



County of Orange RACES NET CONTROL



March 2001

Newsletter of the County of Orange Radio Amateur Civil Emergency Service

Is Amateur Radio Becoming Obsolete for Emergency Communications?

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nications Service

An article in the January 19, 2001, edition of "Amateur Radio Newsline" said, "One of the reasons that hams are called out in emergencies could begin to disappear in 2006." The article referred to an FCC directive that spectrum be made available that will let disaster relief agencies communicate without the need of third parties. Public-safety agencies are already doing that by means of cellular and PCS telephones, Nextel, Multi-Use Radio Service (MURS) and Family Radio Service (FRS), and some frequencies set aside for mutual-aid communications. The

new allocation at 700 MHz would greatly expand such interagency communications.

Radio amateurs must not be discouraged from continued participation in emergency communications. For example, many RACES organizations have shown that handheld SSTV equipment is ideal for on-scene video coverage. Pactor, PSK31, and other new digital modes are ideal for statewide or interstate communications between agencies. Nevertheless, the need is for radio amateurs to consider themselves as part of a reserve communications organization, trained to provide communications on public-safety frequencies, not just amateur radio frequencies. When performing their services for emergency-management agencies, these reserve communicators are actually operating in the expanded Auxiliary Communications Service (ACS) concept, rather than in the restrictive RACES concept that ties them to amateur radio frequencies specified in the agency's RACES plan.

March Meeting

The next OCRACES meeting is Monday evening, March 5, 2001. The meeting will feature a presentation on SSTV techniques and tools by OCRACES ATV Coordinator Jim Carter, WB6HAG.

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

To be more specific about the FCC's directive, on January 11, 2001, the Commission adopted an interoperability standard to ensure effective public-safety communications between different agencies on designated channels in the 700-MHz band. "The Commission has long noted that the inability of different public-safety agencies to efficiently communicate with one another was a concern for the public-safety community."

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Upcoming Events

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.
June 4	OCRACES Meeting, 1930 Hours, 840 N. Eckhoff St.

Captain's Corner

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

March will be a very busy month for OCRACES, starting with the March 4 Brea Mass Casualty Drill. This drill will feature ATV and SSTV plus voice communications. All OCRACES members are invited to attend this exciting simulated Earthquake Disaster drill either as a participant or an observer. Be sure to be a little early in arriving, as the action starts exactly on time and you won't want to miss any of it. OCRACES has been invited to make a technical presentation at the March 14 LADCS meeting at Burbank Fire Headquarters. Ralph Sbragia, KD6FYT and Jim Carter, WB6HAG will make presentations on PSK-31 and SSTV respectively. The March 5 and April 2 OCRACES meetings will be of particular interest, as they will provide updates on Baker to Vegas support activities. Be sure to attend the B/LV planning meeting as there are some subtle changes in race support which you will need to know.

I have been watching our recent intense weather with great interest, noting the significant increase in traffic accidents. Surprisingly, there has been very little major flooding in Southern California, though that could change as a sizeable mountain snow pack begins to melt as the weather warms up. With every power interruption, I can't help but wonder if it's nature or a utility company rolling brownout. Another thing that we can be grateful for is that so far, we have had no swift water rescue emergencies. Hopefully all of the media publicity about the dangers of playing in flood control channels has had some impact. Either that, or the weather has been too bad for some people to go outside and get into trouble.

OCRACES Website Update

Thanks to David Boehm, the OCRACES web page has some exciting new features:

ONLINE CALENDAR (open to the public - no password needed) This is the place to go for information on all OCRACES activities. It provides detailed information about each activity such as date/time/location (with directions), event-specific news and information and a direct link to email the contact person for each event. For larger events (like Baker-2-Vegas), you can sign up to help right from the web page using the On-Line Registration function. Each event type is color coded to help you quickly locate items that might interest you. By default, the current month is always displayed. You may select a new month from the drop down list and clicking "Display Calendar". Likewise, you can display only certain types of events by selecting the desired event type and clicking "Display Calendar". Just click on the event to get all the information.

MEMBER INFORMATION (password protected - OCRACES only):

This section contains your personal information - Name, Address, contact information, email addresses and most important - your website password! This information will be used to print the OCRACES Roster, so it is important that it remain current. The first time you visit the member services section, go here and set a password. This will be required to gain access to any of secure functions! To change data, select EDIT. To view your data without making changes, select VIEW.

OCRACES TIMECARD (Password protected - OCRACES only):

In EDIT mode, you may select an event from the dropdown list and enter the number of hours you provided in support of that event. Don't forget to include pre-event planning meetings etc.! VIEW mode provides an up-to-the-minute record, showing your total number of events and hours.

COUNTY ASSET TRACKING (Password protected - OCRACES only) (coming soon!):

Members that have been issued County of Orange property, such as COR Box repeaters or Slow-Scan TV equipment, should register them on the website. Simply select EDIT and enter the number on the Asset Tag affixed to the equipment. You can also edit the dates that you received and returned the item. A future goal is to list assets that are currently unassigned and available for use by any OCRACES member. This is a work in progress, and should be available for use shortly.

VIEW MASTER RECORD (Password Protected - OCRACES only):

Provides a printer-friendly combination of your current member info, timecard and county assets on one page. This is ideal if you would like to view all of your data in one page, or save a hard copy for your records. At the end of the year, this may be used to help you complete your official timecard!! To access the new functions, visit www.ocraces.org and select the Online Calendar or Member Services links on the left sidebar. Remember to leave the password field blank the first time you sign in, and set up a password in the member information profile.

On a related note, Tom Mirabella is working on a brand new design for our website, and the preliminary concept pages look very good!! Thanks again to David and Tom for all the hard work. Tell a perspective member to visit www.ocraces.org today!

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>

OCSD/Communications

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Did You Know?

First Responder Personal Safety

by: Ray Grimes, W6RYS
Chief Radio Officer, OCRACES

In preparing for the Brea Mass Casualty Incident drill (an earthquake scenario), it would be prudent to discuss a topic which may not be emphasized enough. I am referring to first responder personnel safety in confined spaces. RACES personnel might be called upon to provide vital communications from difficult interior locations, or to send video of a scene to the outside command post. In our haste to assist, we can never forget our own safety needs, or those of others around us. Nothing we do at the scene should compromise the safety of ourselves, rescuers, or victims. This realistic urban shopping mall earthquake recreation includes many of the elements that would be found by first responders, such as debris, trapped victims, darkness, confusion, confined spaces, and the possibility of hazardous conditions. While the Brea Mall Earthquake scenario is only an exercise, it affords an excellent opportunity to practice all aspects of the emergency, and to not focus on just the communicator role.

Prior to entering the confined space area, stop and assess conditions. Is your presence detrimental to the search and rescue operation? Is the space in the room only large enough for the victims, rescuers and their equipment? Are there hazardous conditions present? In doubt, ask the Fire Department before entering. If the firemen are wearing breathing apparatus, then that should serve as a hint that without similar equipment, you don't belong there. Are there risks such as a natural gas leak, live wires, or running water?

Did You Know? cont'd on page 5

Visual Communications

Coordinator: Jim Carter WB6HAG

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

SSTV NET – The SSTV net was reviewed with cities represented at the January all City and County RACES meeting. It was determined this net would be discontinued.

Presentations on the Road – OCRACES has a very informative SSTV or ATV presentation with live demonstrations that is available to any City RACES organizations. Presently, presentations are scheduled for March 5th OCRACES, March 14th LADCS, April 1st OCSD, Aero, and the City of Orange in June.

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 purchased two Kenwood Visual Communicators for OCRACES. This brings our total SSTV capabilities to six units.

Brea Mall Exercise – OCRACES ATV and SSTV communications media will be used in the March 4, 2001, Brea Mall exercise. More information will be in next month's newsletter.

3D Radio

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

Lucent Technologies' Bell Laboratories announced that they have discovered a radio propagation effect, which can be used to triple the information carried on today's mobile telephones. Radio wave electric and magnetic fields radiate in three dimensions, but when a radio wave is sent to a distant receiver, only one predominant wave is received. As we know, tall buildings scatter radio waves, particularly at 800 MHz and higher frequencies. The resultant wave can be vertically or horizontally polarized (or a combination of both). This three dimensional phenomenon might allow the radio wave to carry information in three dimensions. This premise would require that a specialized radio receiver be designed that would detect signals in each received signal dimension, using three separate antennas at right angles to each other. To demonstrate this 3D concept, Bell Laboratories colleagues transmitted an image of a painting to a receiver 25 meters away and around a corner. Bell Laboratories reports that the color image was received three times faster because three channels of different polarization contributed to the total received signal.

This concept is technically interesting, but as Bell Laboratories admits, much more work is necessary to determine the practicality of such systems. This test was conducted in a semi-controlled environment. Random field-testing under 'real' environmental conditions might determine that natural multipath and absorption from nearby objects and RF interference may make this transmission mode unreliable, introducing phase shifts and destructive interference. If it works, then the practical applications are numerous, such as single-carrier, multiple voice transmissions with data and video subcarriers, including error correction, received signal null-fill, and so on. This will be a project to watch with interest.

From: the New Scientist web site at <http://www.newscientist.com/dailynews/news.jsp?id=ns999335>

Harvey Packard Promoted

Ray Grimes, W6RYS, Chief Radio Officer, OCRACES is pleased to report that Harvey Packard, KM6BV has been appointed as the new Alpha Squad sergeant, effective immediately. Harvey brings years of OCRACES experience and has effectively and modestly supported Orange County and neighbor agencies at numerous events and activations. John Roberts has stepped down as Alpha Squad sergeant due to increasing work demands, but will remain as a squad member. We thank John for his past contributions and look forward to his continued OCRACES support.

Obsolete? cont'd from page 1

The Commission adopted Project 25 Phase I as the voice standard for communications on the 700-MHz band interoperability channels, which are channels specifically set aside to allow different public-safety entities to communicate with one another.

The Commission also adopted the data standard incorporated in the Project 25 suite of standards for data communications on the 700- MHz band interoperability channels. These channels will allow public-safety entities, such as police and fire departments, to send status messages or short E-mails to one another.

Additional details on this FCC announcement may be found at http://www.fcc.gov/Bureaus/Wireless/News_Releases/2001/nrw0101.html

ABOUT THOSE UNUSUAL FCC URLs

From the Communications General Corporation

Question: The FCC has some unusual web addresses; for example, the CDBS database resides at <http://svartifoss.fcc.gov...> What is the origin of the word "svartifoss," and are there other exotic FCC web addresses that you could tell us about?

Answer: All the "foss" server names like Gullfoss, Svartifoss, Haifoss, Dettifoss, Hraunfoss, etc. come from Icelandic waterfall names. There are about 15 major waterfalls in Iceland, and we have named about 7 of our servers after them so far.

Did You Know? *cont'd from page 3*

Running water may only be an annoyance, but it can also produce a lethal path for electricity, or a warning of possible roof collapse.

Federal and State OSHA regulations specify confined space safe work practices. These may include use of atmosphere monitoring devices, only working in pairs with a 'buddy', never going into the confined location if the first responder appears to have become unconscious, and wearing a harness with rope when entering tight spaces among fallen debris, and of course, always wear a non-conductive hard hat.

Some excellent First Responder Awareness recommendations come from the Basic Online Disaster Emergency Response project web site (B.O.L.D.E.R.) which can be found at: www.chemicalspill.org/index.html

These are:

- * Establish command/control (scene management)
- * Detect the presence of hazardous materials
- * Begin identification of hazards
- * Evacuation
- * Decontamination/personnel protection
- * Isolate incident/identify zones of activity
- * Contain incident without risking exposure
- * Seek additional appropriate resources

Some essential attitudes for responders 'first on the scene':

- * Hazardous materials incidents are not routine calls
- * Every responder must be aware of their capabilities and limitations
- * The primary responsibility of every first responder is to promote safety for all
- * Coordinate and cooperate with all agencies responding to the incident

While it is unlikely we would truly be 'first responders', we could be called upon to provide early search and rescue planning information at an incident, and it is vital that we understand all of the issues surrounding us, in the mindset of a fireman.

Landslides

Burn areas, canyons, hillsides, mountains and other steep areas are vulnerable to landslides and mudslides. You can reduce the potential impacts of land movement by taking steps to remove yourself from harms way. Develop a family plan that includes out-of-state contacts and evacuation routes; store emergency supplies and an evacuation kit that includes important documents and irreplaceable items such as photographs or other family mementos.

Monitor the amount of rain during intense storms (more than 3 or 4 inches per day can trigger mudslides). Look for geological changes near your home such as new springs, tilted trees or new holes on hillsides. Remember: Make your health and safety and that of your loved ones your top priority.

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.