NET CONTROL

I am proud of the way our Monday night RACES nets are run. Our members are excellent net control operators. However, the problem of “quick speaking” occasionally occurs, especially during roll call. Some net control operators, including some officers and long-time members, forget about the almost one-second transmit delay on our repeater. Some members refer to this problem as “quick keying,” but it is NOT “quick keying.” It is “quick speaking.”

The transmit delay is caused by a short detection time in the repeater’s subaudible tone decoder (“PL” decoder, as trademarked by Motorola), followed by the activation time of the transmitter. This delay could be compounded by the operator’s own transmitter, if its PL encoder and/or its fundamental oscillator or synthesizer has a slow activation time.

The operational problem occurs when you speak IMMEDIATELY after keying your microphone’s PTT switch, resulting in loss of the first one or two syllables. To avoid this problem, force yourself to wait a second after keying your transmitter, before you speak.

If “quick speaking” occurs, some cities will not know if they are called during the roll call. Often all they will hear is the last syllable of their city’s name, such as “…ter” in Westminster. When you stand by for late check-ins, if you hear stations calling that you had already acknowledged,” they probably did not hear your “Roger” during the roll call, which was lost during the “quick speaking” delay. Sometimes a “…ger” or “…er” will get through, and other times no acknowledgement is heard at all.

Public-safety personnel who operate on a trunked system are conditioned to wait a moment after keying their PTT, before speaking. The transmit delay in a trunked radio system is even more pronounced than on our 2-meter repeater. If trunked-system operators can wait a moment, so can we! Don’t be guilty of “quick speaking.”

Our next meeting is on Monday, September 12, 2005 (rather than the first Monday, which is Labor Day), at 7:30 PM, at 840 N. Eckhoff Street in Orange. Our guest speaker will be Donna Boston, Assistant Manager, Orange County Sheriff’s Department, Emergency Management Bureau, who will give us a NIMS briefing. Developed by the Secretary of Homeland Security at the request of the President, the National Incident Management System (NIMS) integrates effective practices in emergency preparedness and response into a comprehen-
sive national framework for incident management. The NIMS will enable responders at all levels to work together more effectively to manage domestic incidents, no matter what the cause, size, or complexity. Donna’s briefing will cover the direction Orange County is taking with the NIMS and will explain how it integrates into our current California Standardized Emergency Management System. The Federal Emergency Management Agency Independent Study Course 700 (NIMS) will be highlighted.

On the Saturday prior to our meeting, we will exhibit our emergency communications response vehicle at the ARRL Southwestern Division Convention in Riverside. The convention runs Friday through Sunday, September 9-11, 2005, but we will exhibit only on September 10th. We plan to park our vehicle outside the Riverside Convention Center, before 8:00 AM. Look for my E-mails with additional details. Information about the convention is posted at http://www.arrlswdconv.org. Let me know if you plan to participate, and your desired shift(s) between 8:30 AM and 5:00 PM. You may wear either your Class A or Class B uniform. This is an excellent opportunity to tell other hams about our activities, and to recruit new members.

OCRACES Support Requested for Elections

It is election season again in Orange County with at least two elections fast approaching and a third election very likely before the year is out. There will be a 48th Congressional District Election on October 4, 2005 affecting only South Orange County. There will also be a Statewide Special Election on November 8, 2005. Depending on the outcome of the October 4 election, there could also be a run-off election on December 6, 2005.

As in past elections, OCSD/Communications will be managing the transportation of ballots from Collection Centers throughout the County to the Vote Tally Cen-

RACES operations in the Command Post at the VTC for the November 2004 General Election

ter (VTC) in Santa Ana. RACES support is again requested to provide communications support between Collection Centers and the VTC.

The responsibilities of the communicator will be to transmit information to the Vote Tally Center regarding the activities (basically the movement of the vans) at the Collection Center as well as request information from the VTC as necessary.

If you haven’t received the official email request for support yet, expect to see it in the very near future.

OCRACES Member Ray Grimes in Print

OCRACES member Ray Grimes, N8RG, has written an article for CQ VHF Magazine. The classic Black Widow VHF AM Transceiver is the topic of the article that was published in the Summer 2005 issue. The once popular Black Widow AM transceivers have all but disappeared from memory and from any sources of used equipment. Ray describes how he found and restored a 2-meter version of this radio, complete with many photos. Check it out on page 10 of the Summer 2005 edition of CQ VHF magazine.
The Arena Response exercise conducted on July 28, 2005, at the Anaheim Convention Center focused on the City of Anaheim’s Metropolitan Medical Response System’s response to a chemical terrorist attack.

OCRACES members Jack Barth (AB6VC), Scott Byington (KC6MMF), Jim Carter (WB6HAG), Carol Matthews (KF6ERZ), Harvey Packard (KM6BV), Joe Selikov (KB6EID), and Steve Sobodos (KN6UX) reported to the Anaheim Convention Center at 0630 on the morning of July 28, 2005, to support this event. Their mission was to provide ATV video from the disaster area to the on scene Unified Incident Command Post.

Jack Barth sent video from inside the Anaheim Convention Arena. Jim Carter & Carol Matthews provided video from behind the arena & inside the Hilton Hotel. Harvey Packard and Scott Byington provided video from the second floor of the Convention Center balcony outside the front of the arena. All video pictures were transmitted to our RACES van that was operated by Steve Sobodos who was our ATV Director and Joe Selikov who was the Command Post Operator. Our van provided video to the Incident Command Post located over 100 feet away.

When the Anaheim Fire Battalion Chief arrived, OCRACES command post operators placed our monitor next to his vehicle. Normally, this task is easily accomplished by parking the RACES van next to their vehicle. However, our operators found the Incident Command Post was not within 100 feet away.

Continued on page 4
This is my last newsletter article. I must say goodbye to this wonderful organization due to my full-time job workload, preparing a house to sell, and planning to add 1500 square feet onto another home. My time is just too thin to support this outstanding organization. This was not an easy decision as I've truly enjoyed working with each of you, and your support was extremely appreciated.

Although I'm leaving, it doesn't mean you can't call me for technical questions regarding ATV or SSTV, the location of something, or just to say hello. I'm still here to assist you anyway I can! You are my friends and you always will be. Thank you for your support and please give the same support to my replacement.

73's - Jim WB6HAG
Watching The Web – By Ken Bourne, W6HK

Each month, we feature a Web Site of interest to RACES personnel, as located by Ken Bourne, W6HK, Chief Radio Officer, County of Orange RACES. Featured this Month: New world record for unamplified wireless networking on 2.4 GHz

Four college students, who are radio amateurs, traveled from Cincinnati, Ohio, to Mt. Potosi near Las Vegas to compete in the 3rd Annual Defcon WiFi Shootout Contest. Part of the team then drove a trailer loaded with equipment to Utah Hill, near Beaver Dam in the state of Utah. On July 30, 2005, the team, which calls itself “iFiber Redwire,” using homebrew antennas, surplus 12-foot satellite dishes, home-welded support structures, scaffolds, ropes, Xetron RF relays, RF Linx pigtails, LMR-400 coax, and Avaratec 3200 laptop computers, wirelessly connected on 2.4 GHz for three hours at 11 Mb/s over a distance of 124.9 miles, a new world record for an unamplified wireless networking connection. An RF Linx amplifier was tried later in Utah, bumping the –37 dBm signal to –18 dBm.

The setup included Z-Com XI-325HP+ 300-mW PCMCIA 802.11b wireless cards (with dual antenna ports), one on each end, running on Ubuntu Hoary (Mt. Potosi) and Debian Sarge (Utah Hill) OSES. Ping times averaged 10 milliseconds, with variances ranging from 0.01 ms to 400 ms.

Details and photographs are on the team’s Web site at http://www.wifiworldrecord.com. The information on this site should be of interest to OCRACES members who are experimenting with HSMM (high-speed multimedia) systems.
**RACES News from Around the County**

**HDSCS**

On Saturday, September 10, 2005, HDSCS Emergency Coordinator April Moel will be one of the presenters at the ARRL Southwestern Division Conference in Riverside, CA. April’s presentation is entitled, “BEFORE All Else Fails” and will focus on the important role amateur radio can play in the support of hospitals. April will highlight HDSCS’s experience and lessons learned over the past 25 years of providing back-up communications for 34 different hospitals.

**City/County RACES Exercise**

The annual City/County RACES exercise is Saturday, October 1, 2005, from 0900 until 1100 hours. County of Orange RACES, most all City RACES organizations, and the Hospital Disaster Support Communications System (HDSCS) will participate. This annual exercise provides an opportunity to exchange messages between the various City and County EOC's using the RACES radio equipment located inside your EOC.

The focus of this exercise will be communicating by voice, primarily between your EOC and all surrounding city EOC's and secondarily, the County EOC. Those organizations that wish to test PSK31, ATV and/or SSTV may also do so.

The scenario will be a loss of public safety communications systems. The Countywide RACES Message Form should be utilized by all participants in this drill, and will help to ensure common radio traffic passing techniques. The form can be downloaded from the County of Orange RACES web page, www.ocraces.org.

Please share the City/County Exercise information with appropriate staff and let OCRACES know of any comments or suggestions by September 15, 2005. Also, please let us know if your organization will be participating in the exercise and in what modes you will participate (Voice/ATV/SSTV/PSK31). You can let us know by sending your response to ocraces@ocgov.com. We look forward to your participation, and thank you in advance for your commitment to emergency communications!
### September 2005

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#### Upcoming Events:

- **September 9-11**: ARRL Convention, Riverside
- **September 12**: OCRACES monthly meeting, 840 N. Eckhoff Street, Orange, 1930 Hours
- **October 1**: Annual City/County RACES Exercise, 0900-1100
- **October 3**: OCRACES monthly meeting
- **October 4**: 48th Congressional District Election

### ARRL SOUTHWESTERN DIVISION CONVENTION

**SEPTEMBER 9-11 - RIVERSIDE, CA**

The Inland Empire Council of Amateur Radio Operators (IECARO) is hosting the ARRL Southwestern Division Convention which will be held September 9—11 in Riverside, CA. The convention will offer programs covering such topics as: ATV, T-Hunting, Tropo Ducting, APRS, Renewable Energy Sources, Public Service, Emergency Communications, new and current technology in equipment and operation modes and much more. The featured banquet speaker will be award winning author and columnist Ward Silver, N0AX. There will also be great prizes from vendors such as: Kenwood, Yaesu, Icom, and many others.

The OCRACES emergency communications response vehicle will also be on display at the convention. The address for the convention is 3443 Orange Street, Riverside, CA, but the actual entrance to the parking lot is on 5th Street between Orange and Market. All the information concerning the program schedules, presenters and exhibitors can be found on the event website at www.arrlswdconv.org.
Meet your County of Orange RACES Members!

Ken Bourne
W6HK

Scott Byington
KC6MMF

Harvey Packard
KM6BV

Joe Selikov
KB6EID

Marten Miller
KF6ZLQ

Robert Stoffel
KD6DAQ

Jack Barth
AB6VC

Bill Borg
KG6PEX

Chuck Dolan
KG6UJC

Ernest Fierheller
KG6LXT

Nancee Graff
N6ZRB

Ray Grimes
N8RG

Bryan Hovde
KD7CRA

Walter Kroy
KC6HAM

Martin LaRocque
N6NTH

Carol Matthews
KF6ERZ

John Roberts
W6JOR

Tony Sanchez
AE6QT

Ralph Sbragia
W6CSP

Steve Sobodos
KN6UX

Tom Stroud
N6FDZ

Tom Tracey
KC6FIC