February 2018



Inside this issue:

Captain's Corner	1
February Meeting	3
City/County Meeting	3
QRP SDR HF Radio	3
Interoperability Drill	4
SoCal Linux Expo	5
Cooperative T-Hunt	5
ACS Radio Rodeo	5
RACES/MOU News	6
Events Calendar	7
OCRACES Members	8

Next OCRACES Meeting:

Monday, February 5, 2018, at 1930 Hours

840 N. Eckhoff Street, Suite 104, Orange

Tabletop HT Programming/Communicating Exercise



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

Communications Addiction

Are we well-rounded? I'm not referring to our physical appearances. Rather, I'm referring to our overall activities, especially as they relate to families, employment, entertainment, physical exercise, travel, church, charities, volunteering, etc. Obsessions with communications, whether by amateur radio or by the Internet or by cellphone texting, can prevent us from being well-rounded.

Admittedly, sitting in front of a ham radio transceiver for hours chasing DX or just rag chewing might make us "wellrounded" physically. Even sitting at a test bench being a mad scientist, trying to discover or learn the latest radio-electronics technology, could prevent us from getting enough exercise and make us "wellrounded" physically. However, these obsessions could prevent us from being wellrounded as far as living up to our daily responsibilities. I confess that I am as guilty as anyone else, so the observations and suggested improvements that I mention here are not "finger-pointing" without looking in the mirror and seeing guilt.

Even helping others, which all of us should have as our main reason for being RACES members, can be an obsession (but a good one). We can spend too much time with some RACES projects if there is a more urgent need to spend time at work or with our families. Don't get me wrong—I really think that most RACES members don't spend enough time with RACES, such as reviewing procedures (including ICS 100, 200, and 700), training, upgrading license class, experimenting and improving mobile and fixed station setups, becoming familiar with all modes of communications, etc. But some RACES members and other public-safety volunteers spend virtually all of their time on agency activities and ignore their work and family responsibilities.

The causes of these addictions and obsessions are numerous. DXers who spend most of their time trying to work every country in the world have what I call a "collector's syndrome," where they (including me!) achieve satisfaction by collecting confirmations from as many DXCC countries as possible. Hams trying to work all states on 6 meters or some other band also have that "collector's syndrome."

This "collector's syndrome" or even excessive hours as a public-safety volunteer may be a form of escapism or procrastination. So is excessive Internet browsing. Some psychologists refer to this as the Pathological Internet Use (PIU) phenomenon. Although excessive users of the Internet might not have a proven mental disorder, they might use the Internet as an escape mechanism. Procrastination is common with those who have a fear of failure, and provides an excuse for failure, because there "wasn't enough time to get it done right." Besides PIU, we can also consider "PRU" (Pathological Radio Use), whereby we spend too much time on the air ragchewing, adding to state or country confirmations, chasing weak signals on 6 meters, etc. Both PIU and PRU refer to addictions that need to be cured. Psychiatrist John Grohol suggests three PIU stages (which could also

Captain's Corner Continued from page 1

be three PRU stages). The first stage is new-user enchantment or obsession (such as discovering a new operating mode like DMR). The second is disillusionment with certain aspects and their consequent avoidance (such as "hijacking of a DMR time slot by someone on another talk group), and the third is balanced or normal use (back to good ol' analog FM!).

Communicating can be quite addictive. Before the Internet, ham-radio addiction was fairly common. It even caused some students to suffer lower grades, as they spent too much time communicating with their friends on the air, or acquiring new friends. This problem has now expanded with the Internet and cell phones, especially with social media. We need to monitor ourselves, to make sure we don't overly satisfy our information and communications needs by going on the air or going online excessively. Fortunately, some apps are now available that will automatically track how much time you spend on social media. They show which social-media apps are used the most, and set limits and block access to social media.

Many are concerned about the amount of time that computer and smartphone owners spend online. They ask if users will be preoccupied with, distracted by, or addicted to social media. Social networking is reported to account for 28 percent of time spent online. Studies claim that teens between the ages of 15 and 19 average at least three hours per day using the likes of Facebook, Twitter, and Instagram. (Back when I got my ham license, in 1956, I and my fellow teenage hams spent at least that much time on 10 and 15 meters, which was not good for our high-school grades!)

One recent study shows that the average employee who accesses the Internet at work spends 60 to 80 percent of his or her online time on non-work-related activities, which consumes nearly one quarter of the employee's day.

Social media (and ham radio) addiction causes social problems such as sleep depravity, anxiety, depression, loss in academic studies and work, and anger management issues. We have seen many drivers using cell phones, and now texting while driving has become a major problem. Many employees are addicted to video games and cannot keep a 9-5 job. Some people suffer from depression and anxiety because they compare their Facebook or other online status with that of their peers. Some children message on Instagram throughout the night (and some hams communicate throughout the night as well).

Newspapers occasionally report adolescent suicides attributed to depression caused by online addiction or bullying. San Diego State University psychology professor Jean Twenge studied more than 500,000 U.S. adolescents and found that "kids who spent three hours a day or more on smartphones or other devices were 34% more likely to suffer at least one suicide-related behavior—including feeling hopeless or seriously considering suicide—than those who used devices two hours a day or less." That figure climbed to 48% for kids who used devices five or more hours a day.

Although teenagers rely on the Internet for social interaction and entertainment, engineers may use it excessively for research and radio amateurs may spend hours using it for controlling their radios remotely or acquiring knowledge about new transceivers or how to use existing equipment.

Many of us hams are incessant browsers, especially when trying to acquire knowledge about new radio equipment, using electronic instrumentation, building antennas, etc. While learning something new, we often question a statement and browse to another Web site, then another, and another, hoping to find the correct set of answers. We spend lots of time reading news on the ARRL Web site, reading equipment reviews on the eHam Web site, investigating procedures on the FEMA Web site, etc. If we suspect a biased opinion on one site, we will hop to other sites to get "true" answers.

Acquiring knowledge can be addictive, just like acquiring material things (such as ham radio equipment). We used to see bumper stickers saying, "He who dies with the most toys wins." But is that what life should be all about—acquiring toys (or transceivers), knowledge, fame, money, QSL cards, etc.? You might ask why I'm against acquiring knowledge. I'm not! But it must not be an obsession, at the expense of fulfilling family responsibilities or loving and serving others. Rather, it should be a *means* of serving others. St. Paul says, in 1 Corinthians 8:1-2, "We know that 'We all possess knowledge.' But knowledge puffs up while love builds up."

We can easily have a wrong objective, whether it's acquiring knowledge or athletic fame or amateur radio contest awards. Acquiring knowledge, while remaining modest about it, but using that knowledge to teach or help others, is good. If our objective is to appear smarter than others, it's bad. If we excel athletically to achieve fame and prove we are better than others, that's bad. If our athletic objective is to inspire others, or to help our team win, or to overcome physical shortcomings, it's good. If we spend "megabucks" on the most expensive transceivers and highest towers and monster antennas in order to achieve glory by placing first in amateur radio contests, it's bad. However, improving our stations with modern transceivers, high-gain antennas, low-loss transmission lines, etc., as well improving our operating techniques, helps us not only to achieve high contest scores, but, more importantly, to provide effective communications during an emergency, while helping others.

Next OCRACES Meeting: February 5th

The next OCRACES meeting will be on Monday, February 5, 2018, at 7:30 PM, at OCSD Communications & Technology Division, 840 N. Eckhoff Street, Suite 104, in Orange. Bring your handheld radios for a tabletop programming/ communicating exercise.

City/County RACES Meeting: February 12th

The next City/County RACES & MOU meeting will be on Monday, February 12, 2018, at 7:30 PM, at OCSD Communications & Technology Division, 840 N. Eckhoff Street, Suite 104, in Orange. At this meeting we will discuss our plans for the ACS Radio Rodeo, which will occur on Saturday, May 5, 2018. Representatives of each City RACES unit and MOU organization are invited to give a brief presentation at this meeting on their recent and planned activities.

MFJ Distributes Xiegu HF/6-m Transceiver

MFJ is now the only authorized North American sales and service distributor of the new Xiegu X5105 portable multimode QRP SDR HF transceiver.

The X5105 features a built-in automatic antenna tuner, split-frequency transceiver function, RIT receive fine tuning, noise blanker, digital noise reduction, notch filter, and computer-aided control functions. It is equipped for tabletop or handheld use and covers all modes (SSB, CW, AM, FM, RTTY, and PSK-31) on 160 through 6 meters.

The X5105's general-coverage receiver tunes from 500 kHz to 30 MHz, plus 6 meters. Its transmitter produces 5 watts output on all bands, 160 through 6 meters (1.5 watts AM).

Digital tuning is provided by a VFO with 1-Hz resolution. The transceiver features A/B split, multiple band-pass filters, selectable AGC speed, computer interface for digital modes, built-in keyer and CW trainer, multi-function microphone, 3.6-inch LCD screen, 3800-mAh battery pack, DC power cord, USB cable, service card, and instruction manual. The



Xiegu XPA125 HF amplifier.



Xiegu X5105 QRP SDR transceiver covers 160 through 6 meters.

built-in battery charger automatically cuts off when the battery is fully charged.

Dimensions are 6-5/8 inches wide by 3-5/8 inches high by 1-7/8 inches deep. Weight is 2.1 pounds.

Also available is the Xiegu XPA125 HF amplifier. MFJ claims it covers 1.8 to 54 MHz, with an output of 125 watts. It has a built-in automatic antenna tuner. Various protections include inputs and outputs, over-current, and over-temperature. Interfaces include output, power, safety socket, ground, serial port, transmit signal input, and accessory.

MFJ will also make available the Xiegu XCE19 data expansion port for connecting a PC or other data terminals, modems, etc. for digital mode operation. It extends the MINI -DIN8 X5105 accessory port to a 3.5-mm stereo socket, and extends the MINI-DIN6 port for XPA125 interfacing.

DoD Interoperability Exercise Is a Success

A November 2017 Department of Defense (DoD)-sponsored communications interoperability exercise involving amateur radio was a success, according to information received recently from US Army Military Auxiliary Radio System (MARS) Program Manager Paul English, WD8DBY. The November 4-6 drill, which focused on interoperability between DOD elements including MARS, other federal agencies, and the amateur radio community, simulated a coronal mass ejection (CME) event. Army and Air Force MARS organizations worked in conjunction with the amateur radio community, primarily on the 60-meter interoperability channels as well as on HF NVIS frequencies and local VHF and UHF, non-Internet linked amateur radio repeaters.

"Amateur radio support for these DOD interoperability exercises continues to grow," English said.

The amateur radio portion of the exercise kicked off with a high-power information broadcast on 60-meter channel 1 (5,330.5 kHz) from a military station on the east coast and the Fort Huachuca HF gateway station in Arizona. The high-power broadcast provided basic exercise information and requested that amateur stations make contact with MARS stations on 60 meters and provide county-by-county status reports for the 3,143 US counties and county equivalents, in order to gain situational awareness and to determine the extent of impact of the scenario. Radio amateurs also were given the opportunity to submit a reception report and receive a QSL card.

New for this exercise, planners divided the continental US geographically and assigned each region to one 60-meter channel, in order to make more efficient use of all five channels. Planners roughly divided the US into northeast, southeast, northwest, southwest, and central regions. Also new for this exercise, military planners incorporated a day-time informational broadcast on a DOD frequency, 13,483.5 kHz USB. The purpose of that broadcast was to extend the exercise outreach during the day to the amateur community and to provide exercise updates.

English said that, of the 738 broadcast reception reports received, 494, or 67%, of them were from the 60meter broadcast while the remaining 244 reports were for the 13-MHz broadcast. The 60-meter broadcasts were received by stations in Canada, Spain, and Switzerland, and reception reports came from several members of the short-wave listening (SWL) community.

Nearly 2,000 amateur radio stations took part in the exercise, submitting 3,025 county status reports, nearly 1,300 of them unique. QSL cards for amateurs and SWLs who participated in this exercise are being processed and will be mailed in January.

"Leaders from the supported DOD headquarters as well as the chiefs of both the Army and Air Force MARS programs appreciated the nearly 2,000 amateur radio stations that trained during this exercise," English said. — *Thanks to US Army MARS Program Manager Paul English, WD8DBY, and* The ARRL ARES E-Letter.

Southern California Linux Expo: March 8-11

The 16th annual Southern California Linux Expo (SCaLE) will take place March 8-11 at the Pasadena Convention Center. SCaLE began hosting Amateur Radio presentations in 2015, and this year's SCaLE will include Special Event station N6S, staffed by members of the Ventura County Amateur Radio Society (VCARS), who will answer questions about amateur radio and how it relates to Linux and the open-source community.

The Amateur Radio Emergency Data Network (AREDN) will demonstrate and answer questions about amateur radio mesh networking. AREDN writes firmware to move wireless access points into the amateur radio portions of the 2.4-, 3.4-, and 5.8-GHz bands. Images from an AREDN camera recently provided live images from the Thomas Fire in California.

Presenters include Orv Beach, KB6I, "Linux and the Ham Radio Internet;" Kate Hutton, K6HTN, "Amateur Radio Messaging, Alive and Well in the 21st Century;" Ben Kuo, AI6YR, "How Social Media, the Internet, and Ham Radio saved the day after Hurricane Maria in Dominica," and Stu Sheldon, AG6AG, "I just got my Amateur Radio License, Now What?" — *Thanks to Vern Potter, W6NCT*

KK6VIV Hides in Los Alamitos

OCSD Emergency Communications Manager Lee Kaser, KK6VIV, was the fox on Monday, January 15, 2018, on the monthly cooperative T-hunt. He turned on the fox box immediately following the 2-meter OCRACES ACS net, hiding in the Katella Deli parking lot in Los Alamitos, south of Katella Avenue and west of Lexington Street.

The first to find the fox were Ken Bourne, W6HK, and his son Bob, K6RBI. They started nearby in the parking lot of Cottonwood Church, and found the fox in just a few minutes. Next were Roger Kepner, W6SQQ, and his wife Carole, K6PUP, after spending some time in Laurel Park near Bloomfield Street, because of a strong signal in that area. Participation was light on this hunt, perhaps because some of the usual hunters were out of the area due to the three-day holiday weekend. Ron Allerdice, WA6CYY, called in on the 448.320 MHz repeater from near Indio, saying that he could not make it back in time for the hunt. Perhaps we should cancel hunts that fall on extended holiday weekends, unless we have a commitment for participation.

The next hunt will be on Monday, February 19, 2018, immediately following the OCRACES 2-meter net (approximately 7:20 PM). The fox will hide on paved, publicly accessible property in a city or sector of Orange County to be announced a few days before the hunt. No fees will be required to drive directly to the fox. He will transmit on the input (146.295 MHz) of the 146.895 MHz repeater. Hunters will compare bearings via the 448.320 MHz repeater and are encouraged to beacon their positions via APRS throughout the hunt. We are looking for a volunteer to be the fox.

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 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. For on-foot hunting, the BC-146.565 three-element, hand-held, foldup, yagi antenna is available from Bob Miller Enterprises (http://www.rdfantennas.com), along with the VK3YNG MK4 sniffer. 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. Useful apps are available for iPhones and Android phones. For some excellent information on T-hunting, see http://www.homingin.com.

ACS/EmComm Radio Rodeo: May 5, 2018

Instead of the usual City/County RACES & MOU ACS Exercise on the first Saturday in May, the event will be expanded to cover all operational areas (counties) in the Southern Region (Mutual Aid Regions I and VI) of Cal OES. Counties in Mutual Aid Region I include Los Angeles, Orange, San Luis Obispo, Santa Barbara, and Ventura. Counties in Mutual Aid Region VI include Imperial, Inyo, Mono, Riverside, San Bernardino, and San Diego.

The exercise objective will be to establish contact between all counties on HF (40 meters) as well as on 2meter, 1¹/₄-meter, and 70-centimeter high-altitude repeaters and linked systems (such as Cactus). In Orange County, we will test local communications on our repeaters on those bands, plus simplex on 2 meters and 70 centimeters, plus our 6-meter repeater. Each county will establish a location for gathering RACES and other amateur radio Em-Comm vehicles. One hour of the exercise will be spent communicating between the local vehicles and perhaps with EOCs throughout the county. The other hour will be devoted to intercounty communications. Net control for intercounty communications will be assigned prior to the exercise.

Formal message traffic is not planned for this exercise. At the conclusion of the exercise, participants will have an opportunity to inspect the communications vehicles.

Plans have been drafted, and include an ICS 205 Incident Radio Communications Plan and an Incident Action Plan (IAP), in accordance with FEMA National Incident Management System (NIMS) and Incident Command System (ICS) procedures.

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 and supportive amateur radio clubs in Orange County.

Please send your news to NetControl Editor Ken Bourne, W6HK, at:

w6hk@ ocraces.org

Anaheim RACES

Sagar Patel is now the RACES Program Coordinator for the City of Anaheim. He is the Administrative Analyst for Anaheim Fire & Rescue—Emergency Management & Preparedness Section. Jonathan Ramos, W6TFK, is the RACES Chief Radio Officer, and Greg Ryman, KK6VIT, is the Assistant Chief Radio Officer.

Fountain Valley RACES

Dick Bruno, N6ISY, Silent Key

We are very sad to report that Fountain Valley RACES Chief Radio Officer Dick Bruno, N6ISY, died on Thursday, January 4, 2018. He is survived by his wife Marcia, N6ISW. A celebration of life was held on Saturday, January 20th, at Coastal Community Church in Fountain Valley.

Alan Hill, W6ARH, is now the Fountain Valley RACES Chief Radio Officer, and Steve Blakesley, KI6ATO, is the Assistant Radio Officer.

Fountain Valley RACES Member Garry Jones, N6NQN, reports that their unit has been re-radioed. "Most all the existing radios in our radio room at the Fountain Valley PD dated back to the initial formation of the emergency communications team way back in the mid 80s. Many of the radios in the inventory only had 10 to 20 memories with many a work-around. Some of them sported only 25 wimpy watts of power and sent out signals on the original antennas. The one new radio, recently donated by a member, was a Kenwood TM-V71A with 1000 memory slots and five separate profiles which we are now loading up with the entire 2m/440-MHz OCRACES 'Yellow Book' frequencies. That event sparked an inquiry to our Fountain Valley PD Liaison, Sgt. James Cataline, for help. They came through with a Police Officer's Association Foundation grant and we were delivered eight new Kenwood TM-V71A dual-band radios with 50 watts on both bands. Two new radios went to the radio room to finish out the line of three stations, and the other six have been built into three "go box" configurations with 30-amp Powerwerx power supplies scheduled to go online in February after computer programming transfer. We also installed five new Comet GP-6 dual-band antennas, courtesy of a Fountain Valley Foundation donation. I can tell you that with a cool 50

watts of power on 2 meters and 440 MHz, and antennas with a 6 to 9 dBi gain, our RACES unit is now in a great position for reliable communications throughout Orange County. We can't wait to try them out on all the simplex frequencies in the OCRACES 'Yellow Book' next MOU exercise. We hope to have a new 'go box' ready for the 5K Fun Run race coming up at the Fountain Valley Sports Park on Saturday, February 3rd. We can't wait to key up."

Los Alamitos RACES

Corporal Dan Brandt, Los Alamitos Police Department, is now the Los Alamitos RACES Program Coordinator

Seal Beach RACES

Alan Ginsburg, WA6TOI, is now the Seal Beach RACES Assistant Radio Officer. Don Kovell, WA6GVI, is the Chief Radio Officer,

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

On Friday evening, April 19, 2018, HDSCS Coordinator April Moell, WA6OPS, provided a program for the Orange County Amateur Radio Club. She discussed the basic functions of this specialty group along with why the ARES model has worked well in in providing support to medical facilities. In addition, she reviewed several real incidents and then talked briefly about issues and concerns involving the new federal regulations requiring disaster plans similar to acute-care hospitals for such facilities as community clinics, dialysis centers, ambulatory surgical centers, long-term -care facilities, and community mental-health centers.

Orange County SKYWARN

Orange County SKYWARN Coordinator Scott O'Donnell, WX6STO, announced at 3:23 PM on Tuesday, January 9, 2018, that SKY-WARN was activated for Orange County, due to a flash-flood warning for Canyon Fire burn scars in effect until 5:45 PM that evening. Debris flows were likely, which could impact SR-91 and surrounding neighborhoods near the burn scar. In a 7:27 PM e-mail, Scott announced that NWS San Diego would like to deactivate Orange County SKYWARN.

February 2018

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3 Weekly 40 m ACS Net
4	5 Weekly 2 m ACS Net & OCRACES Meeting	6	7	8	9	10 Weekly 40 m ACS Net
11	12 Weekly 2 m ACS Net & City/County Meeting	13	14	15	16 Orange County Ama- teur Radio Club Meeting	17 Weekly 40 m ACS Net
18	19 Weekly 2 m ACS Net & Cooperative T-Hunt	20	21	22	23	24 Weekly 40 m ACS Net
25	26 ACS Nets on Five Bands & Cal OES Nets	27	28			

Upcoming Events:

- February 5: OCRACES Meeting, 840 N. Eckhoff Street, Suite 104, Orange, 1930-2130 hours
- February 12: City/County RACES & MOU Meeting, 840 N. Eckhoff Street, Suite 104, Orange, 1930-2130 hours
- February 16: Orange County Amateur Radio Club Meeting, American Red Cross (George M Chitty Building), 600 Parkcenter Drive, Santa Ana, 1900 hours
- February 19: Cooperative T-Hunt on input of 2-meter repeater, 1920 hours
- May 5: RACES Radio Rodeo, 0900-1100 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* 2 m: 146.595 MHz output, 146.295 MHz input, 136.5 Hz PL* 2 m: 146.595 MHz output, 222.160 MHz input, 110.9 Hz PL 70 cm: 446.000 MHz simplex 70 cm: 446.000 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 (private) 70 cm: 449.180 MHz output, 444.180 MHz input, 107.2 Hz PL (private) 70 cm: 449.680 MHz output, 444.680 MHz input, 131.8 Hz PL (private) 70 cm: 449.650 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

<u>RACES Program Coordinator</u> (<u>Emergency Comm's Manager</u>) Lee Kaser, KK6VIV 714-704-8080

Radio Officer (Lieutenant) Scott Byington, KC6MMF Chief Radio Officer (Captain) Ken Bourne, W6HK 714-997-0073

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

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: lkaser@ocsd.org

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!



Ken Bourne W6HK



Jack Barth AB6VC



Bob McFadden KK6CUS

Tom Tracey KC6FIC



Randy Benicky

N6PRL

WB6HMW



David Corsiglia WA6TWF

Ray Grimes





Matt Luczko KM6CAO



KB6EID



KD6DAQ



Ken Tucker

WF6F



Tom Riley

Tom Wright KJ6SPĒ



Brad Russo KB6GPM





Lee Kaser KK6VIV

N8RG

