September 2008

County of Orange RACES

NetControl

Newsletter of the County of Orange Radio Amateur Civil Emergency Service

The Next OCRACES Meeting is

September 8, 2008

1930 Hours

840 N. Eckhoff St., Suite 104, Orange

WebEOC Training by Peggy Erdner, OCSD/EM

Orange County Sheriff's Department Communications Division

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

Winlink Funding

Our requests for Winlink funding for all City/County RACES/ACS units have been submitted. If approved, we will certainly have lots of work ahead of us to put these systems into operation. The work will be very exciting and rewarding, as we all continue to improve our knowledge about Winlink technology and set up our own stations to be compatible with the City and County owned RACES Winlink stations.

I recommend that all OCRACES members explore the wealth of material about Winlink 2000 posted on the http://www.winlink.org Web site. Free software is available for downloading from that Web site to make your Winlink system operate. All you need is a transceiver with a 1200-b/s data port (2 meters) or 9600-b/s data port (440 MHz), a TNC such as the Kantronics KPC-9612+, and a computer.

To run Winlink on HF, which is popular with "Airmail" (a complete standalone package for e-mail on HF PACTOR), the most ideal TNC to use is the expensive SCS PACTOR-IIusb ($998) or PACTOR-IIex ($1448) modem with PACTOR III mode license, which provides maximum data throughput (without compression) higher than 2700 b/s, and around 5,200 b/s if PMC (online text compression) is applied, with maximum bandwidth only about 2400 Hz.

But there is good news for those of us who want to run Winlink or other PACTOR III application on HF, without spending a fortune on a PACTOR III modem. We just learned that WINMOR, an HF digital protocol designed for use with Winlink 2000, will be unveiled at the upcoming ARRL/TAPR Digital Communications Conference in Chicago, September 26-28.

According to developer Rick Muething, KN6KB, WINMOR will effectively eliminate the need for external PACTOR hardware. "This new protocol is implemented through a Windows application that uses a computer sound card for all the analog-to-digital conversion. It provides error-free ARQ transfers within 200, 500, or 2000 Hz bandwidths," Muething said.

In terms of throughput, Muething said the 200-Hz WINMOR mode appears to equal the performance of PACTOR I. In WINMOR's 2000-Hz mode, its performance rivals PACTOR III.

"WINMOR is a work in progress," Muething said. "We won't be pulling the wraps off a finished application at the conference. We're close, though I'd like to see on-air testing in 3 to 6 months."

Rick Muething's presentation paper, "WINMOR...a Sound Card ARQ Mode for Winlink HF Digital Messaging," is included in the ARRL/TAPR conference proceedings, which will be available for sale on the ARRL Web site after the conference.

Helping Red Cross at Texas Gustav HQ
by Tom Tracey, KC6FIC

I had an interesting opportunity on Sunday, August 31, 2008, to help the Red Cross. I was in Dallas that weekend, when an announcement was made on Sunday that volunteers were sought to help Red Cross chapters/shelters for Hurricane Gustav relief efforts.

A few dozen people showed interest, and I hooked up with some friends with a car, and we drove down to the Dallas Chapter of the Red Cross. We left around 4:30 PM and arrived after 5:00 PM. I went into one of the meeting rooms that looked like it was set up like an EOC with table stations around the room and coded signs above the stations.

We checked in, and suddenly one of the women in charge announced that she needed volunteers right away to help set up a headquarters and "pull CAT-5 cable."

Some of us joined in, and we gathered in the parking lot to follow a big equipment truck about 35 miles to the new headquarters location. They were rapidly outgrowing their available space and had to go to a new location.

Portable server at Red Cross Gustav headquarters in Texas

I ran into another Red Cross volunteer who was a ham, and we exchanged brief "shop-talk" comments about what model radio we used, as we were getting into vehicles. I brought a handful of FRS radios in my luggage, which I gave to the volunteers, so we could stay in touch while caravanning to the new location.

We were following the IT guys who had computer equipment and a server. We were in Dallas and made our way to just west of Fort Worth.

After searching for the right address location upon arrival, we were told that we would be in an empty warehouse "over there," which used to be a Wal-Mart. I later found out that Red Cross has a standing nationwide agreement with Wal-Mart, which will provide resources such as supplies or available unused buildings, in case of emergency need. Now I know how Red Cross gets all their supplies so quickly.

We got inside the warehouse, which was completely empty and a little dusty, and talked about the game plan. First, we unloaded the cargo truck, which had lots of equipment in Pelican cases of various sizes and colors. All the cases were coded, such as CBL-049 for a network cable kit, or ATT-051 for something like AT&T cell phones or IP phones or something. I was impressed by the organization of their inventory. It seems like Red Cross has caches of equipment in distribution warehouses.

We had over 100 Dell laptops, all in multiple Pelican cases. Each laptop had a ziplock bag with mouse, mouse pad, power cord, etc.

Some people set up the "VSAT." A dish was placed outside. The controller computer was in orange cases. One of the cases, labeled "WLNK," contained Winlink equipment. There were cable kits (with lots of CAT-5 cables of various lengths), power-strip kits, extension-cable kits, etc. A few cases contained six to eight network switches.

The Response Technology person had a sketched map of where to place the tables for the various departments or stations.

The Red Cross protocols were interesting. First, all cables were to be suspended to avoid trip hazards. Strong wire would be hung between the vertical load-bearing poles of the warehouse, and the power cords and network cables would be hung from them. Plastic shower-curtain hangers were procured from a local store to run the cables through. CAT-5 cables were not to run underneath the table legs, but along the outside of the legs and twist-tied together. Cables run under table legs could cause problems if a computer or a table had to be moved quickly.

I had to string some cable from the VSAT to the server. A second "B" line was run for redundancy in case of failure. We also labeled the A and B cables, about 2 feet from the ends (to avoid relabeling if a cable had to be reterminated).

I was impressed with the workload assignments. When asked if anyone had experience terminating cable, two raised their hands, and they were *not* chosen. Everything had special instruction sheets, and those with no experience were chosen for the task. I saw how the Red Cross understands that the majority of their workers would be volunteers with unrelated experience, and they take this into account, and assign two or three people to a task (not too many, which would create confusion), give them instructions, and let them go. I saw how they had faith in the volunteer to get the job done.

Helping Red Cross at Texas HQ *Continued from page 2*

We ended at 10:00 PM sharp, since they had a new rule that nobody would work "all night long." Some people would return in the morning at 8:00 AM to continue the work, but I had to return with my friends to the hotel.

It was good to see how the Red Cross deployed, their organized inventory methods, their wisdom in network setup, and trust and reliance on the volunteers to get the job done.

It's good that GUSTAV was only at a Category 2 when it hit land, although I hear that power and communication lines are still down.

Lastly, here are some funny lessons I learned:

♦ Keep a change of clothes in a separate spot (or ziplock bag) aside from vacation clothes. I hadn't brought any work pants, like BDUs, and wish I had. All the clothes in my luggage were dirty and I wished I had a clean pair!

♦ Have reliable navigation and power at all times. Though I had brought my car GPS unit, the battery was old and couldn't run long without plugging in.

Controller computer at Red Cross Gustav headquarters in Texas

♦ Have an emergency fund in case of unexpected things. I had to spend extra money getting another room at the hotel and changing my flight itinerary, but I felt it was worth it to spend the money and serve in this way, and I could afford the extra costs.

WebEOC Training at September 8th Meeting

OCSD Senior Emergency Management Program Coordinator Peggy Erdner will train us on WebEOC at the next OCRACES meeting on Monday, September 8, 2008, at 840 N. Eckhoff Street, Suite 104, in Orange. All members are required to attend this training. WebEOC, which is used at the Orange County EOC, is a Web-enabled crisis information management system (CIMS) and provides secure real-time information sharing to help managers made sound decisions quickly. Once trained, OCRACES members will be able to use WebEOC at the EOC, hopefully from a terminal in the RACES Room.

B2V and Field Day Planning at Next Meeting

Due to a longer than expected presentation by our guest speaker at the August 4th OCRACES meeting, we did not have enough time to form committees for our participation in the 2009 25th Baker to Las Vegas Challenge Cup Relay on March 14-15 (about a month earlier than usual), and on 2009 ARRL Field Day, June 27-28. Some members have already submitted their ideas for improving these events, but we need even more ideas on how to make these events more meaningful and interesting for our current and future members. We will discuss these ideas and form committees at the September 8th OCRACES meeting, 7:30 PM, at 840 N. Eckhoff Street, Suite 104, in Orange, after our WebEOC training (see article above). By starting early, we hope to give everyone an opportunity to get involved and benefit from their efforts.

An idea for Field Day is to shorten the operation to one day, since we are really participating to practice setting up emergency communications in the field, and not necessarily to earn contest points. Setup would begin at 0900, but tear down would be at about 1700, with the barbecue after tear down. We want to enhance our training plan to interest emergency responders, with a specific exercise in the park during Field Day, perhaps involving direction finding, constructing and deploying emergency antennas, etc. Potential new members would be invited to participate (with the understanding that they are not covered as Disaster Service Workers).

SWACS Frequency Test

After running the OCRACES net on Monday, August 25, 2008, at 7:00 PM from the Loma Ridge EOC RACES Room, Randy Benicky, N6PRL, joined Chief Radio Officer Ken Bourne, W6HK, Radio Officer Scott Byington, KC6MMF, Assistant Radio Officer Jack Barth, AB6VC, and Chuck Dolan, KG6UJC, in the Southwest ACS Frequency Test on two Los Angeles County DCS 2-meter repeaters, two network systems on 440 MHz, one network system on 222 MHz, three State OES repeaters on 220 MHz and 440 MHz, and an Orange County RACES repeater on 440 MHz. Randy also listened for a State OES net on 75 meters, but propagation conditions were poor. We later communicated with K6GMA at the State OES REOC on 75 meters. The test confirmed the most reliable frequencies and systems to be used during a major disaster and during the November 13th Golden Guardian exercise, for contacting State OES from the Operational Area (County) EOCs, Caltrans, and the National Weather Service in Southern California. State OES Southern Region ACS Officer Arnie Lewin, W7BIA, acted as net control from Encinitas during the test.

Sgt. Jack Barth, AB6VC (left), and Chuck Dolan, KG6UJC, in EOC RACES Room during SWACS Frequency Test

City/County Meeting: September 15th

The next City/County RACES/ACS and MOU meeting is on Monday, September 15, 2008, at 7:00 PM, at 840 N. Eckhoff Street, Suite 104, in Orange. We will discuss our plans for the next City/County RACES and MOU drill on October 4, 2008. We will also discuss our participation in the November Golden Guardian exercise. Also at this meeting, reports will be given by Orange County RACES, each City RACES/ACS unit, and each MOU on their latest activities.

OCRACES to Exhibit Van at OCFA Open House

The Orange County Fire Authority has once again invited County of Orange RACES to exhibit its emergency communications response vehicle at the 3rd Annual OCFA Open House on Saturday, October 11, 2008, from 9:00 AM to 2:00 PM, at the OCFA Regional Fire Operations and Training Center (RFOTC), 1 Fire Authority Road (Jamboree and Tustin Ranch Roads), in Irvine. This event is popular with families, and is an excellent opportunity to introduce children to amateur radio. Families will enjoy touring our van and learning about how we work with the Orange County Sheriff's Department and other agencies such as OCFA in providing additional communications resources during an emergency.

Have You Completed your NIMS IS-200 Test?

It has been quite some time since we were requested to complete our IS-200 training. OCSD Emergency Communications Manager Marten Miller, KF6ZLQ, gave us thorough training, plus there is material on the FEMA Web site to review. The test is multiple choice and open book, and should only take a few minutes to complete. If you have not already done so, please log on to the FEMA Web site and take the test. Then send the notice of acceptance and a copy of the NIMS IS-200 certificate (which you will receive by e-mail) to Marten.

Watching The Web
Web Sites of Interest to RACES Personnel
by Ken Bourne, W6HK, OCRACES Chief Radio Officer

Emergency Communications Support
http://www.communications-support.org

ECS

This Web site at http://www.communications-support.org belongs to Emergency Communications Support, a nonprofit organization that is dedicated to improving communications interoperability between different agencies, equipment, and protocol. Featured is a 40-foot Silver Eagle Bus built by Insync Electronics Corporation to demonstrate communications linking between government agencies and/or public-service organizations. The mobile communications center has over 25 radios. It can link radios, send e-mail by radio or satellite, link wireless computer networks, and monitor and record virtually any type of emergency radio signal.

ECS also demonstrates specialized radios such as HF ALE, which are used by Red Cross, FEMA, and MARS. Emergency radio stations on all frequencies are covered. The demonstration bus incorporates a 70-foot pneumatic tower with repeaters for both public-service and amateur radio links. The 800-MHz and new 700-MHz digital statewide networks can also be linked.

A PTZ (pan/tilt/zoom) camera is installed on top of the 70-foot tower that allows viewing of the disaster or staging area from inside the bus or via satellite from another location.

The ECS communications system demonstrates its potential to aid in communications for first responders, police, fire, EMS, hazmat, and any other local, state, or federal agencies. It can be deployed to chemical and refining plants, hospitals, utility and service companies, and search and rescue, to expedite safety and restoration procedures.

Insync maintains a small research and development lab on the bus that allows real-time testing of new radio and satellite interfaces.

The bus is seen at many public-service events such as the American Diabetes Association, 100-mile bike-a-thon, Louisiana Special Olympics, Women's Wellness Center Triathlons and Kids Triathlons, and Army, Air Force, and Navy/Marines MARS Forums.

Primary sponsors of ECS are Insync and Ellison Tool Company, both located in Baton Rouge, Louisiana. Southern Electronics, located in Baton Rouge and New Orleans, provides support and equipment. The Baton Rouge Amateur Radio Club and the Louisiana State University Amateur Radio Society have provided many volunteer operators to assist ECS with its projects, and ECS assists them in their projects.

ACS/RACES News from Around the County

"ACS/RACES News" provides an opportunity to share information from all City & County ACS/RACES units and MOU organizations in Orange County.

Please send your news to:

w6hk@ ocraces.org

Fullerton

As mentioned in the August issue of *NetControl*, Fullerton RACES Radio Officer Gene Thorpe, KB6CMO, reminds us that he is looking for amateur radio operators for the City of Fullerton Airport Day on Saturday, September 13, 2008, from 0900 to 1400 or so.

Laguna Beach

As mentioned in the August issue of *NetControl*, Laguna Beach Emergency Communications Team (LBECT) will support the Crystal Cove Triathlon on Sunday, September 28, 2008, from 0600 to about 1030 hours. The race itself starts at about 0700 from Reef Point parking lot on Pacific Coast Highway. Radio Officer John Kountz, KE6GFF, reports that the Orange County Triathlon, which is held on the same day, is also looking for communicators. This race starts at 0700 at Lake Mission Viejo. Anyone who can participate should contact Bill Leach at billleach@sbcglobal.net.

Hospital Disaster Support Communications System

A failure in the telephone system at Mission Regional Hospital occurred on July 28, 2008, as workers were servicing the uninterruptible power supply (UPS). The hospital's Disaster Coordinator followed the established procedures to notify HDSCS. Assistant Coordinator Jim McLaughlin, AB6UF, received the hospital's call and immediately contacted John and Corky Walker, AC7GK and KG6YWY, who were driving in the area. John and Corky arrived at the hospital within 10 minutes of being alerted and learned that one building had lost the use of all telephones. They put out a call for more operators and began handling messages between the two parts of the facility, supplementing the business-band transceivers that a few of the hospital staff members had been using. The phone outage lasted approximately four hours, after which the ham operators stood by for an additional half hour to make sure that the system was stable. Other hams who served at the hospital or were en route when repairs were completed were Bill Hegardt, K6WIL, Jim McLaughlin, AB6UF, Al Way, KC6LNP, and Dave West, KI6EPI. Net Control and outside base station operators were Paul Broden, K6MHD, and April Moell, WA6OPS.

Orange County

The next City/County RACES/ACS and MOU meeting is on Monday, September 15, 2008, at 840 N. Eckhoff Street, Suite 104, in Orange. We will discuss the next City/County Drill, which will be on Saturday, October 4, 2008, from 0900 to 1100, and the Golden Guardian exercise scheduled for mid-November. Activity reports will be given by all RACES/ACS and MOU representatives.

Riverside County

The Baseball Program of Lakeside High School in Lake Elsinore will present a Ham Radio & Electronics Swap Meet on the first Saturday of each month, starting October 4, 2008, from 6:30 AM until noon. The high school is at 32593 Riverside Drive (Highway 74) in Lake Elsinore. Spaces will cost $10 each, with up to five spaces available to a seller. All proceeds go to the Baseball Program of the Lakeside High School. More information is available at http://www.lhslancerbaseball.olinesports.com.

September 2008

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 Labor Day	*2*	*3*	*4*	*5*	*6*
7	*8 Monthly Meeting & Weekly ACS Net*	*9*	*10*	*11*	*12*	*13 SWACS Meeting & Fullerton Airport Day*
14	*15 County/ City Meeting & Weekly ACS Net*	*16*	*17*	*18*	*19*	*20*
21	*22 SWACS Net & Weekly ACS Net*	*23*	*24*	*25*	*26*	*27*
28 Orange County Triathlon	*29 Weekly ACS Net*	*30*				

Upcoming Events:

- **Sep 8:** OCRACES Meeting, 1930, 840 N. Eckhoff Street, Suite 104, Orange (WebEOC Training by Peggy Erdner)
- **Sep 13:** SWACS Meeting, 0900, LA County EOC
- **Sep 13:** Fullerton Airport Day
- **Sep 15:** City/County RACES & MOU Meeting, 1900, Eckhoff
- **Sep 22:** SWACS Frequency Test, 2000, Loma Ridge
- **Sep 28:** Orange County Triathlon, 0700, Lake Mission Viejo
- **Oct. 4:** City/County RACES/ACS & MOU Drill, 0900
- **Oct. 11:** OCFA Open House
- **Nov. 4:** Presidential Election
- **Nov. 13:** Golden Guardian

www.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.

County of Orange RACES Frequencies

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: 147.480 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: 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)
23 cm: 1282.025 MHz output, 1270.025 MHz input, 88.5 Hz PL

*Primary Net—Mondays, 1900 hours

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**Visit Our Website
www.ocraces.org
It's Where It's @!**

Questions or Comments?
Contact the *NetControl* Editor
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*"W6ACS ...
Serving
Orange County"*

Meet your County of Orange RACES Members!

Ken Bourne W6HK	Scott Byington KC6MMF	Harvey Packard KM6BV	Ralph Sbragia W6CSP	Joe Selikov KB6EID	Marten Miller KF6ZLQ	Robert Stoffel KD6DAQ
Jack Barth AB6VC	Jim Carter WB6HAG	Ernest Fierheller KG6LXT	Randy Benicky N6PRL	Bill Borg KG6PEX	Chuck Dolan KG6UJC	Nancee Graff N6ZRB	Ray Grimes N8RG
Walter Kroy KC6HAM	Martin La Rocque N6NTH	John Roberts W6JOR	Tony Sanchez AE6QT	Steve Sobodos KN6UX	Tom Stroud N6FDZ	Tom Tracey KC6FIC