



# County of Orange RACES

# NetControl

February 1999



Newsletter of the County of Orange Radio Amateur Civil Emergency Service

## Top Story

### Metro Net

By: Joe Selikov

The OCRACES staff meeting on January 11 was held at the Metro Net dispatch center located at 201 South Anaheim Blvd., in Anaheim. Ms Jean Ferrel, Manager of Communications was our host. Metro Net replaced the old North Net, managed by the City of Orange, and relocated to Anaheim in July of 1994.

Metro Net is now one of the largest dispatch centers in Southern California. Seven Cities are coordinated including: Anaheim, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Newport Beach and Orange. In addition, it can handle the coordination of mutual aid with the other four area dispatch centers.

Over 70 thousand emergency calls are

handled per year. Each call is a true emergency since the center only receives pre-screened 911 calls. Each call is categorized and triaged according to a pre-scripted medical protocol system now being used throughout the country.

There are four categories which include Alpha, Bravo, Charlie and Delta. Delta is the most critical and allows both the paramedics and ambulance teams to be dispatched Code 3. Charlie allows the paramedic team to dispatch Code 3 and the ambulance Code 2. As the operator is questioning the caller, the answers are used to electronically select the type of emergency equipment and personnel skills needed for the incident.

Metro Net has nine dispatch positions. Each position contains three monitors, keyboards and computer mice. One monitor displays the telephone switchboard, one displays the radio and headset controls and the third displays the Computer Aided Dis-

## Feb. Meeting

Sgt. Ron Moore, KD6LFF, a canine handler in the OCSB Bloodhound unit will be the guest speaker. Ron will explain his role as a canine handler, and introduce us to his dog Hershe, who has a very unique specialty in search and rescue. The meeting starts at 1930 hours, 840 N. Eckhoff St., Ste 104, Orange.

patch (CAD).

The CAD system is very impressive. It provides the operator with a check list of options to ask the caller. As the selections are made the system automatically determines the nature of the emergency and starts the

*(Continued on page 6)*

### OCRACES 1998 Yearbook

Thanks to Walter Wilson, K7WWW for putting together the 1998 yearbook. If you have not received your copy please contact Robert Stoffel.

## Upcoming Events

Feb. 1	General Meeting, Alternate EOC
Feb. 8	Staff Meeting, Alternate EOC
Feb. 19	Deadline for <i>NetControl</i>
Mar. 1	General Meeting, Alternate EOC
Mar. 8	Staff Meeting, Alternate EOC
Mar. 20	Amateur Television Presentation, Loma Ridge, 10 AM, Open.
Apr. 5	General Meeting, Alternate EOC
Apr. 10-11	Baker to Las Vegas Challenge Cup
Apr. 12	Staff Meeting, Alternate EOC

### Inside this issue:

Top Story	1
Upcoming Events	1
Captain's Corner	2
City Watch	2
ECC News and Views	2
Training	3
History File	4
Committee Reports	5
Did You Know ?	6
Editor's Notebook	7

Visit the OCRACES Web Page @ <http://www.ocraces.org>

---

## Captain's Corner

By Ray Grimes

---

This week marks a special event, the 5<sup>th</sup> anniversary of the Northridge Earthquake. If you look around, you will notice that aside from those few who are still displaced by this disaster, most everyone else has resumed their lives, and for the most part, totally forgotten about emergency preparedness. Looking back to that January 17, 1994 morning, a 6.7 Mm earthquake was an unpleasant wake-up call for most of Southern California. After the dust settled, this 15 second earthquake cost 51 lives and more than 9,000 injuries, with \$44 billion in property damage. The aftermath reports state that 25,000 dwellings were deemed uninhabitable, 7,000 buildings were red tagged, 22,000 buildings yellow tagged, 9 hospitals closed, 9 parking garages collapsed, portions of 11 major freeways closed, and 9 freeway bridges collapsed. Of interest was that LAFD had 476 reported non-

medical incidents on DAY ONE. The normal LAFD non-medical incident count is typically between 50 and 100 incidents per day, on a "normal" day. Between 4:38 AM and 11:41 PM LAFD lost its CAD capability due to backup power generator failures, causing Fire Dispatch to revert to a manual mode. By 06:45 hours, 50 structure fires were reported in addition to numerous water supply and gas main ruptures. Power outages were city-wide. A mutual aid request from Santa Monica could not be honored by LAFD due to the critical state of events within the city. LAFD provided the Goodyear Blimp with ten post earthquake safety messages in English and Spanish. These messages were displayed over the San Fernando Valley on January 19 and 20<sup>th</sup>.

Do you remember (and practice) the "good sense" disaster planning lessons

widely publicized in 1994? Do you still maintain at least half a tank of gas at all times? Is your personal survival bag up to date, with fresh food, water, and flashlight batteries? Have you reviewed and updated your family emergency numbers calling tree and your family meeting location plan? Do you carry current city maps in your vehicles? Are your RACES duty bags well-stocked and current, and have you included a copy of the latest OC-RACES membership roster? We must not forget the disaster planning lessons of the past. As OCRACES members we can't ever get complacent about emergency preparedness. The anniversary of the most costly earthquake in modern history serves as a good reminder that its time to check our duty bags and to review emergency plans.

---

## City Watch

### Mission Viejo

Lt. Steve Sobodos, KN6UX attended the RACES meeting in Mission Viejo. This is his report.

1. A new 6M radio and antenna was acquired that will make use of the repeater more effective.
2. The word RACES will be removed from the normal net pre-ambles so check-ins can be accepted from non-members without closing the net. The rationale is that when a disaster strikes, there will be a big time lag before the group is activated by the ECC. Once the net is activated the logistics of the RACES activation can be worked out in advance of the need. The RACES activation preamble will remain the same.

3. I was asked if MV would still be used in a disaster with the new 800MHz system being able to talk between agencies. I assured them that inter-agency communications is not a significant part of our role in communications during disasters. Our efforts are directed at offloading channel overload and backup communications. MV as well as other RACES groups will continue to serve in that capacity.

### Yorba Linda

Yorba Linda RACES will be conducting a drill on March 13, which is the second Saturday of the Month. More information will be coming.

### Insert your City here!

Why use **NetControl**?

- **NetControl** provides wide readership and keeps other City and County personnel aware of your activities.
- Provides advanced or possible mutual aid notice prior to the formal request.
- Helps coordinate mutual aid activity
- Helps recognize those that have done a good job.
- Provides forum for sharing both technical and non-technical items of interest

How do I submit articles?

- Articles can be submitted in almost any Microsoft Windows compatible format
- Word (.doc) or Text (.txt)
- Articles can be part of email
- Send articles to Joe Selikov
- E-mail address jalsel@earthlink.net
- Fax (949) 472-1019
- Home address: 25521 Fir Lane, Laguna Hills, Ca. 92653

Cut-off dates for article submittal will be published in the **NetControl** Upcoming Events table

---

## ECC News and Views

by Robert Stoffel

### OCRACES is off and running in 1999!

In January, we continued our planning for

Baker-to-Vegas. This event will be held over the weekend of April 10 and 11, 1999. Communicators are still needed, please contact Mike Krueger, N6MIK if interested. We have also set our Field

Day location as Craig Regional Park in Fullerton. Field Day is set for June 26 and 27, 1999. Ralph Sbragia, KD6FYT is the OCRACES Field Day coordinator

(Continued on page 6)

---

# Training

---

## An Introduction to Trunking Radio Systems

By: Lt. Mike Krueger, N6MIK

The concept of a trunking radio system was first developed in the mid-1980's for the commercial radio business. More and more business customers required radio communications, while fewer and fewer frequencies remained to issue. Motorola designed the first trunking system to help alleviate the congestion in the LMR spectrum, and allow more users to share the same frequencies. Trunking is a method of using relatively few communication paths for large number potential users. These radios systems are similar to the telephone trunking concept that has been in use for years.

A typical trunked radio system consists of blocks of 5 channels (maximum 20) connected by a special computer called the central controller. The central controller uses one control channel for data exchange and system management. The remainder of the channels are used for voice. The control stream is encoded with a 4-digit hexadecimal system identifier. (A RealAudio file of a Motorola control channel is available at [www.ocraces.org](http://www.ocraces.org)).

When a trunking radio is powered on, it searches a pre-programmed list of frequencies for the control channel. When the control channel is found, the radio confirms the System ID and starts quietly monitoring the data stream for instructions from the central controller. This is where trunking gets interesting!

Each radio has a unique Unit ID, which allows the controller to address it individually, and one or more Talk-Group ID's. How does this all work? It's actually quite simple!

When the PTT is keyed, several things happen before the user can speak. First, the radio sends a quick (21.67 milliseconds) burst of data on the input frequency of the control channel repeater, identifying itself and it's current talk-group. The controller then sends instructions out over the control channel, steering all radios tuned to the same talk-group to an open repeater in the system and activates it. At

this point, the user that pressed the PTT gets a "talk-permit" tone (usually 3 short beeps) and can begin speaking. This entire process takes about 58 milliseconds.

When the repeater stops transmitting, each radio reverts to the control channel and awaits further instruction.

In the event that all system repeaters are in use when the central controller receives a talk request, the requesting radio will sound low beeping tones similar to the telephones "busy-signal". Simultaneously, the controller adds the request to a queue, and will signal it with a talk permit tone when a repeater is free. Many public safety systems (including the current Fire radio system in Orange County) have an EMERGENCY button that, when pressed, makes a repeater instantly available (even if the system is busy) and can signal the dispatcher by sounding an alarm at the console.

In the unlikely event of central controller failure, the system will go into Failsoft mode. Failsoft operation divides the entire population into affiliated groups which are distributed on each of the Failsoft channels. These Failsoft channels become party lines, operating much like an open repeater, with all members being able to hear and talk to one another. A faint single beep is heard every 10 seconds to alert users of the condition.

As communicators, it is important that we become familiar with the equipment used by the agencies we support. Knowing the basic operating principles of trunking may prove valuable in the future when Orange County introduces the new trunking system that will incorporate all police, fire and public works agencies countywide. OC-RACES members will have an opportunity to receive training on the new system and radios around mid-1999.

Until next month.... 73!

---

## Trunking Terminology

**Central Controller:** The brains of the trunked system. The controller is a computer that performs many functions, the most obvious of which is letting users talk.

The controller processes transmit requests from user radios and assigns all radios tuned to that talkgroup to an available channel in the system. The controller also allows for administrative functions, such as adding talkgroups, changing the trunking time, billing, and other functions

**Control channel:** The channel of the trunked system, which transmits 3600 baud FSK data to the user radios affiliated with that system. The control channel usually rotates daily among a set group of channels to avoid making one repeater do all the work.

**Conventional:** The term used to refer to non-trunked, fixed-frequency two-way operation. Amateur Radio repeaters are examples of conventional radio systems.

**Failsoft:** When the central controller goes into cardiac arrest due to catastrophic failure, the system reverts to Failsoft mode to allow some communications to continue. The radios are programmed with Failsoft frequencies, and they automatically tune there when the control channel ceases. Users then operate as they would on conventional open repeaters.

**Hang Time:** The length of time that a repeater continues to transmit after a user stops transmitting through it.

**Hexadecimal:** A base-16 numbering system; hex numbers are expressed using 0 through 9, then the letters A through F to express the numbers 10 through 15, e.g. 0E3F would be a typical Motorola System ID expressed in hex.

**Talkgroup:** A logical group of users, analogous to a channel, except that it is independent of the radio frequency used to converse. So, it still really is a channel, but with a fancy name.

**Talk-Permit:** A short tone (usually 3 short beeps) indicating that the trunked system has processed your PTT request and it is OK to speak.

**Unit ID:** also shortened to just "id"; identifies the individual radio affiliated with the trunked system. Each radio in a trunked system is assigned a unique unit id by the system administrator. This is not the same as a talkgroup!

---

# History File

---

## In the Beginning...

by: Ray Grimes, W6RYS  
Chief Radio Officer, OCRACES

Who was Elmer Wavering? Only one of the world's greatest contributors to automotive and entertainment electronics technology. His ingenuity and brilliance touched us all through his remarkable career achievements. Elmer recently died at the age of 91.

In the peak of his professional career he was distinguished as the pioneer of the first mass-produced automobile radio, the inventor of the automobile alternator, and influenced the application of semiconductors in the automotive industry. He also led the effort which produced the radio communications system used by the Apollo astronauts.

In WW II Elmer led a national effort to produce quartz crystals for use in military radios and radar. This effort is considered second in importance only to the Manhattan Project for its strategic role in the war.

Elmer once said "the radio may have made the car fun, but the alternator and the switch from positive to negative grounded systems made everything else

possible". In the 1950's Elmer presented his concept of the car of the future to major auto manufacturers. This vision included an alternator, a 12 volt battery supply, electronic ignition, and computerized controls. How profound to think that all of these concepts became not only realities but the foundation of modern vehicles.

Elmer was born in 1907 in Quincy, Illinois. As a young boy he built his first radio receiver in the summer of 1921. During high school Elmer worked in a radio parts store run by his friend Bill Lear, who eventually founded the Lear Jet Corporation. They helped customers build their own radios, and in the process, invented the car radio.

In 1930 Elmer left his own radio business in Illinois to work with Paul Galvin, the founder of Motorola, in developing the first commercial automobile radio. After attending George Washington University, Elmer left to open a radio shop in Quincy. In 1930 he joined Galvin Manufacturing Co. to develop the car radio. The car radio product was called Motorola, to suggest sound in a motorcar (inspired by the popular Victrola). In 1934 Elmer helped lead the company's car radio and police two-way radio communications business. He was elected chief operating officer in 1964. He was selected as a member of the Auto-

motive Hall of Fame in 1989.

Elmer's memory is ingrained in every automobile, entertainment radio, and two-way radio we use today.

---

## QST or CQ?

by: Joe Selikov

In 1927 a convention was held in Washington to determine some issues relating to the use of "Q" signals and band usage. These changes became effective January 1, 1928. A simpler and much more sensible set of audibility signals, a brand new and much more extensive set of "Q" signals and a rather extensive list of one-, two-, and three- letter abbreviations. These changes were adopted internationally and were binding on all classes of stations.

The prefix for a general call to all stations was changed from "QST" to "CQ" and the former became blank in the international list of "Q" signals. The ARRL magazine, was named "QST" and has been in publication since 1915. The magazine kept the "QST" name and vowed to only change the name if "QST" took on some uncomplimentary meaning.

---

## ESP

Feb. '99



## Landslides

### The ground can move without a quake!

When most Californians think about ground movement, they probably envision images of the ground below them moving from side to side or up and down during an earthquake.

In the aftermath of wildfires such as the 21 blazes that comprised the Southern California Wildfire Siege in 1993, residents of steep hillsides and canyons need to include another type of ground movement in their thoughts and plans.

Areas left barren of grasses, plants, shrubs and trees by fire are vulnerable to landslides through sliding, falling and flowing soil, rock, mud, brush and trees, particularly during and after heavy rains.

Although slow-moving landslides can cause significant property damage, they usually don't cause any deaths. Mudslides, however, are much more dangerous. According to the California Department of Conservation, mudslides can easily exceed speeds of 10 miles per hour and often flow at rates of more than 20 mph. Because they travel much faster, mudslides can cause deaths and injuries as well as significant property damage.

According to the Department of Conservation, landslides and mudslides caused by the 1997-98 El Niño phenomenon caused

three deaths and 19 injuries in Southern California alone. Such earth movement also destroyed at least 44 homes, damaged 94 others and resulted in at least the temporary evacuation of more than 1,000 people.

Wherever you live, work or play, use the recommendations on the reverse side of this *Focus Sheet* to help reduce your risk of death, injury and property losses from landslides, mudslides and other types of ground failure.

---

The Los Angeles County Office of Emergency Management has a program called ESP which stands for Earthquake Survival Program. As part of that program they supply a set of articles which focus on a different hazard each month. **NetControl** will publish each month's hazard through the end of the year.

# Committee Reports

## Visual Communications

Coordinator: Jim Carter (WB6HAG)  
Web page:  
[http:// www.qsl.net/wb6hag/](http://www.qsl.net/wb6hag/)

**Tri-Agency Update** - A formal letter was mailed to SCRRBA last month requesting ATV repeater frequencies, availability, and assignments. Until their response is received, the Tri-Agency program remains on hold.

**ATV Communication Frequency Update** - Our ATV com channel frequency for 426.25 MHz video is now on 144.345 MHz. Please update your frequency listings.

**ATV Training and Demonstration** - Hemet and Huntington Beach RACES will be attending an ATV training session presented by OCRACES members Jack Barth (AB6VC), Ray Grimes (W6RYS), Robert Stoffel (KD6DAQ) and Jim Carter (WB6HAG) on Saturday, March 20<sup>th</sup>. Attendees will receive an introduction to

ATV, where and how used, applicable FCC regulations, an overview for using the different frequency type transmitters and power requirements, filters, receivers, antennas, cameras, repeaters, and a live demonstration showing the OCRACES equipment used in the field. The Helmetcam that uses a business card size ATV transmitter will also be displayed and demonstrated. City RACES organizations are invited and may inquire, by calling Jim Carter at (714) 522-9358 during normal business hours or sending an E-mail to [jecarter@ix.netcom.com](mailto:jecarter@ix.netcom.com). Anyone who plans to use ATV should not miss this informative presentation.

**Loma Ridge** - Jack Barth (AB6VC) and Ray Grimes (W6RYS) continue to spend time in resolving issues related to ATV performance. Jack identified that the TV used for displaying video in the RACES room was defective. He replaced it with a donated Commodore 64 monitor. This

monitor has greatly improved our technical operations. Thank you Ray and Jack for your time and efforts in improving our operations.

**Baker to Vegas** - The ATV link between Las Vegas and our Santiago ATV repeater remains non-operational. Last November, we approached San Bernardino RACES about assisting with their 2.4 GHz ATV remote feeds to the Las Vegas repeater which they use to cover race course. However, to date, we have not heard from them. Because of last year's costs associated with linking race course pictures to the Web, we will not provide this service this year. However, some ATV personnel may chose to provide video via the Las Vegas repeater, if operational as last year, its 900 MHz input was down, to our command post. This continues to be under discussion.



Coordinator: Lt. Mike Krueger, N6MIK  
E-mail: [mikek@deltanet.com](mailto:mikek@deltanet.com)

Orange County RACES is looking for communicators for the April 10-11 Baker to Las Vegas Challenge (B2LV). The Orange County Sheriffs is fielding two teams again this year so we will need about 25 Hams to ride in vehicles split between two shifts. Shift one Starts in Baker Saturday and ends in Pahrump in the middle of the night. Shift two takes over in Pahrump

and ends at the finish line in Las Vegas. Shuttles will transport communicators from Las Vegas/Pahrump so that you can end up back at your vehicle at the end of your shift.

Although B2LV communications for the OC Sheriffs is being coordinated by OC-RACES, non-RACES HAMS are welcome to help out also. Tell a friend. If you have never seen this race in person, you should experience this at least once in your life - the thrill of victory and agony of defeat happens at every checkpoint.

If you are considering helping out, give me a call or Email so I can get you assigned to the shift you prefer.

Lt. Steve Sobodos  
Orange County RACES  
KN6UX  
[scs@cpus.com](mailto:scs@cpus.com)

## Welcome

OCRACES is pleased to welcome our newest member, Robbe (Rob) Gibson, K6RAG.

Rob is self employed as a professional photographer and provides services for industrial and fine arts customers. He also has a background in advertising which he is willing to share with us.

Rob is looking to give back some of his time to his community. Let's put him to work.

(ECC News and Views from page 2)

and is making plans now for this weekend event.

Our meeting schedule is off to a very successful start with an excellent presentation by David Boehm, N6DSB on Civil Air Patrol communications at our general meeting, a tour of Metro Net at our staff meeting, and an informative City/County RACES meeting last week. Thanks to all for their help and participation in these meetings.

And finally, OCRACES with the help of Jim Carter, WB6HAG and Ray Grimes, W6RYS submitted an application for co-

ordinated operation of an inter-counties Amateur Television repeater/frequency relay system. This application was submitted to the Southern California Repeater and Remote Base Association.

In other news, the Federal Communications Commission (FCC) recently announced a change in the handling of enforcement actions concerning the Amateur Radio Service. All investigation, evaluation and processing of radio amateur related enforcement matters have been transferred to the FCC's Compliance and Information Bureau. The main objective of this change is to facilitate the Commission's pursuit of compliance in the ama-

teur services especially with regard to resolution of interference complaints. The FCC advised all enforcement questions and complaints be sent to the Compliance and Information Bureau, Compliance Division, Attention Amateur Complaints, 1919 M Street, Mail Stop 1500E1, Washington D.C. 20554. Our local FCC office has confirmed that the Commission is taking a more aggressive role regarding Amateur Radio.

I look forward to seeing you at our general meeting on February 1, 1999, 1930 hours at the usual Eckhoff Street meeting location.

(Metro Net from page 1)

appropriate dispatch. Units can be dispatched and rolling before the call is completed. For the times the operator is called upon to provide first responder medical assistance over the phone, the system can provide the same information as found in the flip charts which are also available to the operator.

This is a modern facility in a very secure building which provides participating cities the advantage of using state-of-the-art technology at a cost that will not over burden small city budgets.

OCRACES would like to thank Ms. Ferrel and the staff at Metro Net for taking the time to explain what they do and for making us feel welcome at their facility.

AMATEUR FREQUENCY BANDS  
assigned by The Washington Convention of 1927

Kilocycles	Width in Kilocycles	Assignment	Approx. Meters on basis factor 3	Meters on basis factor 2.998	Harmonic family for centers of related portions		Amateur Purpose
					Kilocycles	Meters	
1715-2000	285	Amateur, Mobile, point-to-point	150 - 175	149.9 - 174.8	1775	168.92	Domestic
3500-4000	500	" "	75 - 85.7	74.96 - 85.66	3550	84.46	"
7000-7300	300	Amateur Exclusively	41.1 - 42.9	41.07 - 42.83	7100	42.23	International Night
14,000-14,400	400	" "	20.83 - 21.43	20.82 - 21.42	14,200	21.11	International Day
28,000-30,000	2000	Amateur & Experimental	10.00 - 10.71	9.99 - 10.71	28,400	10.56	Experimental
56,000-60,000	4000	" "	5.00 - 5.36	4.997 - 5.354	56,800	5.28	"

FIG. 4

Reprinted from the September 1928 issue of QST Magazine

## Did You Know?

by: Ray Grimes, W6RYS

While preparing yourself and your home for earthquakes, don't forget to consider earthquake planning for your pets. The January, 1997 County of Orange Health Care Agency bulletin offers some excellent earthquake safety recommendations in their article "Preparing Pets for Earthquakes".

To begin, a safety check is recommended to assure that items are removed or secured which could block access between human caretakers and pets. Fasten aquariums to avoid tipping, secure bird cages, secure pet sleeping areas to avoid

falling debris.

Survival items to obtain before a quake, include keeping your pet's ID tag up to date (don't forget to change those phone number area codes), store a 3 days food and water supply for each pet, store first aid supplies such as antiseptic cream, eye drops and bandages, and any special medications. Keep a leash and harness available. Have a portable kennel available with shipping label and muzzle, to store, transport, or move possibly injured pets. Also keep fresh blankets and towels in the kennel, for warmth.

Prearrange with a neighbor or local friend to care for your pets in the event that you can't return home after an earthquake. Keep a list of names and phone numbers

of people who might be able to help you care for your pets. Keep your pet's inoculations up to date.

### Do not try to hold onto your pet during the earthquake shaking.

Animals will instinctively protect themselves and hide where they are safe. You could also be bitten or injured as they attempt to flee. If your pet disappears following an earthquake, post signs for several blocks near your home and visit all local animal shelters, and post a "lost" ad in the local newspapers. Pets can safely be left at home under most circumstances. A list of private citizens offering as volunteer "pet sitters" is maintained by OC Shelter.

### Meetings:

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

**Staff:** Second Monday of Month  
(members only) @ 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: 449.175 MHz output,  
444.175 MHz input, 107.2 Hz  
PL (private)

### OCRACES Web Page:

<http://www.ocraces.org>

### OCSD/Comm's Staff:

Emergency Comm's Coord.  
Robert Stoffel, KD6DAQ  
(714) 704-7919

Chief Telecomm. Engineer  
Gary Gray, W6DOE  
(714) 704-7911

OCRACES Chief Radio Officer  
Ray Grimes, W6RYS  
(562) 594-0065

Assistant Chief Radio Officer  
Ken Mirabella, KM6YH  
(714) 990-6656

Assistant Radio Officers  
Mike Krueger, N6MIK  
John Roberts, W6JOR  
Joe Selikov, KB6EID  
Steve Sobodos, KN6UX

### Sergeants

Al Baird, KC6TWI  
Jim Carter, WB6HAG  
Marty Mitchell, N6ZAV  
David Wilson, KE6AFR

### NetControl Editor:

Lt. Joe Selikov, KB6EID  
[jalsel@earthlink.net](mailto:jalsel@earthlink.net)

## Editor's Notebook

The following article was taken from the September 1928 issue of QST magazine. It was written by the President of the American Radio Relay League, Mr. Hiram Percy Maxim. I find his words still true today. This is our legacy. Enjoy the reading.

### Opportunity

**By Hiram Percy Maxim, President, American Radio Relay League**

When I was a very small boy my father and I used to ponder at length over the problem: Is it the salt fish that makes the ocean salt, or is it the ocean that makes the salt fish salt?

There is a somewhat similar problem to-day but there is no joker in it. Is Amateur Radio what we amateurs have made it, or are we amateurs what Amateur Radio has made us?

Amateur Radio is one of the amazing products of this century. Where before has an amateur group been depended upon in great public emergencies? Where before has an amateur group been depended upon for communications by every kind of an exploring expedition that starts out? Where before has an amateur group been depended upon by a great railroad system for its communications in time of emergency? Where before has an amateur group been depended upon to carry a message from the President of the United States to an explorer in the polar regions? And where before has an amateur group led the way in an important field of scientific research?

The answer is: Nowhere. And hence the question: Is there something about Amateur Radio that carries us amateurs along with it and makes us what we are, or is it we amateurs who have made Amateur Radio the wonderful thing it has become?

I believe it is we amateurs. We built up a splendid organization, which gave us the tremendous advantage of being able to work as an efficiently coordinated whole, instead of a disorderly mob. And this brought us OPPORTUNITIES, which we never otherwise would have had.

And all the OPPORTUNITIES have not passed. Radio telegraphy brought broadcasting. The latter brought the talking moving picture. And then meanwhile amateur moving pictures came along. They have brought that latest marvel, full natural colored amateur motion pictures. Commercial full natural colored motion pictures will quickly come from these, and full natural colored talking moving pictures will follow it. And then will come radio television in full natural colors.

Amateurs are to have golden OPPORTUNITIES in all of them. And it leads one to wonder which of us, obscure to-day, are to shine with the lustre of a Lindbergh tomorrow.

Let's keep everlastingly at it, fellows.

Copyright © 1999 by County of Orange RACES. All rights reserved. No by-lined article may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the author. Once such permission has been obtained, reproduction must include credit to the author and to the publisher (OCRACES and **NetControl**). Non by-lined material may be reproduced, provided that credit is given to the publisher (OCRACES and **NetControl**).