County of Orange RACES

NetControl

March 1998

Top Story **Friends in High Places**

Ken Bourne, W6HK, OCRACES Chief Radio Officer resigns to accepts the position of Deputy Chief ACS Officer - South, for the State of California OES. A ceremony was held at OCSD/Communications on February 9, 1998 in his honor commending his 20+ years of service. Ken was presented with a plaque from OCRACES and LADCS for exemplary service.

Ray Grimes presents award to Ken Bourne for 20+ years of service.

Change of Command **as of February 9, 1998**

Capt. Ray Grimes, W6RYS, Chief Radio Officer

Lt. Ken Mirabella, KM6YH, Assistant Chief Radio Officer

Lt. John Roberts, W6JOR, Central Squad Leader
Lt. Joe Selikov, KB6EID, North Squad Leader
Lt. Steve Sobodos, KN6UX, South Squad Leader

Sgt. Al Baird, KC6TWI
Sgt. Robert Barris, KD6IFZ
Sgt. Mike Krueger, KC6ZSF
Sgt. Marty Mitchell, N6ZAV
Sgt. David Steffen, W6DS

Robert Barris, KD6IFZ, DF Coordinator
David Boehm, KD6IOV, HAMFAX Project Coordinator
Jim Carter, WB6HAG, ATV Coordinator
Nancee Graff, N6ZRB, Membership, PIO and Public Relations Coordinator
Tom Mirabella, KD6AAN, Webmaster
Amish Parashar, KE6EZM, Resources Coordinator
Lt. Joe Selikov, KB6EID, *NetControl* Editor
Dave Wilson, KE6AFR, Digital Communications Coordinator

Goodbye and Good Luck

Sgt. Randy Holland and PR Coordinator Rachael Kent have resigned from OCRACES. Randy has accepted a position in Las Vegas. We will miss both of you but look forward to you joining the OCRACES Las Vegas auxiliary.

Upcoming Events

Mar 2	General Meeting, Eckhoff Street
Mar 9	Staff Meeting, Eckhoff Street
Mar 20	Last Day to submit article for April *NetControl*
Mar 28	Baker 2 Vegas Equipment Tune-up
Apr 1	State OES "Duck, Cover and Hold" Earthquake Drill
Apr 5	Persian Festival, Mason Regional Park, Irvine
Apr 6	General Meeting, Eckhoff Street
Apr 13	Staff Meeting, Eckhoff Street
Apr 25-26	Baker to Las Vegas Challenge Cup Relay Race Web Site: http://www.flo-bin.com/Baker2Vegas
May 29	OCSD/EM SONGS Decontamination Drill, Orange Coast College
Jun 2	Primary Election

Captain's Corner

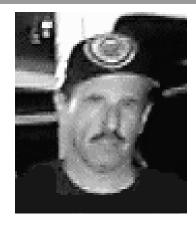## Changing of the Guard
By Ray Grimes

Ken Bourne, you're a tough act to follow! In the 20 years you have been associated with OCRACES you have set a high professional standard in public safety communications volunteer support services which is widely recognized and admired. It has often been said that a job is defined by the person in that position. The OCRACES Chief Radio Officer position duties read like a book. The CRO is a decision-maker, a policy-maker, sets the direction of the organization, plans for growth, influences training and exercises, is a diplomat, marketing director, personnel manager, liaison to the County and Cities, newsletter publisher, web page manager, and special events coordinator, to name a few of the key responsibilities. If allowed, this could become close to a full-time job which does not end with the two RACES meetings per month, particularly when a real emergency call-out occurs. There are e-mails to read and write, phone calls to make and receive, pager calls to respond to, radios to answer, related meetings to attend, reports to read and write, and so on. Somewhere in this schedule the CRO also tries to feed his family and maintain a personal life and social agenda.

I thank the many who have asked me to be your new OCRACES Chief Radio Officer. This is indeed an honor, following in the footsteps of Ken Bourne. I take this step seriously, giving a lot of thought to the present and future of OCRACES and its demands. I have also weighed the time consumption and impacts to my personal life. I conclude that I can offer strong leadership to OCRACES, but not at the expense of my obligations to family and friends, and to my professional career. I also must share my time and availability with the OCSD Aero Squadron, the Aviation Exploring Program, and Angel Flight, air transporting medical patients for treatment.

After much thought, I agreed to accept the CRO position, but I will need considerable help from its membership. Aside from the CRO duties, I will continue to provide monthly articles for Net Control, as I have done for several years. I will need volunteers to take over the many tasks which I simply can't handle personally. To name a few key tasks, there is OCRACES web page manager, Net Control newsletter editor, and special events coordinators (Baker/Las Vegas, Field Day, Persian Festival, etc.). These duties are ongoing, and can be shared or rotated among members.

One of the benefits as CRO is that you can work on "pet projects". I have a few, such as increasing OCRACES membership by 25% in the next 12 months; placing a cache of county-owned RACES communications equipment in several key locations throughout the county such as in Sheriff's substations and Fire stations; and increasing member participation in all activities. There is opportunity for rank and responsibility advancement in OCRACES due to several personnel changes within the group and the need for more active involvement by members. I would like to see the growth in OCRACES headcount because it has been apparent to me that a relatively small portion of our membership regularly does most of the work. We need more involvement from our present membership, and new members are needed to spread the workload and to bring-in new talents. I view my accepting the CRO position as a bargain with the OCRACES membership. I'll do my part if you do whatever you can to help, not waiting for someone to ask first. Here's looking forward to an exciting 1998 (but not too exciting).

State OES Deputy Chief ACS Officer – South

Thanks to all of you in OCRACES for such a nice party at the staff meeting last night. I will hang the beautiful plaque in the most prominent place I can find in my ham shack, and will treasure it always. Most of all, I will treasure the memories of working with all of you, and will always be proud of you and your dedication to serving the County government and the public with the finest RACES communications organization in the nation.

Congratulations to Ray Grimes as your new Chief Radio Officer, to Ken Mirabella as your new Assistant Chief Radio Officer, to Joe Selikov as your new Assistant Radio Officer (North Squad) and editor of "NetControl," to Tom Mirabella as your new Webmaster, and to Dave Wilson and Dan Welch as your new packet BBS experts.

I will try to make as many of your meetings as I can, and keep you up-to-date on State OES/ACS matters. I'll contribute an article to Joe occasionally, too, on State things. I also want to stay aware of your accomplishments, so I can inform other RACES organizations in the State about all the good things you are doing.

Once again, thanks for the great time last night, and the warm wishes you gave to Carol and me.

73,
Ken Bourne, W6HK

ECC News and Views by Robert Stoffel

February was a month of change for County of Orange RACES! Our organization has been fortunate to have had twenty years of exceptional service provided by Ken Bourne (W6HK), serving the last ten years as our Chief Radio Officer. Ken has "moved up in the world," accepting a position with State OES. We will miss him, but also know he is still close by and available when we need him!

Our new officers and coordinators are now in place, and we are prepared for the challenges ahead! Congratulations to Chief Radio Officer Ray Grimes (W6RYS), Assistant Chief Radio Officer Ken Mirabella (KM6YH), North Squad Assistant Radio Officer Joe Selikov (KB6EID), Digital Communications Coordinator Dave Wilson (KE6AFR), Ham-Fax Project Coordinator David Boehm (KD6IOV), Public Relations Coordinator Nancee Graff (N6ZRB), Resources Coordinator Amish Parashar (KE6EZM), and

Web Page Coordinator Tom Mirabella (KD6AAN). In addition to his Assistant Radio Officer duties, Joe Selikov will also serve as the editor of Net Control. I invite you to join me in providing these members with your help and support as they pursue their new assignments for our organization.

At the February General Meeting, an excellent program on APRS was presented by members Randy Holland (KO6KC), Ken Mirabella (KM6YH), Robert Barris (KD6IFZ), Marty Mitchell (N6ZAV), Jim Carter (WB6HAG), Dan Welch (KF6IZO) and Walter Wilson (N6VYB). This was the first of several technical programs County of Orange RACES will be presenting in 1998. Five more sessions will be conducted this year, with ATV taking the spotlight at our April General Meeting. City RACES members are encouraged to attend these interesting and informative meetings.

Our annual participation in several activities is keeping members busy with the details of planning and coordination. Baker-to-Vegas is well underway under the direction of Chairman Mike Krueger (KC6ZSF). A few operator spots remain open, call Mike if you would like to participate. The annual Persian New Year event at Mason Park, Sunday, April 5, 1998, is being coordinated by John Roberts (W6JOR). Various shifts are available including ATV and bicycle patrol. Call John at (714) 540-7368 if interested.

Last but not least, OCRACES members will find several updated documents included with this copy of Net Control. Please take the time to review the information and file it in your OCRACES Information Manual notebook. Thanks to everyone for your ongoing support of our RACES organization. Until next month .... the frequency is now clear. ⊕

March Meeting

Some of the guest speaker assignments have been rearranged. The DARE program presentation has been postponed until the next general topics meeting which is May. At the March 2nd meeting, Eric Johnson from the Costa Mesa Fire Department will give us a perspective on Orange County swift water rescue pro-

grams, a subject on everyone's minds right now. Eric was the author of the Swift Water Rescue Plan utilized by all Fire Service Agencies in Orange County. We will also have a second guest speaker/show and tell. This is Miles Flewitt, co-owner and Marine/Stunt Coordinator for Extreme Marine of Newport

Beach. Miles will show a brief video and tell us a little about the hover craft rescue vehicle he markets. He will also bring the very same rescue vehicle seen on Bay Watch (a hover craft with a light bar) which is transported on the back of his 4x4 truck. This should be an exceptionally interesting evening for everyone. ⊕

Event Coordination

Persian Festival

Mutual Aid requested
OCRACES will be supporting the Orange County Park Rangers this year during the Persian Festival being held in Mason Park, Irvine. Over 30 RACES members are needed to man 3 shifts from 08:00 hrs till 22:00 hrs on Sunday, April 5, 1998. All City and County members are urged to participate. People interested in volunteering should contact Lt. John Roberts.

Primary Election, June 2

On June 2, 1998 OCRACES will again assist in the collection of Election Ballot Boxes throughout Orange County. RACES personnel will be stationed at the 22 regional ballot collection centers around the County and will update the Vote Tally Center with the total number of ballot boxes collected at each site every 15 minutes. This will enable the Vote Tally Center personnel to evaluate van deployment and expedite ballot

pickup at the Regional Collection Centers. A former member now living in Las Vegas , N6BG, Byon Garrabrant developed a PC based program that tracks the status of each collection van including the number of boxes being carried. In addition, the program stores information about the number of boxes waiting for pickup at each Collection Center. This information has proven vital to the collection process, to the County and the Registrar of Voters.

Training

Where's the Radio Room?

by: Ray Grimes, W6RYS
Chief Radio Officer
Orange County RACES

Several OCRACES members recently had the opportunity to operate an EMS console position at the Loma Ridge EOC during the recent "flu season" hospital resources crisis. For some, this was their first opportunity to actually touch the hardware and learn the system operation. After studying the console for a few minutes, you would soon be able to locate and identify the individual radio channel modules, the select and unselect speaker audio panels, the paging encoder, the crosspatch bank, alert tone controller, telephone systems CRT, and ancillary control modules. A light-weight telephone type headset would typically be used by the dispatcher, though a desk microphone might also be used, along with a speaker. All of this equipment was what you'd expect to see as part of a public safety communications console. This familiar console configuration is "tried and true", and has been the mainstay of public safety communications centers for at least half a century.

I recently had the opportunity to tour a new, state-of-the-art communications center for a neighboring County. My first thought was "where are the radios"? I saw a large, nicely furnished business office with modern computer desks and sound-deadening space dividers, with dispatchers and call takers sitting in attractive, ergonomic chairs. The room was softly lit, and was very quiet. Artificial plants were placed around the windowless facility to offer some connection with nature and an outside world. Each dispatcher and call taker had up to 3 CRT terminals in front of him or her, placed strategically for best viewing angle and maximum comfort. There was a mouse and mouse pad for each computer screen, and a single keyboard. The lightweight telephone operator style headset was the only recognizable item which implied that this was a communications center, in the traditional sense.

This is undoubtedly the wave of the future. There are many benefits to the computer-based communications center. Probably the most important is that computers are much more versatile than hardware- based systems. To expand a hardware-based system, you add more hardware, that is, until you run out of floor space, electrical power, and air conditioning. The hardware-based system expansion may be less costly to expand initially, though ongoing maintenance is much higher, and systems speed, flexibility, and efficiency lag behind.

The computer-based system has come unto its own, with an abundance of computer hardware available and numerous companies recognizing the growing and lucrative market for PSAP (Public Safety Answering Point) operational software. It should be quite apparent that communications center dispatch applications are critical to public life and safety, and flawless performance is a paramount requirement. Redundant systems are a must, requiring parallel and diverse circuits for telephone systems, control circuits, data buses, and computer mainframes and desktop terminals. Well-planned dispatch facilities include spare or redundant terminals and consoles (such as a watch commanders console) which can replicate the functions of any other console. Ease of service and support is critical. If a dispatch position computer device fails, troubleshooting must be simplified, with spare devices available requiring minimal installation effort. Spare equipment must be able to be easily replaced by non-technical personnel or by on-call technical personnel. The mainframe computer requires a robust Uninterruptable Power Supply (UPS). The facility must maintain one or more large AC power generators. The facility itself must meet Uniform Building Code (UBC) Seismic Zone 4 standards and comply with Senate Bill 239 Essential Services Act standards.

Someone once said that Edsel Murphy was an optimist. If a fail-proof communications facility should actually fail during a catastrophe (fire, flood, earthquake, or killer bees), one or more backup systems are a must. This is where easily recognizable radio equipment returns to the scene. Handheld portables may save the day for dispatchers. Parallel conventional hardware-type dispatch consoles (perhaps located at other standalone facilities) may be brought into action (however this requires that dispatchers regularly train on these to remain effective).

The benefits of a well-designed computer-based communications center are many. Hardware is identical for each desk position, regardless of job assignment. This simplifies personnel training and minimizes spare device shelf stock requirements. System upgrades are software-based, and may be installed and tested on the standby, redundant mainframe computer system, making changes and cut-over almost transparent to communications center dispatch personnel. Computer systems are very fast and positive-acting. Expected hardware life is exceptional (except for the occasional coffee-induced keyboard failure), Almost any operating feature or characteristic can be designed into the system. Work stations can retain "learned" user preferences and requirements. The work environment of the computerized, ergonomic communications center is less stressful than that of conventional dispatch centers where high ambient noise and background distractions often prevail.

There is opportunity awaiting communications technicians of the future. Someone with basic radio and telephone systems knowledge and computer systems troubleshooting skills should find exciting career opportunities with many public safety and private sector communications providers.

Committee Reports

Amateur Television (ATV) By: Jim Carter WB6HAG

OCRACES Joins Amateur Television Network (ATN):

Thanks to donations from Chief Radio Officer Ray Grimes (W6RYS), and OCRACES members Jack Barth (AB6VC), and Jim Carter (WB6HAG), the ATV Committee is registered with ATN. ATN is a group of ATV repeater owners who link their sites together. These sites include Las Vegas, Santiago Peak, San Diego, Santa Barbara and points between. The repeater links allow live video transmissions, of the Baker to Vegas Race, to be viewed at the EOC on Loma Ridge. Being a member also establishes OCRACES as part of the ATV community.

Tri-Agency ATV Repeater Project:

A proposal for a fixed repeater was presented at the ATN annual meeting on February 7, by Jim Carter (WB6HAG) and Chief Radio Officer Ray Grimes (W6RYS) and later presented to Tom O'Hara, the SCRBA 1.2 GHZ and ATV Coordinator for Southern California. Comments received lead to the development of a second proposal, utilizing a portable repeater, which was submitted to the Tri-Agency project members on Febuary 20, 1998 and is being evaluated.

Baker to Vegas:

The ATV Committee has a new 900 MHz FM ATV transmitter, thanks to OCSD Communications. This transmitter will free up the 400 MHz ATV band and provide OCRACES a better link to Mt Potosi during the race. We have received permission from the Las Vegas ATV Repeater Trustee to use their repeater. We have also entered into a joint venture with Gary Heston ATV Coordinator for San Bernardino County RACES, to work together during the race. This enables both organizations to expanded their ATV coverage. OCRACES member Jack Barth (AB6VC) has determined which course locations will provide the best video locations for transmission to the Loma Ridge EOC, which will be manned by OCRACES member Amish Parashar (KE6EZM). OCRACES will also display pictures of the race on their ATV web site by using software that allows pictures to be transferred via a cellular phone.

ATV Manual:

The manual will include an introduction to ATV and OCRACES operating procedures. The manual is 90% complete and will be distributed at the April OCRACES meeting. Members are encouraged to insert the ATV manual into their Information manual.

ATV Presentation:

The ATV Committee is preparing an informative ATV presentation for April's meeting. If you don't know what ATV is, how it works, and what it does, you don't want to miss this one. Our Chief Radio Officer, Ray Grimes (W6RYS), is presenting technical information about ATV so you can operate your own station. Also, you will see demonstrations of portable ATV equipment used during our activation's by Jack Barth (AB6VC), Amish Parashar (KE6EZM) and Jim Carter (WB6HAG). Jack Barth (AB6VC) has an interesting 2.4 GHz portable transmitter that is unique for public service field operations. Also, a portable ATV repeater will be demonstrated.

Control 6 with ATV antenna.

Digital Communications

The primary goal of the Digital Communications Committee is to provide communications links via portable packet radio stations. These stations should be fully contained and be able to provide printed messages to the addressees in a matter of seconds. Packet radio has many advantages over voice communications, such as greater privacy, error-free message reception, simple logging, and un-manned station operation. Packet radio is highly recommended by the State OES as a means of communicating in emergencies. The secondary goal of the committee is the upkeep of the OCRACES maintained packet-radio Bulletin Board System (BBS). This BBS is used to distribute RACES bulletins throughout the County and to assist with worldwide message passing.

The committee also has the responsibility of educating all OCRACES personnel on the basics of packet radio, and experimentating with ways of improving use of digital communications.

Baker to Las Vegas

Event Coordinator:
Sgt. Mike Krueger (KC6ZSF)
B2V Web page:
http://www.flo-bin.com/Baker2Vegas/

The Baker to Las Vegas Challenge Cup Relay Race is scheduled for April 25-26, 1998. This 120-mile relay will assemble at the Baker High School, begin north of town, proceed over Ibex Pass to Shoshone, head toward Pahrump, Nevada, go up the mountain through Mountain Springs, and then head down to Las Vegas, ending at the Tropicana Hotel. The MGM Grand will be the host hotel and convention center.

OC Sheriff Department plans to field two teams - Open and 800. This will require a lot of APRS equipment, so start configuring your systems, procuring Anderson Powerpoles, building your cables, tuning your antennas, etc.

We will be holding several meetings in preparation for Baker to Vegas. All users of our voice and APRS systems (OCSD and other agencies) should attend these meetings. Unless noted otherwise, the meetings will be held at OCSD/ Communications, 840 N. Eckhoff St., Suite 104 (second floor), Orange.

Latest News:

The latest count is 23 APRS tracking beacons, including one for the team from Great Britain.

Thanks to former member and now Las Vegas resident **Byon Garrabrant**, N6BG, Internet users will be able to view the OCRACES APRS beacon positions from their web browsers anywhere in the world in real-time.

ATV race video will be broadcast on the monitors at Loma Ridge with the help of Amish Parashar, KE6EZM (also see the ATV committee report).

This will be the largest Baker to Vegas event ever, with 205 teams attending. The Race Committee predicts that over 12,000 people will be travelling to Las Vegas for the event.

APRS Subcommittee

APRS Coordinator:
Harold Robinson (KE6DVB)
B2V Web page:
http://www.flo-bin.com/Baker2Vegas/

Please mark your calendars for March 7th as the first Baker to Vegas Beacon Test date. All Teams / members who are participating in this years Baker to Vegas race and are supplying APRS Beacon boxes need to be at this meeting to have your beacon box configured for the OC-RACES APRS system. This will involve assigning your beacon box a slot time, unit ID number and reviewing all the TNC settings, beacon box wiring and operation.

Date: March 7, 1998
Time: 10:00 hrs (AM)
Place: 840 N. Echkoff St., Orange, CA, Suite 104 (upstairs conference room)

We will be having a complete system test within one month after this test date. Testing will include simulation of race HUB sites and the broadcasting of race type APRS data throughout Orange County. Testing should also include all monitoring sites that will be setup along the course. This is to assure compatibility with the OCRACES Tracker data.

Any team using the DOS version of APRS software should contact the APRS Coordinator as the DOS version will not be supported as part of the backbone operations during the race.

All monitoring stations should be using:

WinAPRS, MacAPRS or APRSa+.

Meeting Schedules:

Saturday March 7th: APRS testing and TNC programming at **10AM**. All TNC's that will be used in APRS tracker beacons must be programmed with the required data for our system and be tested prior to the race. This will occur at OCSD/ Communications 840 N. Eckhoff in Orange.

Monday March 23rd: Baker to Vegas planning meeting **7PM.** 840 N. Eckhoff St. in Orange. This will be the last OCSD communications team planning meeting before the race.

Saturday March 28th: Equipment tune-up. 0900 – 1300 hours. Eckhoff Street.

Saturday April 4th: Final APRS beacon testing! 10AM. This will be a full scale test of the Tracker software system and all beacons that will be used during the race.

Monday April 20th: General meeting for all participating agencies and OC RACES members.

Thursday April 23rd: Installation of wiring harnesses in OCSD vans. Time is yet to be decided. 840 N. Eckhoff St.

Editor's Notebook

Welcome to the new *NetControl.* I have tried to keep some of the old look but have also added some new features that I hope will add to the newsletter's usefulness. One of the major differences is the addition of an entire section devoted to Committee reports. Each of the committee coordinators is urged to submit an article, on a monthly basis, containing the latest status of activities and any information relevant to that committee. OCRACES members and non members are encouraged to submit articles of interest to the editor at any time. Articles submitted past the cutoff date will be in the next issue, space permitting. Long articles may be continued in the following issue. Again this will depend on available space.

This newsletter is intended to serve the members of OCRACES. Members should voice their opinions to the editor about its content and look. *NetControl* is viewed by many people outside of our organization and should be a good means of conveying what it is that OCRACES is doing.

Articles can be submitted in any of the standard Office 97 formats including Word, Report Definition Format (RDF), any text format, as part of an email or if all else fails a FAX or written copy. Short articles can be phoned in to the editor. The important point is to send the article, the newsletter staff will worry about converting the format.

Your articles and comments are what will make a good newsletter a great newsletter.

Did You Know?

What happens to 911 hangup calls received at the CHP? These of course, could be cellular phone calls that terminate for a number of possible technical or life threatening reasons. In some cases, the operator has already gotten a cellular callback number when the call dropped. (A landline 911 hangup typically gets a return call per the ANI readout, or a Code 2 response by the P.D. to see if anything is wrong). Today's current CHP system does not include automatic callback procedures.