Illegal Operation

Using amateur radio equipment on non-amateur frequencies is just plain illegal, unless the equipment is FCC certified for such use. On the other hand, equipment certified for use on non-amateur frequencies may be modified or reprogrammed for use on the ham bands, provided that it meets FCC technical standards.

Reprogramming your amateur mobile or hand-held radio for use on Family Radio Service (FRS) or General Mobile Radio Service (GMRS) frequencies is illegal. Unless it is Part 90 certified (such as a Motorola radio being used on amateur frequencies), it can’t be used on OCSD County Access or Blue Channel either. Be careful of the Chinese radios that claim to be Part 90 certified. If they have been modified for front-panel programming, they might have lost their Part 90 certification. Part 90 certification does not allow use on FRS or GMRS frequencies, which fall under Part 95 of the FCC rules.

Revised FCC rules require manufacturers to prevent end-user modification of such devices as WiFi routers in such a manner that the device could operate outside its authorized parameters and possibly cause harmful interference. For some time now, hams involved in broadband WiFi networking (such as Broadband-Hamnet or AR-EDN) have been modifying commonplace routers for use on amateur radio frequencies—and this remains a legal activity, although the new requirements for manufacturers could make this more difficult, if not impossible.

The FCC gave some examples of authorized equipment being used in an unlawful manner.

- The use of WiFi equipment to intentionally disrupt the lawful operation of neighboring WiFi networks.
- The use of authorized broadcast transmitters to operate unlicensed or “pirate” radio stations.
- The use of authorized WiFi routers on unauthorized channels or on authorized channels at unauthorized power levels.
- The programming and use of Private Land Mobile Radio devices (Part 90 radios) to operate on unauthorized channels.

Revised FCC rules require manufacturers to prevent end-user modification of such devices as WiFi routers in such a manner that the device could operate outside its authorized parameters and possibly cause harmful interference. For some time now, hams involved in broadband WiFi networking (such as Broadband-Hamnet or AR-EDN) have been modifying commonplace routers for use on amateur radio frequencies—and this remains a legal activity, although the new requirements for manufacturers could make this more difficult, if not impossible.
The Orange County Amateur Radio Club (OCARC) and County of Orange RACES (OCRACES) participated as a team at Field Day on Saturday, June 25-26, 2016, at the Walter Knott Education Center in Buena Park. It was an enjoyable event, and many members attended.

OCARC members began constructing their HF antennas and towers at 0900 hours on Friday, June 24th. Their stations operated on 15 meters phone/CW, 20 meters phone, 20 meters CW, digital all bands, 40 meters phone/CW, and satellite. They also had a GOTA station for visitors to operate. OCRACES arrived before 0800 Saturday to set up its van and VHF/UHF station. OCARC Member Tim Goeppinger, N6GP, provided a Moxon 6-meter antenna, which was mounted on the van’s Will-Burt mast. OCRACES/OCARC Member Tony Scalpi, who set up and operated the club’s satellite station, provided a 2-meter/70-centimeter loop antenna for the van’s station.

The location was excellent, with a nice shady spot for the OCRACES van. A Boy Scout troop cooked excellent meals (breakfast, lunch, and dinner) for all participants, available at a very reasonable cost as a fund raiser for the Scouts.

Fran Needham, KJ6UJS, drove the OCRACES van from Eckhoff to the Field Day site on Saturday, and then back to Eckhoff on Sunday. The van and VHF/UHF stations were set up by Fran, Chief Radio Officer Ken Bourne, W6HK, Tom Riley, K6TPR, Tom Wright, KJ6SPE, Walter Kroy, KC6HAM, and Radio Officer Harvey Packard, KM6BV. Also present most of the day was Martin La Rocque, N6NTH. Radio Officer Scott Byington, KC6MMF, stopped by on his way to Las Vegas for a relative’s wedding event.

Due to an OCSD Search & Rescue and Aero Squadron Reserve exercise on Saturday, some members arrived late Saturday, or could not participate. After the exercise, Assistant Radio Officer Bob McFadden, KK6CUS, stayed into late evening, and came back on Sunday. David Corsiglia, WA6TWF, also participated on Saturday.

Visiting from the Orange County Sheriff’s Department, Communications & Technology Division, were Emergency Communications Manager Lee Kaser, KK6VIV, the new Division Director Dave Fontneau and his wife, and Program Support Manager Delia Kraft, KR6AFT, and her husband Brian.

Demobilization began at 1100 hours on Sunday, by Ken, W6HK, Fran, KJ6UJS, Bob, KK6CUS, Walter, KC6HAM, and Tony, N2VAJ, as well as by many OCARC members tearing down the HF stations.
Next OCRACES Meeting: July 11th

Due to the July 4th holiday, the next County of Orange RACES meeting will not be held on the usual first Monday of the month. Rather, the meeting will be on Monday, July 11, 2016, at 840 N. Eckhoff Street, Suite 104, in Orange. At this meeting, Ken Mirabella, KM6YH, will give a presentation on the new TERA TR-7400 DMR handheld radio, distributed by Powerwerx. Also at this meeting we will review the May 7th City/County RACES & MOU ACS Exercise, as well as RACES activities at the Primary Election and our participation at Field Day.

OCSD App Available for iPhones

The OCSD App is now available in the Apple App Store for iOS 9.0 or later, and is compatible with iPhone, iPad, and iPod touch. It allows access to the latest OCSD news and press releases, crime alerts, arrest logs, inmate information, and much more. More features and an Android version are slated for release later this year.

Current features include:

- News & Press Releases: Get the latest OCSD news provided by the Department’s Media Relations team
- Arrest Log: View daily arrest logs
- Arrest Warrants: Search the Department’s warrant repository
- Sheriff’s Blotter: View crime call information by city
- Submit A Tip: Got a tip about a crime? Submit it from this mobile app
- Who’s in Jail: Search the Department’s inmate population
- Contact Us: View the Department’s directory.

RMS Express Becomes Winlink Express

The latest version (1.4.0.0) of RMS Express is now called Winlink Express. It is copyrighted by the American Radio Safety Foundation, Inc. Two of the several changes in the new version convert commas and semicolons to underscore in contact names, and fix a problem with password validation. Users are requested, but not required, to pay $24.00 for a Winlink Express registration key. If a user has already paid for a WINMOR TNC registration key, their WINMOR key will work with Winlink Express. That key should be entered on the Winlink Express Site Properties screen.

Registration of Winlink Express through the Amateur Radio Safety Foundation helps insure the continued support and enhancement of Winlink Express, WINMOR TNC, and the Winlink system. Registration payments can be done directly on-line using PayPal or most credit cards using the secure registration link of https://www.arsfi.org/winmor.aspx.

When registering, the user will receive a 128-bit (32 hex characters) registration key that can be copied and pasted into the Windows Express Properties (“Setup”) screen, completing the registration process. Registration is for one specific call sign and will work for any -ssid of that call sign. Registration keys may be freely copied to other instances of Winlink Express, other computers, or installations using the same base call sign.

If the user does not enter a registration key, periodically Winlink Express displays a registration reminder screen.

Next City/County Meeting: October 17th

Contrary to the agenda note at the June 13th City/County RACES & MOU Meeting, the next City/County/MOU meeting will not be on October 10th, due to the Columbus Day holiday. Rather, the meeting will be on the following (third) Monday, October 17, 2016, at 7:20 PM, at 840 N. Eckhoff Street, Suite 104, in Orange.

The Cooperative T-Hunt for October, normally held on the third Monday, has been moved to the second Monday (Columbus Day), October 10, 2016, immediately following the 7:00 PM OCRACES ACS net.
OCSD Communications & Technology Division coordinated ballot transportation for the Primary Election on June 7, 2016. County and City RACES units provided communicators at each of the 33 Collection Centers and the Vote Tally Center (VTC), beginning as soon as the first ballot boxes arrived after 8:00 PM.

The Collection Center communicators transmitted information to Net Control and the VTC regarding the movement of the vans and the precinct numbers of ballot boxes loaded into the vans. Three different OCRACES repeaters provided full coverage of Orange County. Someone unknowingly had a stuck microphone on the 2-meter repeater, but operations on that repeater were successfully transferred to one of the OCRACES UHF repeaters.

Collection Center communicators first transmitted when the van and truck arrived. Next they transmitted when the first ballot box arrived, and gave the precinct number of that box. Subsequent transmissions included when the van departed for the VTC, and the precinct numbers of all ballot boxes being transported.

At the VTC were OCRACES Members Fran Needham, KJ6UJS, Jim Dorris, KC6RFC, Radio Officer Scott Byington, KC6MMF, Radio Officer Harvey Packard, Assistant Radio Officer Tom Tracey, KC6FIC, and OCSD Emergency Communications Manager Lee Kaser, KK6VIV. Assistant Radio Officer Jack Barth, AB6VC, worked at VTC Traffic Control, along with OCSD Senior Telecommunications Engineer Nick Condaras, KD3QY, and OCSD Communications Technician Nate Dellinger, Kf6PWI.

We do not have a record of all City RACES and MOU members who were at the Collection Centers, but we will list those we know of, as accurately as we can, with sincere thanks to all who participated.

At Anaheim PD was Jonathan Ramos, W6TFK, Anaheim RACES Chief Radio Officer. At Canyon Hills was Frank Lansner, Kf6NDQ, from Anaheim RACES. At Buena Park was Robert Stoffel, KD6DAQ, from OCRACES (retired OCSD/Communications Director). At Costa Mesa was Mike Oviatt, KE6lWM, from MESAC. At Santa Ana was Robert LaBarge, Kf6HXF. At Fountain Valley was Alan Hill, W6ARH, from Fountain Valley RACES. At Fullerton was David Reed, Kf6PQT, Fullerton RACES Assistant Radio Officer. At Garden Grove was Walter Kroy, KC6HAM, from OCRACES. At Huntington Beach was Roy Lothringter, N6SLD, from HBRACES. At Irvine was Peter Gonzalez, KC6TWS, IDEC Operations Captain. At Laguna Beach was John Kountz, WO1S, LBECT Chief Radio Officer. At Laguna Woods was Jim Riedel, Kf6EEE, Laguna Woods RACES Assistant Radio Officer. At La Habra was Gene Thorpe, KB6CMO, Fullerton RACES Radio Officer. At Los Alamitos was Michael Peer, WD6CDN, Los Alamitos RACES Chief Radio Officer. At Orange PD was Will Stoddard, KJ6IA, from COAR. At Rancho Santa Margarita Fire Station #45 were Knute Josifeh, K6HV, from Mission Viejo RACES, and Randy Benicky, N6PRL, from OCRACES. At Placentia was Mark Garrett, KG6CAV, Placentia RACES Radio Officer. At San Clemente was Joe Lopez, W6BGR, Tri-Cities RACES Chief Radio Officer. At Saddleback was Scott Holcomb, KK6WHC, from Mission Viejo RACES. At Tustin was Ken Bourne, W6HK, OCRACES Chief Radio Officer. At Westminster was Chi Nguyen, KE6MYS, Westminster RACES Radio Officer. At Laguna Niguel Fire Station #49 were Clark Croisette, Kf6IZE, from Tri-Cities RACES, and Allen Renning, WB6CKG, from HDSCS. At Allso Viejo was Bob McFadden, KK6CUS, OCRACES Assistant Radio Officer. At San Juan Capistrano was Kevin Barry, KJ6OCM, from Tri-Cities RACES. At West Anaheim Youth Center was Rich Lewis, AF6TM, from Anaheim RACES. At Corona Del Mar was Tom Wright, KJ6SPE, from OCRACES. At Orange School was Rich Helmick, KE6WWK, from COAR. At Huntington Beach Faith Church was Pete Zillox, K5PZ, from HBRACES (please look at his incredible ham shack on QRZ.COM). At Boeing/Huntington Beach was Manny Vizinho, KG6lQL, from HBRACES. At Irvine High School was Bill Miller, KE6KYH, from IDEC. At Mission Viejo City Hall was Charley Speelman, WA6RUZ, Mission Viejo RACES Radio Officer. At Placentia Church was Theresia Olson, KK6ZOO, from Placentia RACES. At Santa Ana High School was Larry Wilson, K6SCH.
KC6TWS Hides in the Southern Hills of Irvine

IDEC Operations Captain Peter Gonzalez, KC6TWS, was the fox on Monday, June 18, 2016, on the monthly cooperative T-hunt. He turned on the fox box immediately following the 2-meter OCRACES ACS net, hiding in Las Lomas Community Park in the hills of southern Irvine. His signal was reflecting off the hills in the area, creating a challenge to the two hunting teams who were intensely comparing bearings via the 449.100 MHz repeater. Peter enjoyed listening to the hunters as they drove down Culver Drive onto Bonita Canyon Drive, driving down dead-end roads in the southern part of the University of California Irvine campus, inspecting the campus of Mariners Church, and finally crossing over Turtle Ridge Drive and into the north end of the Park’s parking lot. It was a high point, overlooking the twisty roads of the UCI campus to the north. It took the hunters almost an hour to find the fox.

The “Bourne Team” was the first to arrive, consisting of Ken, W6HK, and his two sons Don, KB6TVK, and Bob, K6RBI. Close behind them was Ron Allerdice, WA6CYY, in his impressive, well-equipped, hunting vehicle.

The next cooperative T-hunt will be held on July 18, 2016 (the third Monday in July), 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 (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!

HRO Ham Jam: July 16th

County of Orange RACES will exhibit its emergency communications response vehicle at the 5th Annual HRO Ham Jam on Saturday, July 16, 2016, at Ham Radio Outlet, 933 N. Euclid Street, in Anaheim. Store hours are 10:00 AM to 5:30 PM, but an exact schedule of OCRACES activities will be announced prior to the event. We always have many OCRACES members at this event, eager to show our van to the many Ham Jam visitors—plus some of our members typically win nice prizes. HRO will host local clubs and communications specialists in the store parking lot for this educational and fun event.

The Eagle Scouts will be providing lunch this year. HRO will have a post Field-Day tent with quick-deploy antennas for attendees who want to put in some HF operating using the new Icom IC-7300 transceiver. License testing will also be available most of the day.

OCSD Tests Readiness with OCFA

An exercise on June 24, 2016, called “OCFA O-305 Simulator Day,” at the Orange County Fire Authority headquarters in Irvine, tested the readiness of the OCSD Samantha I trailer alongside the OCFA IT and communications vehicles. Brian Peelle from the OCSD Information Services Bureau requested the use of the OASIS trailer to test its readiness and compatibility with Samantha 1. A satellite phone connection was established inside Samantha 1 as well as a line outside the trailer. Internet hookup was also tested, with Brian able to successfully run OCSD Computer Aided Dispatch by satellite—a round trip of 44,000 miles. OCSD Emergency Communications Manager Lee Kaser, KK6VIV, arranged to bring the OASIS trailer to the event. OCRACES was represented by Chief Radio Officer Ken Bourne, W6HK.

Lee Kaser, KK6VIV (right), at OASIS trailer.
Laguna Beach RACES (LBECT)
LBECT Chief Radio Officer John Kountz, WO1S, reports that their Field Day activities were successful, thanks to the members and a host of others. Three LDS elders carried batteries, tripods, and a variety of heavy objects, in addition to climbing a kiosk to install two solar panels and a dual-band antenna, and linking a wire antenna to the park trees. LBECT members Mark Cohen, K6ZGI, Annette Garcia, KK6CNT, Arlene Schwartz, KE6GFI, John Kountz, WO1S, and Shawn, a volunteer tennis player, not only carried a folding table, power distribution and solar interconnect cables, and wire and yagi antennas, but they connected it all together into four functioning amateur radio stations. Once up and running, Steven Morse Tiner, AA6JK, and his brother Peter spent some time with the stations. The Tiner brothers are descendents of Samuel F. B. Morse, the inventor of Morse code. Jeff Davis, NØDY, made almost 100 CW contacts in the afternoon. Councilman Rob von Zur Schmiede visited in the afternoon, along with Laguna Beach hams Bill Miller, AA1CY, Roger Taft, W6LHT, and Gale Keller, KE6SKW.

Orange County SKYWARN
The previous Orange County SKYWARN Web site has been decommissioned. http://www.ocskywarn.org is no longer being used and has been deactivated. You can follow Orange County SKYWARN on Facebook at www.facebook.com/OCSkywarn/. You can follow them on Twitter at @OCSkywarn or https://twitter.com/OCSkywarn.

The regional SKYWARN is broken into four local areas. Orange County SKYWARN operates as a component of Southwest California SKYWARN. Orange County SKYWARN will now use the regional Web site, http://www.swskywarn.org. During activations, this regional Web site is automatically updated to inform which areas are activated and other details regarding the activation.

Southwest California SKYWARN is an all-volunteer organization that supports the National Weather Service Forecast Office in San Diego. Its service region covers San Diego, Orange, Western Riverside, and Southwest San Bernardino Counties. It is a separate entity from and operates at the request of the National Weather Service, and in no way represents the National Weather Service, its staff, products, or services.

Each area is administered by a local coordinator. (The coordinator for Orange County SKYWARN is Scott O’Donnell, WX6STO.) Within each of these areas, ham radio nets are established when that area’s SKYWARN is activated by the National Weather Service. Each of these ham radio nets uses different repeaters and/or simplex frequencies outlined on the communications section of the regional Web site. Roll-call nets take place weekly.

Orange County SKYWARN still uses the 448.040 MHz (-) primary tactical repeater (135.5 Hz PL) for its Tuesday ham radio roll call at 7:30 PM.

County of Orange

Jim Carter, WB6HAG, Silent Key
With deep sadness, we report that Jim Carter, WB6HAG, passed away Saturday morning, June 25, 2016, after a struggle with cancer. A funeral service will be held for Jim on Friday, July 8th, at 12:30 PM, at the chapel at Fairhaven Memorial Park, 1702 Fairhaven Avenue, in Santa Ana.

Jim is a former OCRACES member, a former OCSD Reserve Sergeant, and, later, an OCSD PSR. He devoted many hours of service to the Department.


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

<table>
<thead>
<tr>
<th>Band</th>
<th>Frequency Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 m</td>
<td>7250 kHz SSB (City/County/MOU Net—Saturdays, 1000 hours)</td>
</tr>
<tr>
<td>10 m</td>
<td>29.640 MHz output, 29.540 MHz input, 107.2 Hz PL</td>
</tr>
<tr>
<td>6 m</td>
<td>52.620 MHz output, 52.120 MHz input, 103.5 Hz PL</td>
</tr>
<tr>
<td>2 m</td>
<td>146.895 MHz output, 146.295 MHz input, 136.5 Hz PL*</td>
</tr>
<tr>
<td>2 m</td>
<td>146.595 MHz simplex</td>
</tr>
<tr>
<td>1.25 m</td>
<td>223.760 MHz output, 222.160 MHz input, 110.9 Hz PL</td>
</tr>
<tr>
<td>70 cm</td>
<td>446.000 MHz simplex</td>
</tr>
<tr>
<td>70 cm</td>
<td>449.100 MHz output, 444.100 MHz input, 110.9 Hz PL (private)</td>
</tr>
<tr>
<td>70 cm</td>
<td>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*</td>
</tr>
</tbody>
</table>

*Primary Net—Mondays, 1900 hours

Upcoming Events:
- **July 4:** Independence Day; no meeting, no net
- **July 11:** OCRACES Meeting, 840 N. Eckhoff Street, Suite 104, Orange, 1930-2130 hours
- **July 16:** HRO Ham Jam, Ham Radio Outlet, 933 N. Euclid Street, Anaheim, 1000-1730 hours
- **July 18:** Cooperative T-Hunt on input of 2-meter repeater, 1920 hours
- **July 25:** Five-band ACS nets and Cal OES Nets at OC EOC

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

Chief Radio Officer (Captain)
Ken Bourne, W6HK
714-997-0073

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

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Meet Your County of Orange RACES Members!

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W6HK

Scott Byington  
KC6MMF

Harvey Packard  
KM6BV

Jack Barth  
AB6VC

Ernest Fierheller  
KG6LXT

Bob McFadden  
KK6CUS

Tom Tracey  
KC6FIC

Randy Benicky  
N6PRL

Roger Berchtold  
WB6HMA

David Corsiglia  
WA6TRF

Jim Dorris  
KC6RFC

Nancee Graff  
N6ZRB

Ray Grimes  
N8RG

Walter Kroy  
KC6HAM

Martin La Rocque  
N6NTH

Fran Needham  
KJ6UJS

Kenan Reilly  
KR6J

Tom Riley  
K6TPR

Brad Russo  
KB6GPM

Tony Scalpi  
N2VAJ

Joe Selikov  
KB6EID

Robert Stoffel  
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It's Where It's @!

“W6ACS ... Serving Orange County”