orange, CA 92868-1021

Telephone - 714-704-8080 Fax - 714-704-7902 E-mail - ocraces@comm.ocgov.com



Questions or Comments? Contact NetControl Editor Ken Bourne, W6HK w6hk@ocraces.org



"W6ACS Serving **Orange County**"

Meet Your County of Orange RACES Members!

AB6VC



Ken Bourne W6HK

Scott Byington KC6MMF



KM6BV



Ernest Fierheller KG6LXT



Bob McFadden

KK6CUS

Tom Tracey KC6FIC



Randy Benicky N6PRL



David Corsiglia WA6TWF

Jim Dorris KC6RFC

Nancee Graff N6ZRB



Walter Kroy KC6HAM



Martin La Rocque N6NTH



WB6HMW



Ken Tucker

WF6F

Fran Needham KJ6UJS



Kenan Reilly KR6J



Tom Riley Brad Russo K6TPR KB6GPM



Tony Scalpi N2VAJ



Lee Kaser KK6VIV

Joe Selikov KB6EID

Robert Stoffel KD6DAQ



Tom Wright KJ6SPE