



County of Orange RACES NET CONTROL



February 2001

Newsletter of the County of Orange Radio Amateur Civil Emergency Service

PDA's and the Emergency Responder

by: Capt. Ray Grimes, W6RYS
Chief Radio Officer, OCRACES

PDA's are Personal Digital Assistants, not that this description really tells you much about what it actually is. PDA's are more commonly known as Palm Pilot's or similar electronic personal organizers. These complex electronic replacements for an address book have evolved tremendously in the last year or two. Such devices can be provided with Internet capability using a celfone, producing a powerful pocket sized data terminal. A conventional police or fire mobile data terminal can cost upwards of \$12,000 each, but a Palm VII can cost less than \$500.00. At these prices, an entire department can affordably be 'wired' into the information highway.

There is little doubt that PDA's are

convenient, but how can these devices assist public safety? For starters, emergency responders can tap into their department's data base, pulling up incident information, route maps, structure maps, site HAZMAT inventories, enabling intercommunication with dispatchers and other responders, and so on. Police and Fire can also communicate with each other, and with outside service and support providers. Critical weather information can be obtained which can be factored into a response plan. Police in the field can review crime statistics for a beat area, check serial numbers of stolen merchandise, and display wanted or missing persons photos. There are four main features that make PDA's attractive for law enforcement, fire, and EMS agencies. They provide real-time mission-critical information; PDA's can streamline an agency's administrative paperwork; the cost of ownership is minimal for the devices and connectivity; and last but not least, the technology provides for highly secure acquisition and

February Meeting

The next OCRACES meeting is Monday evening, February 5, 2001. The meeting will feature a presentation on the 800 MHz International Tactical (ITAC) mutual aid channels being implemented throughout Orange County. This is a mutual aid resource that we may be called upon to utilize when supporting public safety and this presentation will focus on how the channels are programmed into Orange County public safety radios, proper use of the channels, and the use of an air-borne portable repeater.

This is an open meeting and will start at 1930 hours at the usual meeting location, 840 N. Eckhoff Street in Orange.

transfer of information. PDA's will lighten the load for dispatchers, greatly reducing information inquiries from field units. The field units will be able to get their own information with lightning speed.

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Upcoming Events

February 5	OCRACES Meeting, 1930 Hours, 840 N. Eckhoff St.
March 4	Mass Casualty Incident exercise 0700 Hours, Brea Mall
March 5	OCRACES Meeting, 1930 Hours, 840 N. Eckhoff St.
April 1	OCRACES Activation Persian New Year
April 2	OCRACES Meeting, 1930 Hours, 840 N. Eckhoff St.
April 7/8	Baker-To-Vegas Challenge Cup Relay Race
April 28	OCRACES Activation Christmas In April
May 7	OCRACES Meeting, 1930 Hours, 840 N. Eckhoff St.

Captain's Corner

By: Capt. Ray Grimes, W6RYS
OCRACES Chief Radio Officer

What an interesting start to the new year! We have already experienced a 4.6 MM (Moment Magnitude) earthquake in the greater Los Angeles area and continue to struggle with the threat of rolling power blackouts. Our sincere best wishes go to the people of El Salvador who experienced a massive 7.6 MM earthquake, resulting in over 600 verified casualties so far; and in Ahmedabad, India where a 7.9 MM earthquake yielded 3200 casualties to date with expectations of up to 15,000 deaths. There is not much that can be said about preparation for disasters in an impoverished country where construction standards are non-existent. It is ironic that this is the 7th anniversary of the Northridge Earthquake, and what have we learned and done? Seismic building standards in California have improved, insurance companies can be held fully liable for personal losses (even years after a claim has been settled), and the public has gone about their business, forgetting or ignoring good advice about disaster preparation.

We in Orange County must now prepare for inevitable rolling power blackouts. It has already been educational to observe news footage of the first Stage 3 rolling power outages in Northern California. Traffic accidents have increased, particularly at intersections. The local utilities have admitted that they will not be getting the advance notice from the California ISO that we were first promised. With 10 minutes warning, the best we can expect is to hear about in-progress rolling power blackout locations on our entertainment radios and TV, and to avoid them. There will be no way to predict where the next blackout may occur. OCRACES should remain on standby, remembering that many of the conventional ways we communicate depend on commercial power.

Floods

Flooding has certainly had an impact on Southern California. Storms similar to the winter storms of 1992 through 1998 could cause flash floods, contaminate the drinking water supply, create power outages and damage homes and contents. Heavy storms can also strand individuals. Learn now how to prepare before the rains and flooding begin.

Assemble a flood emergency supply kit that includes sandbags, plastic sheeting, plywood, lumber and tools. Contact your local insurance agent or call the Federal Emergency Management Agency (FEMA) regarding special flood insurance at (800) 638-6620.

For more information on the Earthquake Survival Program (ESP), contact your local Office of Emergency Services.

Newsletter Article from
'GETTING IT DONE IN 2001, PREPARING FOR ALL HAZARDS',
published by The County of Los Angeles Chief Administrative Office, Office of Emergency Management
Submitted by Linda Bomberg, Orange County Sheriff's Dept.

PDA's cont'd from pg. 1

PDA effectiveness is only limited by cellular coverage in an area. This allows effective PDA operation from most anywhere, including inside of buildings, tunnels, and parking garages. Officers in cars or on foot can obtain information, as can officers on horseback. The future is portable data.

from: RadioResource Magazine, October, 2000 Pg. 50,
Public Safety in the Palm of the Hand; Gillespe, Martin

***Please bring
a
prospective member
to a
meeting!***

Meetings:

General: First Monday of Month
(open to public) @ 1930 hr

Meeting Location:

OCSD/Communications
840 N. Eckhoff St. Suite 104
Orange, CA 92868-1021

County RACES Frequencies:

6 m: 52.62 MHz output, 52.12
MHz input, 103.5 Hz PL

2 m: 146.895 MHz output,
146.295 MHz input, 136.5 PL;
(primary net Mondays, 1900 hrs)

2 m: Packet: 145.07 MHz
(1830 - 1900 hours)

1.25 m: 223.76 MHz output,
222.16 MHz input, 110.9 Hz PL

70 cm: 449.180 MHz output,
444.180 MHz input, 107.2 Hz
PL (private)

OCRACES Web Page:

<http://www.ocraces.org>

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Did You Know?

By: Capt. Ray Grimes, W6RYS,
OCRACES Chief Radio Officer

California is far from being out of an electrical power crisis. A spokesman from SCE stated on the evening news tonight California will likely be subject to rolling blackouts for months. New power plants are scheduled for California but the first one won't be on-line until the end of this year. To lend perspective to who is using up all of our power and why we can't increase our output capacity, let me offer some statistics which I obtained from various energy web sites such as <http://www.energy.gov> and the California ISO at <http://www.aiso.com>.

California operates 988 major power generating stations, producing 53,713 megawatts. Of these, 387 are hydroelectric producing 25% of our total output, 45 are geothermal producing 5% of our totals, 335 oil/gas generators contribute 55% of our output, coal power plants (yes, in California) produce 1% of the total, 99 wind generator stations produce 3%, 90 Biomass (co-generation plants) produce 2%, 2 nuclear plants produce 8%, and 14 solar farms produce 1%.

California's typical daily average demand is somewhere around 67,000 megawatts, requiring that approximately 25% of our power needs be met from sources outside the state. Statistics from 1990 to 2000 indicate that residential users increased electrical demand over a decade by 12%, commercial users increased use by 11%, industrial use was up 8%, and agricultural use was down 15%.

You may want to visit a very interesting web site at <http://www.aiso.com/SystemsStatus.html>. This site provides real-time information as to current (no pun intended) electrical demands and recent trends.

Visual Communications

Coordinator: Jim Carter WB6HAG

Web Page: <http://www.qsl.net/wb6hag/>

SSTV NET – Next month's newsletter will detail the results of the City / County RACES meeting which will review the need for SSTV nets and future drills.

Presentations on the Road – OCRACES has a very informative SSTV / ATV presentation with live demonstrations that is available to any City RACES organization. If your RACES group is interested in learning more about SSTV or ATV, please contact Robert Stoffel at (714)704-7919 for availability.

New SSTV Equipment – The County of Orange is purchasing two Kenwood Visual Communicators for OCRACES. This brings our total count to six as we will have four County and two privately owned devices.

SSTV and Ham FAX – 'Silicon Pixels' SSTV software which we now use for our SSTV operations, is being evaluated for ham fax capabilities. Test results will be presented in next month's newsletter.

Silent Key - Personal Communications Pioneer Al Gross, W8PAL

The man who brought the world such indispensable wireless communications concepts and devices as the walkie-talkie, pager and cordless telephone has died. Al Gross, W8PAL, of Sun City, Arizona, passed away on December 21. He was 82.

Gross obtained his Amateur Radio license in 1934 at the age of 16. His early interest in Amateur Radio helped set his career choice while he was still a teenager.

Gross pioneered the development of devices that operated in the relatively unexplored VHF and UHF spectrum above 100 MHz. His first invention was a portable hand-held radio transmitter-receiver. Developed in 1938 while he was still in high school in Cleveland, he christened it the "walkie-talkie." The device caught the attention of the US Office of Strategic Services—the forerunner of the Central Intelligence Agency. The OSS recruited Gross, and this led to the invention of a two-way air-to-ground communications system used by the military behind enemy lines during the World War II. The system allowed OSS agents to communicate with high-flying aircraft.

After World War II, Gross set up Gross Electronics Inc to design and build various communications products, some of them under government contracts. He also launched Citizens Radio Corporation to design, develop and manufacture personal wireless transceivers.

Cartoonist Chester Gould asked if he could use Gross' concept of a miniaturized two-way radio in his Dick Tracy comic strip. The result was the Dick Tracy two-way wrist radio.

During the 1950s and 1960s, Gross secured several patents for various portable and cordless telephone devices. In September 1958 Gross Electronics received FCC type approval for mobile and hand-held transceivers for use on the new Class D 27-MHz Citizens Band. "If you have a cordless telephone or a cellular telephone or a walkie talkie or beeper, you've got one of my patents," Gross once said. He added that if his patents on those technologies hadn't run out in 1971, he'd have been a millionaire several times over. Over the years, Gross worked as a communications specialist for several large companies. Since 1990, he had worked as a senior engineer for Orbital Sciences Corporation and was still on the payroll there when he died.

Gross received numerous awards and honors during his distinguished career, including the 1992 Fred B. Link Award from the Radio Club of America, the 1997 Marconi Memorial Gold Medal of Achievement from the Veteran Wireless Operators Association, and the 1999 Edwin Howard Armstrong Achievement Award from the Institute of Electrical and Electronics Engineers. In 1998, he received Eta Kappa Nu's Vladimir Karapetoff Eminent Members' Award in recognition of his pioneering contributions to the engineering of personal wireless communications.

Earlier this year he won the Lemelson-MIT Lifetime Achievement Award for invention and innovation and for playing a major role in the wireless personal communications field. As his IEEE biography put it: "It is clear that Mr. Gross was a true pioneer and helped lead the way to today's wireless personal communications revolution."

Al Gross is survived by his wife, Ethel. A burial mass was held December 27 in Sun City.—thanks to The W5YI Report and the IEEE for this information.

City/County News

ARRL- Joe Brown, W6UPQ, Orange County ARRL Section Manager has recently accepted the position of Riverside County RACES Chief Radio Officer. We welcome Joe to this key position and look forward to working with him and Riverside County RACES. Joe will continue his relationship with the ARRL as Section Manager.