NET CONTROL

SKYWARN will be the featured presentation at the next OCRACES meeting on Monday, September 11, 2006. The meeting begins at 7:30 PM, at 840 N. Eckhoff St., Suite 104, in Orange. Miguel Miller, National Weather Service Forecaster and Spotter Program Manager, who is based at NWS San Diego, will make the presentation. Assisting will be Jim Courter, KF6RWF, Southwest California SKYWARN Assistant Region Coordinator. Orange County SKYWARN Coordinator Mike McLaughlin, KJ6EQ, will discuss operations (including frequencies) in Orange County.

The presentation will include comprehensive training on severe-weather spotting. Those attending the meeting will be eligible for certification as trained weather spotters. Forms will be provided to those who want to be certified, which will then be submitted to NWS San Diego for processing.

Many county and city RACES organizations throughout the United States include SKYWARN as one of their operational functions. This is especially true in “Tornado Alley” areas of Texas, Oklahoma, Kansas, and other states. Fortunately, our weather is not as severe, although Santa Ana winds and other conditions still need careful attention. OCRACES, dedicated to supporting the Orange County Sheriff’s Department and other agencies to which we are deployed by OCSD, does not plan to adopt SKYWARN as a direct function. However, we are working with NWS (which is a federal agency) and SKYWARN to develop a Memorandum of Understanding to allow communications with NWS/SKYWARN during RACES activations. This will be similar to the MOUs that we have with the Hospital Disaster Support Communications System (HDSCS) and the Orange County Chapter of the American Red Cross.

Continued on page 2
The spotter training that we will receive at our September 11th meeting will enhance our usefulness to OCSD and other agencies, including the Orange County Fire Authority. We will learn to report (or understand reports on) flooding, winter weather, wind, extreme heat, fog, thunderstorms, tornadoes (including waterspouts), surf, etc. These conditions can affect (or effect) emergency conditions to which we are deployed.

Once we have an MOU in place, SKYWARN will be able to communicate directly with OCRACES, and provide us with reports that could be very useful during RACES activations for flood conditions, fire storms (involving extreme heat and/or high wind), fire patrols, etc. Reports of thunderstorm conditions, which could trigger fires in local mountains, could be relayed from SKYWARN through OCRACES to OCFA. If we are providing communications during disasters involving evacuations, we would be able to provide critical weather reports (such as pending heavy rain), with the help of SKYWARN, to officials responsible for transporting and sheltering evacuees. Incident Commanders could request reports from NWS and SKYWARN through OCRACES, to enable them to make quick decisions based on changing weather conditions.

OCRACES members and others attending this meeting will have the opportunity to be certified as weather spotters, and to participate directly in Orange County SKYWARN operations. We do request, though, that any RACES member involved in SKYWARN or other non-RACES emergency communications activity give first priority to RACES activations and deployments.

We look forward to training with SKYWARN, and working with their members during exercises and emergency activations. We expect to expand our communications capabilities as a result, in service to OCSD and other agencies in Orange County.

All images and logos in this article are from the Skywarn.org website.
Van Awning Repair Complete

OCRACES Radio Officer Harvey Packard, KM6BV, has succeeded in getting the awning repaired for our emergency communications response vehicle. Problems were first noted during our Field Day deployment, when the awning would not stay in the “rolled-down” position. The roll-down mechanism has a ratchet that prevents the awning from suddenly rolling up. The repair was made at Anaheim Coach and Trailer for $71.65. It is possible that the ratchet assembly was damaged by someone forcing the awning up or down with the ratchet in the wrong position. This type of damage can be prevented with proper training. Let’s be sure to use future activations involving the RACES vehicle as training opportunities, even on the mechanical issues surrounding the set-up and operation of the van.

Huntington Beach Opens New EOC

Huntington Beach celebrated the opening of their new Emergency Operations Center (EOC) on Thursday, August 31, 2006. OCRACES Program Coordinator Marten Miller, OCSD/Communications Training Officer Pat Campobasso, and OCRACES Chief Radio Officer Ken Bourne attending the open house celebration. The improved EOC features a large video wall that displays maps and incident data. They are now running WebEOC emergency management software, which replaces message forms, message runners, and faxes. WebEOC is interfaced with the city's Geographic Information System (GIS). The GIS mapping shows current information such as locations and type of incident, deployed resources, command posts, staging areas, shelters, FEMA centers, etc. This information is displayed on desktops and on the video wall. Laptops replace pencils and paper. EOC positions have access to real-time information for timely and effective decision-making. The police/fire radio room and been redesigned. A "SmartBoard" has been installed, which is an interactive tool for briefings. The podium includes a wireless sound system.

A well-equipped RACES Room is located in the EOC. Behind the RACES Room is a repeater system. RACES provides amateur television (ATV) images to officials utilizing telecommand procedures on 800 MHz. A new command support vehicle has been procured, and RACES equipment will be installed in the vehicle. The EOC sports new paint and carpet, and electrical and other cabling has been replaced. The old 1974 furniture has also been replaced. The EOC refurbishing was accomplished with Federal and State grants totaling $215,000, plus city funding of $95,000. Present in the RACES Room during the open house were Steve Albert, KE6OCE (pictured in the photograph), and Peter Shores, AD6TN.
NOAA’s National Weather Service will conduct a limited communications test of the Tsunami Warning System in the coastal areas of California, Oregon, and Washington on Wednesday, September 13, between 10:45 a.m. and 11:00 a.m. Pacific Daylight Time.

The West Coast/Alaska Tsunami Warning Center, located in Palmer, Alaska will disseminate a special test tsunami warning message. The message will be clearly labeled as a test. Upon receipt of the test message, National Weather Service offices responsible for western coastal areas will broadcast a brief message via NOAA Weather Radio, describing the purpose of the test, using the “Required Monthly Test” (RMT) code. The actual Tsunami Warning code (EAS code TSW) will not be used for this test.

The general public can participate in the test by monitoring NOAA Weather Radio All Hazards. Media outlets responsible for relaying emergency information may relay the test information.

Officials will evaluate the success of the test and correct any problems. To assist in this process, people in coastal areas should monitor their NOAA Weather Radio All Hazards during the test and provide feedback online at http://www.wrh.noaa.gov/tsunamitest.php

If there is excessive seismic activity on September 13, the test will be cancelled.

Units that receive the NOAA Weather Radio All Hazards signal are available at many electronic retail stores, marine supply stores, mail order catalogs and the Internet. Prices vary by model and available options, but typically range between $20 and $80.

In 2007 NOAA, an agency of the U.S. Commerce Department, celebrates 200 years of science and service to the nation. Starting with the establishment of the U.S. Coast and Geodetic Survey in 1807 by Thomas Jefferson much of America's scientific heritage is rooted in NOAA. The agency is dedicated to enhancing economic security and national safety through the prediction and research of weather and climate-related events and information service delivery for transportation, and by providing environmental stewardship of our nation's coastal and marine resources. Through the emerging Global Earth Observation System of Systems (GEOSS), NOAA is working with its federal partners, more than 60 countries and the European Commission to develop a global monitoring network that is as integrated as the planet it observes, predicts, and protects.

On the web:
NOAA: http://www.noaa.gov
NOAA’S West Coast and Alaska Tsunami Warning Center: http://wcatwc.arh.noaa.gov
NOAA Tsunami Portal: http://www.noaa.gov/tsunamis.html
Watching The Web

**Web Sites of Interest to RACES Personnel by Ken Bourne, W6HK, Chief Radio Officer**

Mark Lowell, N1LO, has an interesting Web site at http://www.qsl.net/n1lo called “NYLO’S NOTEPAD. The site includes homebrew projects such as building towers, antennas, and repeaters, improving transmit audio, solving radio-frequency interference, and other topics.

Mark’s tower information is extremely comprehensive. Included are guides on constructing, engineering, lightning protection and grounding, and climbing. He covers planning for installation, selecting tower types, bracket supports, bases, mast and boom material, thrust bearings, anchors, guy cables, lightning abatement, climbing gear, corrosion prevention, protecting threaded fasteners, waterproofing connections, accessory materials and services, rotators, attaching coax and control wires, maintaining antenna switchbox relays, inspection, assembling tower sections, preassembly on the ground, gin poles, raising masts, climbing masts, using a crane or bucket truck for access, raising antennas, child-proofing/anti-climb guards, tower strength, refurbishing used towers, adapting CATV hardline for amateur use, wasps, building your own balun, and attaching electrical enclosures to your tower.

Antenna projects include 2-meter antennas such as an HT “handipole,” rollup J-pole, four-element portable yagi, four-element quad, and a bicycle whip. Monoband HF antenna projects include a 10-meter wire J-pole, a 10-meter wire collinear “super” J-pole, and a 20-meter wire J-pole. Multiband HF antennas include an 80-10 meter doublet with open-wire feed, and an 80-10 meter mobile vertical.

Repeater-building information includes obtaining repeater coordination, estimating coverage, planning and selecting components, site survey, controllers, antennas, feedlines, duplexers, preamps, troubleshooting desense problems, adjusting/tailoring audio, DTMF falsing, antennas, autopatch, interference problems, intermod product calculator, power supplies, and much more.

Improving transmit audio, solving RFI problems, and other topics are also covered in great detail. You can learn much of great value from this Web site.

**Deadline Approaches for Completing IS-100 Test**

As mentioned in the last three issues of *Net Control*, all department employees and volunteers (including RACES) must complete two NIMS training classes in order for the Sheriff’s Department to be in compliance with NIMS requirements. Most of our personnel have already completed one of these on-line courses (FEMA IS-700). The other required course is IS-100: Introduction to ICS, and is also an on-line course. This class and the on-line test must be completed no later than September 30, 2006. On-line classes are taken at the FEMA Web site, and the IS-100 course can be found at:

[http://www.training.fema.gov/EMIWeb/IS/is100.asp](http://www.training.fema.gov/EMIWeb/IS/is100.asp)

Most OCRACES members reviewed the IS-100 study guide at the July 10, 2006, monthly meeting. Any member who has not yet taken the on-line test is urged to do so immediately. If you have questions or need assistance, please contact Marten Miller. This is the last *Net Control* issue prior to the looming deadline! Please don’t put it off any longer.
BUENA PARK

Jim Reynolds, N6MIP, advised that Buena Park RACES has added ARES to their program. Jim stated that they are now named "DCOMM Buena Park". (For Disaster Communications), but he adds that it is, “OK to call us by the same name as before, Buena Park RACES. That is what we are as far as you are concerned.”

Other changes include no longer having packet and changing their primary frequency. Buena Park RACES will now use 145.570 as their Primary frequency, and 145.530 as their secondary.

Jim assures us that they will monitor both old and new frequencies during drills and a real emergency, and that “Buena Park will always be very loyal to RACES!”

HDSCS

Late Thursday afternoon August 17, HDSCS was activated to Children's Hospital in Orange due to a disruption of phone service. The cause turned out to be a construction accident up the street that led to damage of a fiber optic cable. Unfortunately it was not an easy fix and Murphy's Laws were evident on several occasions. Our communicators were on site for 22 1/2 continuous hours. This was the third longest activation in our 26 year history.

Once again the portability and flexibility of HDSCS communicators were crucial to our successful support of this incident. The hospital did not activate its normal command post but instead had a small command structure on the 4th floor in the nursing administration office. No antenna there, but the operator assigned to that position was able to communicate thanks to his preparation and to the use of a 220 repeater available to HDSCS. Internal communications were handled on 440 simplex. A base station was always in contact with the command post operator to coordinate and manage the need for communicators as well as handle some external traffic.

Twenty-two HDSCS communicators participated in this emergency. Several served more than one shift during the event. Depending on the time of day and the changes in phone status we used as few as 3 operators and as many as 11 to cover the needs of the hospital. Check out the website for more information.

Right on the heels of the phone emergency that ended Friday afternoon, was an HDSCS mini-workshop on Saturday. Huntington Beach Hospital hosted this activity designed for some of our newer members but with interest in review from some regular members and 3 folks from Los Angeles County interested in hospital support, we had 18 attendees. It was a great group of Amateur Radio operators learning, helping each other, sharing experiences with new folks and enjoying pastries, cookies and later on pizza.
# September 2006

<table>
<thead>
<tr>
<th>Sun</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Labor Day</td>
<td></td>
<td></td>
<td></td>
<td>Monthly Breakfast Meeting</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Monthly Meeting &amp; Weekly Net</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>Weekly Net</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>Weekly Net</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Southwest ACS Meeting</td>
<td></td>
</tr>
</tbody>
</table>

## Upcoming Events:
- **Sept 9**: RACES monthly breakfast meeting (Mimi’s, Tustin)
- **Sept 11**: OCRACES monthly meeting, 840 N. Eckhoff St., Orange
- **Sept 30**: Southwest ACS meeting at Loma Ridge EOC.
- **Oct 2**: OCRACES monthly meeting
- **Oct 7**: City/County RACES Exercise

## County of Orange RACES Frequencies:
- **6m**: 52.62 MHz output, 52.12 MHz input, 103.5 PL
- **2m**: 146.895 MHz output, 146.295 MHz input, 136.5 PL *
- **23cm**: 1282.025 MHz output, 1270.025 MHz input, 88.5 PL
- **1.25m**: 223.76 MHz output, 222.16 MHz input, 110.9 PL
- **70 cm**: 449.180 MHz output, 444.180 MHz input, 107.2 PL

* Primary Net - Mondays, 1900 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.

## Contacts

- **Program Coordinator**: Marten Miller, KF6ZLQ  
  (714) 704-7917
- **Chief Radio Officer**: Ken Bourne, W6HK  
  (714) 997-0073
- **Radio Officers**: Scott Byington, KC6MMF  
  Harvey Packard, KM6BV  
  Joe Selikov, KB6EID  
  Ralph Sbragia, W6CSP
- **Assistant Radio Officers**: Jack Barth, AB6VC  
  Tony Sanchez, AE6QT  
  Ernest Fierheller, KG6LXT

- **County of Orange RACES**:  
  OCSD/Communications  
  840 N. Eckhoff St. Suite 104  
  Orange, CA 92868-1021
  Telephone – (714) 704-7917  
  Fax – (714) 704-7902  
  E-Mail – OCRACES@ocgov.com

- **Website**: [www.ocraces.org](http://www.ocraces.org)
Meet your County of Orange RACES Members!

Ken Bourne
W6HK

Scott Byington
KC6MMF

Harvey Packard
KM6BV

Joe Selikov
KB6EID

Ralph Sbragia
W6CSP

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

Steve Sobodos
KN6UX

Tom Stroud
N6FDZ

Tom Tracey
KC6FIC

“W6KRW ... Serving Orange County”