

March 2022



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**OCRACES
Online Meeting
on Microsoft
Teams:**

**Monday,
March 7, 2022
at 7:30 PM**

Orange County Sheriff's Department
Emergency Management Division



Newsletter of the County of Orange Radio Amateur Civil Emergency Service

CRO's Nest

by Ken Bourne, W6HK, OCRACES Chief Radio Officer

Net Control Procedures

OCRACES holds weekly ACS nets almost every Monday at 1930 hours on our 2-meter repeater. Every fourth Monday, following the 2-meter net, we also conduct a roll call on one of our four 70-centimeter repeaters (rotated each month), followed by the 1¼-meter repeater, and finally on the 6-meter repeater.

The purposes of the nets are to:

- Practice emergency operating procedures
- Check our radios and antennas for reliable operation
- Give announcements of upcoming events
- Provide activity for RACES PSRs and sworn Reserves (who can log 0.5 hour on the Reserve Tracker)

Over the years, our Sheriff's RACES Coordinators, who have had considerable experience as dispatcher supervisors, have instructed OCRACES to conduct its nets in a professional, public-safety manner. Consequently, our net exchanges should be brief and sharp, which might sound "unfriendly" to some. (Conversely, our Saturday 60-meter nets are informal and "friendly.")

When responding to the roll call, city stations should give only their call sign and city name (such as "AF6TM Anaheim"). Other EmComm stations should use a similar procedure (such as "KM6RSY OCHEART"). OCRACES members should give only their call sign (such as "KD6DAQ"). Do not add something like, "Good evening, Ken."

When a station checks in, net control responds only with "Roger" and nothing else

(no city name, no member name, no "Good evening," and no "Thanks for checking in").

Preferably, net control should use a base station and stationary antenna, or at least a mobile station at a stationary location, rather than using a portable radio to run a net. It's unprofessional and upsetting if net control stations forget to charge their portable radios or transmit a signal that intermittently drops out of the repeater. With a home station and outside antenna, you can also monitor the OCRACES repeaters and communicate regularly with fellow members.

At the beginning of each transmission, such as when calling or acknowledging a station, remember that the 2-meter repeater is on a simulcast system, with a slight transmit audio delay that could cut off a first syllable. With each transmission, key your push-to-talk switch, wait a second, and then speak. Otherwise, when net control says, "Roger," for example, net participants might not hear anything and conclude that they were not heard.

If a called station does not check in, go on to the next station in the roll call, without any comment such as "Nothing heard." "Nothing heard" is ok on simplex or HF nets, when some stations might hear (and relay) a station that is not heard by net control, but is time-wasting on a repeater net.

When asking for late or visitor check-ins, acknowledge by call sign (or at least by suffix). Don't just say "Roger." Otherwise, the calling station won't know if you are acknowledging him or some other station that was stronger and overrode him. Sharpen your operation and listen carefully to late or visitor call signs, so you don't have to ask for repeats.

800 MHz Talkgroups in Orange County (Part 1)

by Robert Stoffel, KD6DAQ

As RACES members, we are sometimes called upon to operate on public safety radio channels, either from the Orange County Emergency Operations Center (EOC) at Loma Ridge, in the field with the Control 7 communications response vehicle, or using a radio at the scene of an incident. In this continuing series I am sharing information and providing our members with a better understanding about these channels and how they are used.

Over the past eight months we have learned about the various conventional radio channels used in Orange County. Now, it is time to start looking at the 800 MHz Countywide Coordinated Communications System (CCCS), the trunked radio system shared between the County and its 34 cities. Most every Law, Fire, Lifeguard, and Public Works department uses this massive radio system, and over the next several months I will discuss the various disciplines and how they use it. RACES members have access to these channels when assigned a portable radio at an incident/event, when using radios inside Control 7, and when using the radio console at the EOC.

Orange County uses the term “talkgroup” when referencing a trunked communications pathway within the 800 MHz CCCS, but most users refer to them as channels. If you see training materials talking about a talkgroup, that lets you know the channel is actually a trunked talk path, providing CCCS features such as the emergency button and automatic radio identification each time the push-to-talk is activated.

This article will focus on talkgroups unique to the Orange County Sheriff’s Department (OCSD).

Dispatch talkgroups assigned to the OCSD include the color “Yellow” in their name and used as follows:

- Yellow-1 – Patrol for Stanton, Villa Park, Yorba Linda, and OCSD North Operations Division
- Yellow-2 – Patrol for Aliso Viejo, Laguna Hills, Laguna Niguel, Laguna Woods, and OCSD Investigators
- Yellow-3 – Patrol for Lake Forest, Mission Viejo, Rancho Santa Margarita, and OCSD Southeast Unincorporated
- Yellow-4 – Patrol for Dana Point, San Clemente, and San Juan Capistrano
- Yellow-5 – Special purpose talkgroup
- Yellow-6 – Harbor Patrol talkgroup
- Yellow-7 – John Wayne Airport tactical talkgroup
- Yellow-8 – Used to coordinate communication with the OCSD helicopters

The above talkgroups (except Yellow-6 and Yellow-7) are located in Zone 1 of an OCSD radio. Yellow-6 is located in Zone 14 and Yellow-7 is located in Zone 15 of an OCSD radio.

Tactical talkgroups assigned to the OCSD include the “YTAC” designator and are primarily used by patrol operations as follows:

- YTAC-C1 – Countywide tactical talkgroup
- YTAC-C2 – Countywide tactical talkgroup
- YTAC-C3 – Countywide tactical talkgroup
- YTAC-N1 – North County tactical talkgroup
- YTAC-N2 – North County tactical talkgroup
- YTAC-S1 – South County tactical talkgroup
- YTAC-S2 – South County tactical talkgroup
- YTAC-A1 – Airport tactical talkgroup

The above talkgroups (except YTAC-A1) are located in Zone 1 of an OCSD radio. YTAC-A1 is located in Zone 15 of an OCSD radio.

The OCSD has talkgroups assigned to each Courthouse and Jail, using the leading word or abbreviation “SHERIFF” followed by a three-letter designator to identify the facility:



Top view of an APX portable selected to Yellow-1.



Front view of an APX portable selected to Yellow-1.

800 MHz Talkgroups *Continued from page 2*

- SHERIFF-CMJ – Central Men’s Jail talkgroup
- SHERIFF-CWJ – Central Women’s Jail talkgroup
- SHERIFF-IRC – Intake Release Center talkgroup
- SHERIFF-TLF – Theo Lacy Jail talkgroup
- SHERIFF-JMF – James Musick Jail talkgroup
- SHERIFF-COC – Central Division Courthouse talkgroup
- SHERIFF-HOC – Harbor Division Courthouse talkgroup
- SHERIFF-LJC – Juvenile Division Courthouse talkgroup
- SHERIFF-NOC – North Division Courthouse talkgroup
- SHERIFF-SAC – South Annex Courthouse talkgroup
- SHERIFF-SOC – South Division Courthouse talkgroup
- SHERIFF-WOC – West Division Courthouse talkgroup

The above talkgroups are located in Zone 13 of an OCSD radio.

Finally, the OCSD provides Law Enforcement for the County’s John Wayne Airport, and deputies use the Airport’s Silver-1 talkgroup for day-to-day operations, along with Airport Operations. OCSD will use YELLOW -7 and YTAC-A1 for tactical use at the airport. These talkgroups are located in Zone 15 of an OCSD radio.

This completes our review of the 800 MHz CCCS trunked talkgroups that are unique to the OCSD. Next month we will continue our journey by looking at the 800 MHz CCCS talkgroups used by other Law Enforcement agencies.

Winlink in Orange County *by Scott MacGillivray, KM6RTE@gmail.com*

Upcoming Winlink Peer-to-Peer Practice Drill

This quarter’s (Q1) countywide Peer-to-Peer (P2P) drill is scheduled for Saturday, March 12, 2022 from 9:00 AM until noon. This drill will be similar to the one held on December 11th last year, but will have a couple more gateways available to use as relays. In addition, new for this drill will be a couple of stations operating as “Winlink Message Centers” around the county that will simulate a local EOC during an emergency event and represent stations available to send and receive messages to and from. For more information on the drill, refer to the instructions distributed through the OCRACES Groups.io mailing list on February 19th or contact me at KM6RTE@gmail.com. These countywide Winlink P2P drills are held once a quarter, and next quarter’s (Q2) drill is tentatively scheduled for Saturday, June 11, 2022.

Next Offering of Introduction to Winlink Express Classes

I’ve been contacted by a several people interested in my online Introduction to Winlink Express and wanting to know when it will be offered again. At this time, I have not set a specific date for them to start. Most likely they will start in July or August. If you’re interested in participating in the next series of classes (or know of someone that might be interested), please send me an email expressing your interest in the class with your name, call sign, what city you live in, and what (if any) emergency communications organization you are part of. I’m currently compiling a list of interested people and will send out notifications once the specific dates are firmed up. The 1-hour-long classes meet online Thursdays at noon and repeated again on Sundays at 3:00 PM for 5 weeks. It doesn’t matter which class you participate in for a given week.

New Winlink Radio Message Server (RMS) Now Available in Central OC

A new VHF Winlink RMS (aka gateway) has been temporarily set up at Loma Ridge. From this location in central Orange County, this gateway provides excellent coverage to most of the county. The gateway (KM6RTE-12) operates at 145.090 MHz, 1200 baud, and uses packet encoding. This temporary gateway is made available due in part to the continued unavailability of the county’s UHF gateways (W6ACS-10, -11, and -12) that have been down since July 2020. While progress has been made in developing a path forward to getting these gateways back up and running, no schedule has been set.

Protecting Yourself from Cyberattacks

by Eric Bowen, W6RTR

At our January 2022 OCRACES meeting, we had a fantastic discussion about cybersecurity and how to protect yourself from attacks. At home, I use two different methods to protect myself from ransomware and other spyware. I will discuss each of these below and give a brief overview. I would suggest researching these options on your own to learn more about them, since they both range from easy to difficult to set up, depending on how involved you want to get.

One of the companies that I worked at fell prey to a ransomware attack. One of our employees opened an email attachment and it infected her computer. It locked up everything on her hard drive, as well as expanding out to the shared network drives. Unfortunately for the company, some of her shared drives were pointing to our production drives. My company processed millions of transactions a day, so you can imagine what this did to our production servers.

Fortunately for the company, they had a real-time backup system, so we were able to restore our network with minimal loss. However, that downtime lasted for a couple of days while everything was brought back online. They also had to come up with a plan to prevent this type of attack in the future from affecting the production servers.

They did this by removing all the drive mappings from all computers, with exception of our home directories. They essentially removed all production software and access to the production servers from all the computers on the network. All we were allowed to do locally was browse the internet and run Office 365. We could also run some minor programs that had no network access. The only other software that we could use on our computer was a virtual machine (VM) software.

This software allowed us to connect to virtual computer desktops in our data center. From these VMs, we could access all our production software and network drives like before, but they were now isolated from ransomware and other viruses since they were no longer on the same computer as our web browsers and our email.

If you are not familiar with VMs, it is something that you should really investigate if you want to protect your home computer(s) the same way. It is one of the two options that I use at home to help protect my computers and laptops. I'll explain the second a little later.

A VM, or virtual machine, allows you to run an operating system, such as Windows 10/11 or Linux, in an app window on your computer. It acts like a different computer and protects your local computer from malware, viruses, ransomware, and other cyberattacks. The VM software is free, although there are paid versions out there. If something does happen to your virtual machine, you can just delete it and create another one, without doing any damage to your computer or its operating system.

My favorite is VMWare Workstation Player. The only downside to using this type of software is, although minor, buying a license for the software you plan to use on it. Although, Linux is free, but might not work for you if you are not familiar with it.

And that leads me to the second option that I use—the Raspberry Pi. The Pi is a small computer that costs between \$35 and \$75, depending on which one you purchase and where you get it. It is a very powerful computer, especially for its size. It runs on Linux. And since that OS is free, the total cost to set up one of these minicomputers is very minimal.

You can use the Pi as a regular computer, meaning you can hook up a keyboard, mouse, and monitor to it and do your browsing and email on it, or however you want to use it in order to protect your main computer. Or... you can just plug it in, without the keyboard, mouse, and monitor, and access it remotely using a program such as VLC. I prefer to use a program called MobaXterm. It is a very advanced terminal emulator program that allows you to remotely connect to other computers and perform a lot of different functions.

Each of these options have several different ways to use them, so I wouldn't be able to tell you exactly how to install, set up, or use them. I would recommend finding some very recent videos on YouTube and learn how to do this. It does require a little bit of computer knowledge to use either of these, but it is worth learning if you want to seclude your computer/laptop from cyberattacks and lower the chances of something happening.

Amateur Radio in Ukraine Ordered Off the Air

A state of emergency was declared in Ukraine just prior to the Russian military invasion. Among other things, the February 24, 2022, decree from President Volodymyr Zelensky will remain in effect at least for 30 days and may be extended. As published on the website of the Verkhovna Rada, Ukraine's unicameral legislative body, the state of emergency includes regulation of TV and radio activities and "a ban on the operation of amateur radio transmitters for personal and collective use." Ukrainian Amateur Radio League's Vice-President, Anatoly Kirilenko, UT3UY, also announced the ban on amateur radio for 30 days.

The decree also imposes a ban on mass events and on strikes and authorizes checking the documents of citizens, and, if necessary, conducting searches on persons, vehicles, cargo, office space, and housing. A curfew could be imposed. "The situation changes rapidly," International Amateur Radio Union (IARU) Region 1 Secretary Mats Espling, SM6EAN, said. "IARU Region 1 continues to monitor the development and expects all radio amateurs to follow their national laws and regulations."

Next OCRACES Meeting: March 7th on Teams

Our next OCRACES meeting will be on Monday, March 7, 2022, at 7:30 PM. Joe Selikov, KB6EID, will host this meeting on Microsoft Teams. A meeting link will be emailed to the ocsd-races Groups.io list. Members of city, county, and state RACES and EmComm units are invited. This will be a mandatory meeting for all OCRACES members to discuss how we can enhance our service to the OCSO Emergency Management Division. We hope Sgt. Kyle Sheek will be available to discuss Reserve Bureau procedures. RACES PSRs need to register for this meeting on the Reserve Tracker Calendar. We will discuss how each of us can meet the 10-hour-per-month requirement. For the city RACES members attending the meeting, we will provide information on the exciting programs in the Sheriff's Department, if they wish to consider becoming a Professional Services Responder.

DHS Offers AUXCOMM Course on April 1-3

A three-day virtual AUXCOMM course is being offered in our region on April 1-3, 2022, by the U.S. Department of Homeland Security Office of Emergency Communications. This class is designed for amateur radio operators who volunteer to provide backup radio communications support to public-safety agencies. This course focuses on auxiliary communications interoperability, the relationship between the COML and AUXCOMM/AUXC volunteers, emergency operations center (EOC) etiquette, on-the-air etiquette, FCC rules and regulations, auxiliary communications training and planning, and emergency communications deployment. To attend this course, applicants must have an active FCC amateur radio license, past experience in auxiliary emergency communications, a desire to work with COMLs in a NIMS/ICS environment, an affiliation with a public-safety agency (such as a law-enforcement agency, fire department, or emergency management agency), and completion of FEMA IS-100, IS-200, IS-700, and IS-800 training courses. This free AUXCOMM course uses the Webex Training Center platform and the students will be required to attend a one-hour Webex Orientation session on either March 28th at 1200 or March 29th at 1700. The course will begin at 1700 on Friday, April 1, for approximately four hours and resume at 0800 on Saturday as well as Sunday. Course materials will be provided electronically via a large file transfer using DoD SAFE. Applicants should submit a copy of their current FCC amateur license with scanned copies of all prerequisite Certificates of Completion for IS prerequisite courses by March 7th to Jaimie Flowers at Jamie.I.Flowers.civ@us.navy.mil. Admittance is limited to the first 15 qualified applicants.

Bob Bruninga, WB4APR, Silent Key

It is sad and ironic that, on the same day of the last OCRACES meeting, February 7, 2022, featuring an open discussion of the Automatic Packet Reporting System (APRS), the creator of APRS, Bob Bruninga, WB4APR, of Glen Burnie, Maryland, died. An ARRL Life Member, Bruninga was 73. According to his daughter, Bruninga succumbed to cancer and the effects of COVID-19. Over the years, he readily shared his broad knowledge of and experience with APRS, among other topics in the amateur radio and electronics fields.

While best known for APRS, Bruninga was also a retired U.S. Naval Academy (USNA) senior research engineer who had an abiding interest in alternative power sources, such as solar power. In 2018, he authored *Energy Choices for the Radio Amateur*, published by ARRL, which explores developing changes in the area of power and energy, and examines the choices radio amateurs and others can make regarding home solar power, heat pumps, and hybrid and electric vehicles. Bruninga drove an all-electric car and had experimented with a variety of electric-powered vehicles over the years.

APRS originated in 1982, when Bruninga wrote his first data map program that plotted the positions of U.S. Navy ships for the Apple II platform. A couple of years later, he developed what he called the Connectionless Emergency Traffic System (CETS) on the VIC-20 and C64 platforms for digital packet communications to support an endurance race. The program was ported to the IBM PC platform in 1988, and was renamed APRS in 1992. The recognized North American APRS frequency is 144.39 MHz, and APRS is globally linked via the internet. Bruninga founded the Appalachian Trail Golden Packet (ATPG) event, which fields APRS nodes from Stone Mountain in Georgia to Mount Katahdin in Maine each July.

Bruninga mentored USNA midshipmen in building and launching amateur radio satellites and CubeSats, beginning with PCsat in 2001. PCsat was the first satellite to directly report its precise position to users via its onboard GPS module. Subsequent USNA spacecraft included PSK31 capability (HF to UHF) and other innovations.

Amateur Radio on the International Space Station (ARISS) ARRL liaison Rosalie White, K1STO, recalled that Bruninga attended many ARISS-International meetings and contributed "enormously" to ARISS APRS activities, leading a team in developing protocols and software for rapid message exchange via a packet "robot."

White said APRS remains a key staple in the new ARISS InterOperable Radio System (IORS) that's now on board the ISS. She added that Bruninga offered input for future NASA Lunar and Gateway opportunities in which ARISS hopes to take part.

Bruninga held a bachelor's degree in electrical engineering from Georgia Tech (Georgia Institute of Technology) and a master's degree in electrical engineering from the Naval Postgraduate School. Bruninga was a 20-year U.S. Navy veteran.

Countywide RACES/EmComm News

"RACES/EmComm News" provides an opportunity to share information from all City & County RACES/ACS units and EmComm organizations and supportive amateur radio clubs in and near Orange County, as well as from Cal OES and federal agencies.

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

kbourne.ocsd@earthlink.net

[City of Orange Amateur Radio \(COAR\)](#)

The URL for the City of Orange RACES (COAR) website is now <https://www.cityoforange.org/our-city/departments/police/programs/city-of-orange-amateur-radio-coar-volunteers>.

[Orange County SKYWARN](#)

Orange County SKYWARN Coordinator Scott O'Donnell, WX6STO, activated OC SKYWARN at 1400 hours on Tuesday, February 15, 2022, at the request of the National Weather Service (NWS) San Diego. Main concerns were a chance of thunderstorms and high winds (mainly blowing sand/reduced visibility in the deserts). Scott asked spotters to report any conditions that meet the criteria to NWS by telephone, by online spotter form, or by amateur radio if a net controller were available on the air. The online spotter form is at <https://inws.ncep.noaa.gov/report/>. Alex Tardy of the NWS San Diego SKYWARN program said they had many great reports from February 15-16, which included hail, heavy rain, snowfall, and lightning. He alerted spotters about another chance on Tuesday into Wednesday of the following week. Alex expressed appreciation for the weather support. Snowfall was as much as 12 inches at Lake Arrowhead, and near 1 inch down to 3000 to 3500 feet, and hail as large as 1/2 inch diameter. NWS San Diego observed 190 cloud-to-ground lightning strikes and 165 in-cloud lightning flashes.

As predicted, on Tuesday, February 22nd, NWS San Diego requested SKYWARN activation through noon the next day, for reports of snow and snow levels in the mountains (expected to go down to 2,000 feet), as well as rain totals in the lower elevations.

[Winlink Express Training](#)

OCRACES Member Scott MacGillivray, KM6RTE, has conducted four of his five online tutorials on Introduction to Winlink Express. His tutorial #5 will be in early March. He is contemplating repeating his excellent sessions later in 2022.

Scott will conduct another countywide

Peer-to-Peer (P2P) Winlink drill on Saturday, March 12, 2022, from 9:00 AM until noon. This is not an OCRACES drill, but is held for the benefit of any radio amateur who wishes to check his Winlink equipment and practice P2P techniques. See Scott's article on page 3 of this issue for additional information.

[Orange County Sheriff's Department Emergency Management Division](#)

The 2022 edition of the *Official RACES Guidebook* ("Yellow Book") has been printed. OCRACES members and a designated representative from each city RACES and MOU unit may pick up their books at the OCSO Technology Division front desk at 840 N. Eckhoff Street in Orange (door near the miniature tower).

[Orange County Sheriff's Department Mutual Aid / Reserve Bureau](#)

On Saturday, March 5, 2022, from 0900 hours until noon, the PSR Fire Watch Team, which is different than the OCRACES Severe Fire Weather Patrol, will hold a training meeting at the Orange County Sheriff's Regional Training Academy in Tustin. Uniforms are required. PSR Fire Watch is activated during Red Flag Warnings and members work a 5 or 6 hour shift, driving a Sheriff's vehicle, using 800-MHz radios. Please register on the Reserve Tracker Calendar.

All RACES PSRs are asked to attend PSR Training on Monday, March 14, 2022, from 1800 to 2000 hours, at the Sheriff's Academy in Tustin. Uniforms are required. At this training we will learn about OCSO's South Gang Enforcement Team. We will meet other PSRs and learn about their activities in other Reserve Units. We will also get to meet Sgt. Kyle Sheek, who is now the PSR administrator. Please register on the Reserve Tracker Calendar.

Captain Richard Nelson, the OCSO Reserve Bureau Commander, will retire on March 10, 2022. Taking his place will be Captain Jason Doherty. Sergeant Jason McLennan administers the sworn Reserve Deputies, and Sergeant Kyle Sheek administers the PSRs, Explorers, and Chaplains.

March 2022

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2 PSR Orientation	3	4	5 Weekly 60 m ACS Net & PSR FW Training
6	7 Weekly 2 m ACS Net & OCRACES Teams Mtg	8	9	10	11	12 Weekly 60 m ACS Net & PSR Prescreen
13	14 PSR Training (no net)	15	16	17	18 Orange County Amateur Radio Club Meeting	19 Weekly 60 m ACS Net
20	21 Weekly 2 m ACS N	22	23	24	25	26 Weekly 60 m ACS Net
27	28 ACS Net on 4 Bands	29	30	31		

Upcoming Events:

- **March 2, 1830 hours:** Orientation for PSR Applicants, OC Sheriff's Regional Training Academy
- **March 5, 0900-1300 hours:** PSR Fire Watch Training, OC Sheriff's Regional Training Academy
- **March 7, 1930 hours:** OCRACES Meeting on Microsoft Teams
- **March 12, 0900 hours:** Prescreen for PSR Applicants, OC Sheriff's Regional Training Academy
- **March 12, 0900-1200 hours:** Winlink Peer-to-Peer Exercise (non-RACES)
- **March 14, 1800-2000 hours:** PSR Training, Gang Enforcement Team, OC Sheriff's Regional Training Academy (OCRACES ACS net canceled)
- **March 18, 1900 hours:** Orange County Amateur Radio Club Meeting on Zoom
- **March 28, 1200 hours, or March 29, 1700 hours:** Webex Orientation for April 1-3 AUXCOMM course
- **April 1-3:** DHS AUXCOMM course (see page 5)
- **May 7: 0900-1200 hours:** City/County RACES & EmComm ACS Exercise



County of Orange RACES Frequencies

- 60 m: 5371.5 kHz USB (dial) (Channel 4) (OC ACS Net—Saturdays, 1000 hours)
- 40 m: 7250 kHz LSB
- 10 m: 29.640 MHz output, 29.540 MHz input, 107.2 Hz PL (down for repair)
- 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: 446.000 MHz simplex
- 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 (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)
- *Primary Net—Mondays, 1900 hours



<https://ocraces.org>

Mission Statement

County of Orange RACES has made a commitment to provide all Public Safety departments in Orange County with the most efficient response possible to supplement emergency/disaster and routine Public Safety communications events and activities. We will provide the highest level of service using Amateur and Public Safety radio resources coupled with technology, teamwork, safety, and excellence. We will do so in an efficient, professional, and courteous manner, accepting accountability for all actions. We dedicate ourselves to working in partnership with the Public Safety community to professionally excel in the ability to provide emergency communications resources and services.

OCSD RACES Coordinator

Lee Kaser, KK6VIV, (714) 628-7081

Chief Radio Officer

Ken Bourne, W6HK, (714) 997-0073

Radio Officer

Scott Byington, KC6MMF

Assistant Radio Officers

Jack Barth, AB6VC
Ernest Fierheller, KG6LXT (pending PSR acceptance)

County of Orange RACES

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Visit Our Web Site
<https://ocraces.org>
 It's Where It's @!

Questions or Comments?
 Contact *NetControl* Editor Ken Bourne, W6HK
kbourne.ocsd@earthlink.net



**“W6ACS ...
 Serving
 Orange County”**

Meet Your County of Orange RACES Members!

Officers →



Ken Bourne W6HK
Scott Byington KC6MMF
Jack Barth AB6VC

**OCSD
 RACES
 Coordinator** →



Lee Kaser
 KK6VIV



Heide Aguire K3TOG
Randy Benicky N6PRL
Eric Bowen W6RTR
Ray Grimes N8RG
Peter Jimenez K16UTE
Walter Kroy KC6HAM
Martin La Rocque N6NTH
Steve Livingston NJ6R



Scott MacGillivray KM6RTE
Don Mikami N6ELD
Fran Needham KJ6UJS
John Pilger K6PIO
Joe Selikov KB6EID
Robert Stoffel KD6DAQ
Chuck Streitz KK6HFS
Ken Tucker WF6F

**PSR
 Applicant** →



Ernest Fierheller
 KG6LXT