

July, 2006



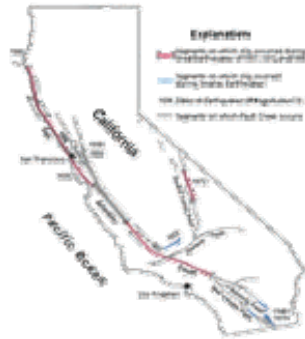
Newsletter of the County of Orange Radio Amateur Civil Emergency Service

**Inside this issue:**

- Captain's Corner** 1
- EMS Week 2006** 2
- Field Day 2006** 3
- Fire Safety Article** 4
- Watching the Web** 5
- NIMS IS-100** 5
- RACES News** 6
- Calendar** 7

## Captain's Corner

by Ken Bourne, W6HK, Chief Radio Officer



According to a recent study, the southern San Andreas Fault is ready to explode! That could produce an earthquake in our area (or

at least in an area to which we might need to provide mutual aid) of cataclysmic proportions. By "cataclysmic," we are talking about a jolt of up to 32 feet! Compare this to the earthquake that destroyed San Francisco in 1906, produced by a sudden movement of up to 21 feet of the northern end of the San Andreas Fault. A sudden 23- to 32-foot lateral movement would be one of the largest ever recorded.

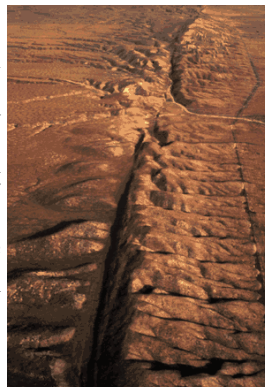
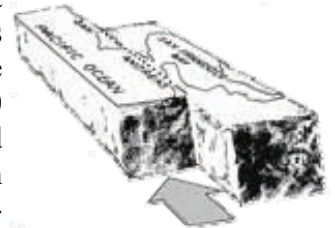
Why are we expecting an earthquake so much more powerful and devastating than the 1906 San Francisco earthquake? It's because the southern end of the San Andreas Fault has been relatively quiet for more than two centuries, and is under immense stress. Yuri Fialko at the Scripps Institution of Oceanography in La Jolla says there could be enough pent-up energy in the southern end of the fault to trigger that 32-foot jolt. He bases that on the average annual movement rates in other areas of the fault, compared to very little move-

ment in the southern end. Fialko wrote in the journal *Nature* that "The observed strain rates confirm that the southern section of the San Andreas Fault may be approaching the end of the interseismic phase of the earthquake cycle."

Fialko also noted that no movement has been recorded at the southern end of the 800-mile-long fault since Europeans began settling the area about 250 years ago. He said this correlates with the predicted 200- to 300-year gaps between major earthquakes at the southern end of the fault.

Average slippage rates of up to 2 centimeters per year in other areas of the fault have prevented a buildup of explosive pressure deep underground. When these slippages were blocked and suddenly broke loose, as in the case of the 1906 San Francisco earthquake, they produced tremors of varying intensity. Fialko made his calculations based on land and satellite observations.

Such a cataclysmic quake could destroy Palmdale, San Bernardino, and other cities on or near the fault, and could also cause considerable damage in Orange County. We are also in danger from more local faults, such as the Newport-Inglewood Fault and the Whittier fault. The Whittier Fault runs for 24 miles from Chino Hills to Whittier.



The Next  
OCRACES  
Meeting is

July 10, 2006  
1930 Hours

840 N. Eckhoff St.,  
Orange, CA

Our meeting will  
feature an over-  
view of IS-100 In-  
troduction to ICS.



Orange County Sheriff's Department  
Michael S. Carona, Sheriff-Coroner

## Captain's Corner

*Continued from Page 1*

It has a slip rate of between 2.5 and 3.0 millimeters per year, and could generate an earthquake of 6.0 to 7.2 on the moment magnitude scale. It could wipe out the Prado Dam, causing severe flooding problems in parts of Orange County.

As was noted in last year's Katrina disaster, most local emergency communications responders did not respond! They were so completely devastated by the disaster that they had no surviving communications equipment, let alone their own homes and even families. Most of the responders came from other areas, providing mutual aid. We must be as prepared as possible. When the "big one" hits, after we first take care of our immediate family crises, we need to be able to respond to activations of our RACES unit. Make sure that you have enough supplies to take care of your family for at least two weeks, and that your communications equipment is ready for deployment, no matter how severe the emergency might be.

We need to be ready to work with State OES and RACES/ACS units deployed from other counties to assist us if our conditions are severe. We must also be ready to assist city RACES units in Orange County, and to accept assistance from them. To prepare for that, we have scheduled a City/County RACES Exercise for Saturday, October 7, 2006, from 0900 to 1100 hours. (The scenario is bird flu, not an earthquake, but our communications resources will still be thoroughly tested.) State OES plans to participate, and has notified surrounding counties of our exercise. We hope they will participate as well. We need to practice working with all city/county/state RACES/ACS units. Accordingly, OCRACES has joined the Southwest Region Emergency Communications Coordination Group, consisting of RACES/ACS units from nearby counties and State OES. We are planning joint exercises and will exchange critical information (key personnel, EOC locations, frequencies, procedures, etc.) needed when coordinating mutual aid between counties.

Part of mutual aid is making sure that we are all in compliance with the same procedures, many of which are based on FEMA's National Incident Management System (NIMS). Most OCRACES members are certified under IS-700 (introduction to NIMS). At our July 10th meeting (840 N. Eckhoff St., Suite 104, Orange, at 1930 hours), we will continue our NIMS training with an IS-100 course (introduction to the Incident Command System), leading toward all of us being IS-100 certified.

## EMS Week 2006

*Pre-Game Display*

OCRACES was represented at the EMS Week culmination, pre-game tailgate party under the "Big A" at the Anaheim Stadium on Saturday, May 27, 2006. Several Public Safety agencies were present with equipment on display to the public. This was a good opportunity to show off our RACES Emergency Communications vehicle to Public Safety personnel and to the general public as many people passed through the display area on their way to the game. Many thanks to Ken Bourne, W6HK, Scott Byington, KC6MMF, and Tony Sanchez, AE6QT for supporting this event.



# Field Day 2006 Wrap-Up

by Ralph Sbragia, W6CSP



Field Day 2006 was a qualified success. We did not fulfill our mission (to keep two transceivers on the air the entire 24 hours, however, we had the highest level of member participation compared to recent years (14 of 20 members attended) and we learned some valuable lessons about operations from the OCRACES Van. Overall, it was a Field Day exercise that we can build on for future success.

Members who attended included Ken (W6HK), Scott (KC6MMF), Harvey (KM6BV), Tony (AE6QT), Carol (KF6ERZ), Chuck (KG6UJC), Ernest (KG6LXT), Walter (KC6HAM), John (W6JOR), Jack (AB6VC), Bill (KG6PEX), Ray (N8RG), Martin (N6NTH) and myself, Ralph (W6CSP). Operators included Ken, Tony, Chuck, Ernest, Walter, Jack (ATV), John, Bill and myself. Both set-up and tear down went very smoothly due to the significant member support at each of those times.

From an operational point of view, we used a different set of antennas this year, so a direct comparison with 2005 is probably not very realistic. This year we used a random length inverted "L" (the wire for which will be staying in the van) and the screwdriver antenna already mounted on the van. Additionally, from the discussion at the City/County meeting on the Monday after Field Day, most of the Orange County Operators found band conditions to be less that desirable for building up lots of contacts. A comparison of our contacts made between this year and last is in the table at right.

The van itself performed very well and there are no equipment issues to report. One area for potential improve-

ment is the performance of the screwdriver antenna. While working various bands with this antenna, reception was very good (or at least seemed to be), however, operators found it difficult to make contacts with stations they could hear. One possible solution to improve our operational readiness would be to procure an amplifier for the HF radio (the screwdriver can handle up to 700W, the barefoot radio emits 100W).

Another operational lesson learned is the location of antennas. This year the van was parked right below the long wire inverted 'L'. This caused the screwdriver antenna's signal to cause unwanted interference on the second station. This was not something we thought about as we were setting up the station, but is something to remember and consider during future operations.

For 2007, there are three things we need every member to accomplish to increase our success. They are: 1) Recruit a new member, (2) Mark June 23rd & 24th 2007 on your Calendar as Field Day 2007 and (3) Plan now to be available at least one if not both of those days to assist in next years efforts. Among some (but certainly not all to choose from) of the activities we could attempt next year if we have the staff: operate an information table for interested members of the public, operate a youth Get On The Air station, operate a new technologies demonstration station, operate on V/UHF, and or operate a satellite station.

My thanks again to all who participated, 73, Ralph.

Band	QSO's	
	2005	2006
15M	0	17
20M	29	76
40M	181	89
80M	80	60
<b>Total</b>	<b>278</b>	<b>242</b>



# ORANGE COUNTY FIRE AUTHORITY

## Fire Safety Article



From The Office Of Fire Chief Chip Prather  
Contact Captain Stephen J. Miller, Public Information Officer, (714) 573-6201

### Earthquake Preparedness

We have heard it so many times—the “big one” is coming. In our lifetime, we still haven’t seen or felt that huge earthquake. That shouldn’t stop us from preparing. Following are some important steps everyone can take to be prepared.

#### Before an Earthquake

- ◆ Prepare an emergency supply kit, which should include food, water, first aid kit, flashlights with extra batteries, portable battery operated radio, extra blankets, clothing, sturdy shoes, cash, alternative cooking sources, medicines, tools and food for pets.
- ◆ Know the safe spots in each room and conduct practice exit drills. Choose an out-of-state friend/relative to call after the earthquake.

#### During an Earthquake

- ◆ If indoors, stay there. Drop, cover and hold on. If outdoors, get into an open area away from trees, buildings, walls, and power lines.
- ◆ If driving, pull over to the side of the road and stop. Avoid overpasses, underpasses and power lines. Stay inside your car until the shaking stops.

#### After an Earthquake

- ◆ Unless there is an immediate, life-threatening emergency, do not attempt to use the telephone.
- ◆ Check for gas and water leaks, broken electrical wiring or sewage lines. If there is damage, turn the utility off at the source and report to your utility company. **Only shut off the gas IF you smell leaking gas.**
- ◆ Check your building/home for cracks and damage, including the roof, chimneys and foundation. Turn on your portable radio for emergency instructions. Do not use your vehicle unless there is an emergency. Be prepared for aftershocks.

*To obtain a flyer with additional information on the Earthquake Preparedness please call the OCFA Community Relations and Education Section at (714) 573-6200 or visit OCFA’s website at [www.ocfa.org/safety&education](http://www.ocfa.org/safety&education).*

## Watching The Web

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

WSJT, developed by Joe Taylor, K1JT, is a soundcard-based free program for VHF/UHF communications using advanced digital techniques. It decodes fraction-of-a-second signals reflected from ionized meteor trails, as well as steady signals more than 10 dB weaker than those required for conventional CW. One of its operating modes is particularly well optimized for amateur EME (Earth-Moon-Earth) communications. The Web site for WSJT is <http://pulsar.princeton.edu/~joe/K1JT/>.

WSJT supports five principal operating modes:

- FSK441 (for meteor scatter)
  - JT65 (for EME and extreme troposcatter)
  - JT6M (for meteor scatter, optimized for 50 MHz)
  - EME Echo (for measuring your own echos from the Moon)
- CW (for EME QSOs using 15-wpm Morse code)

The current version of WSJT and a tutorial on its use can be downloaded from the WSJT site. A simulator called SimJT is also available. It tests performance of the JT65 modes of WSJT, and compares them to CW.

Amazing results with WSJT on meteor scatter on 6 meters and 2 meters, as well as on 222 MHz and 432 MHz, are being reported. For those who are interested in unusual VHF and UHF propagation, WSJT is certainly worth investigating.

## IS-100 Class Required for NIMS Compliance

As mentioned in last month's 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 known as 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. Online classes are taken at the FEMA website, and the IS-100 course can be found at:

***<http://www.training.fema.gov/EMIWeb/IS/is100.asp>***

All OCRACES members are encouraged to be at the July 10, 2006, OCRACES monthly meeting. We will be reviewing the IS-100 study guide as a group to expedite OCRACES' NIMS compliance.

# *RACES News from Around the County*

## HUNTINGTON BEACH

2006 ARRL Field Day Station was on the beach bluff at Pacific Coast Highway and Goldenwest. The operation relied on 100% alternative power (battery, wind and solar) at a public location with visits by Gordon West, Suzie West and Bob Heil. Dave Glawson, WA6CGR, of [www.pacwind.net](http://www.pacwind.net) provided a 1KW Vertical Axis Wind Turbine for our use. We demonstrated ATV from our city helicopter and also received ATV from Costa Mesa stations. The activity was integrated with the HB CERT communicator program as a kick off for their upcoming new ham class in August. Photos and press releases available at [www.hbrates.org](http://www.hbrates.org).

HB RACES was activated on the evening of July 4th, 2006 to manage the increased 9-1-1 call volume regarding fireworks in the city. The operation included maintaining resource status and logging calls and dispatching resources from the Fire Operations Center under the direction of Deputy Fire Marshal Dave McBride.

The Huntington Beach EOC renovation continues with the integration of PC technology upgrades. Training and procedure changes will be required to fully utilize the new systems. The replacement EOC-EOC radio is now fully functional and additional ATV display options are now available in the EOC.

Antennas and radios were installed to allow EOC-EOC and Red Cross low-band communication from the Fire Operations Center, which is HB's backup EOC location.

A NIMS Training session is scheduled for the evening of July 19th in the EOC. This will provide instruction in ICS 700 and IS 100 the minimum requirement for city volunteers. The instruction is open to Fountain Valley RACES and other neighboring RACES groups as space is available. Contact Brevyn Mettler for additional information and to register for the training session at 714-374-1565.

## NEWPORT BEACH

The last meeting of Newport Beach RACES was conducted as a tour of Air Operations of the Police Helicopter facility at John Wayne/Orange County Airport. The operation is jointly owned by the cities of Newport Beach and Costa Mesa. Gordon West, WB6NOA has installed ATV transmitters in each of the helicopters. The pilots are all licensed amateur radio operators. ATV signals are downloaded to ME-SAC personnel when requested.

## OES

For the Southern Region OES ACS meeting on July 17, 2006, our featured speaker will be Rob Balfour, Senior Forecaster/Incident Meteorologist, from the NWS (National Weather Service) Forecast Office in San Diego. He will give an overview on weather, how it affects our daily lives and fire weather behavior. The OC weather is forecasted from the San Diego NWS office <http://www.wrh.noaa.gov/sgx/>. This meeting will be on July 17, at 7:30 PM in room 202, Building 6 on the Los Alamitos Joint Forces Training Base.

For the Southern Region OES ACS meeting on August 21, 2006, our featured speaker will be Captain Bret Davidson from the Poway Fire Department. His topic will be wildland fire and weather behavior. He will also address "entrapment." This meeting will be on August 21, at 7:00 PM in room 214, Building 6 on the Los Alamitos Joint Forces Training Base.

All visitors are more than welcome. For additional information, please contact Arnie Lewin, [W7BIA@cox.net](mailto:W7BIA@cox.net).

**"RACES News"  
provides an  
opportunity to  
share  
information from  
all City & County  
RACES  
organizations in  
Orange County.**

**Please send your  
news to:**

**OCRACES@  
ocgov.com**

# July 2006

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3 <i>Weekly Net</i>	4 <i>Independence Day</i>	5	6	7	8
9	10 <i>Monthly Meeting &amp; Weekly Net</i>	11	12	13	14	15
16	17 <i>Weekly Net</i>	18	19	20	21	22
23	24 <i>Weekly Net</i>	25	26	27	28	29
30	31 <i>Weekly Net</i>					

### Upcoming Events:

- **July 4:** Independence Day
- **July 10:** OCRACES monthly meeting at 840 N. Eckhoff in Orange
- **Aug 7:** OCRACES monthly meeting at 840 N. Eckhoff in Orange
- **Oct 7:** City/County Exercise



[www.ocraces.org](http://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:

- 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

#### Program Coordinator

Marten Miller, KF6ZLQ  
(714) 704-7917

#### Radio Officers

Scott Byington, KC6MMF  
Harvey Packard, KM6BV  
Joe Selikov, KB6EID  
Ralph Sbragia, W6CSP

#### Chief Radio Officer

Ken Bourne, W6HK  
(714) 997-0073

#### 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](mailto:OCRACES@ocgov.com)

# 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](mailto:OCRACES@ocgov.com)

Visit Our Website  
[www.ocraces.org](http://www.ocraces.org)  
It's Where It's @!

Questions or Comments?  
Contact the Net Control Editor  
[OCRACES@ocgov.com](mailto:OCRACES@ocgov.com)



**"W6KRW ...  
Serving  
Orange County"**

## *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