County of Orange RACES
NET CONTROL
June 2000

Newsletter of the County of Orange Radio Amateur Civil Emergency Service

Field Day 2000 Update

by: Ralph Sbragia, KD6FYT

The primary goal of OCRACES Field Day activities this year will be a twenty-four hour shakedown of our facilities at the Loma Ridge EOC. At minimum, we will operate the EOC's HF radio the entire twenty-four hours of Field Day (1100 local Saturday to 1100 local Sunday). In addition, as operators allow, we will set up and operate the HF radio from one of the Control Vehicles stationed at the EOC and the various V/UHF radios in the RACES Room.

As with all previous Field Day activations, this year's Field Day activities are part of our RACES field training program and participation by all members is a requirement. Due to the fact that we will have minimal set-up requirements, attendance during the set-up period will not be required.

TRAINING GOALS
As stated above, our primary goal this year is to operate the RACES Room continuously for twenty-four hours. This will allow us to test operation of the HF, ATV, V/UHF and other equipment over an extended period of time and times of day. This will also allow all members an opportunity to familiarize themselves with the various pieces of equipment located at the EOC. A secondary objective is to test the operations of and familiarize us with one of the mobile EOC units.

Currently, of OCRACES' 29 members, 13 (or almost half) do not have HF operating privileges and therefore do not have the opportunity to practice weak signal communications techniques from home. Field Day provides all of us an opportunity each year to re-familiarize ourselves with SSB weak signal operating techniques. This is but one of the many forms of communications we must keep in our bag of operating resources, ready to deploy should the particular mission require it.

BAR-B-QUE PLANNED
In addition to our operating goals, we are also planning a mid to late afternoon Pot Luck Bar-B-Que and social for Field Day Saturday. Members of each squad will be assigned a different side dish type to bring.

Field Day cont'd on pg. 5

June Meeting:

The next OCRACES General Meeting will be held at Loma Ridge on Monday, June 5th at 7:30PM. OCRACES member Chris Storey will present a review of tactical Net Control procedures, such as those utilized during a RACES activation, and Lt. Mike Krueger will review the weekly net control procedures.
See you there!

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Upcoming Events

June 5	OCRACES monthly meeting, Loma Ridge EOC, 1930 Hours
June 24-25	Field Day, Loma Ridge EOC
June 26	City/County RACES meeting, 840 N. Eckhoff, 1930 Hours
July 10	OCRACES monthly meeting (note date change due to holiday)
July 18	SONGS tour, 0900-1300, contact Robert Stoffel if interested
August 7	OCRACES monthly meeting

Captain's Corner

by: Ray Grimes, W6RYS
Chief Radio Officer, OCRACES

This month's Net Control features a special photo tribute to our dear friend and fellow OCRACES member Al Baird, KC6TWI who passed away on April 30. Al served in WW II and the Korean War as a Marine, having a part in the making of important world history. He also served as a Santa Ana police officer and detective, and an Investigator for the State of California Department of Insurance. Al operated a small detective agency, performing private investigations and locating missing persons. Even with Al's military and police training and experiences, he remained as one of the nicest and most helpful people I have personally known. Al was always there for OCRACES, regardless of the task. Ham radio was his passion, introducing several people to the hobby and helping them obtain their licenses. Aside from ham radio, Al enjoyed computers, hunting, and the outdoors. Al is survived by his wife Dixie, five children, and twelve grandchildren. Al's passing reminds me that we in OCRACES are a family. While we may not always agree (just like any family), we are there for each other and care about the people who make up our group. OCRACES is commissioning two memorial plaques for Al. One plaque will be installed permanently on the wall of the Loma Ridge OCRACES room, and the other plaque will be presented to Dixie and family in a special ceremony at our June 5th OCRACES meeting. I know each of you will want to be there.

On a lighter subject, June 24 and 25 is Field Day. OCRACES members have voted to hold a low impact Field Day this year at the Loma Ridge EOC. There will be operating ham radio stations, ATV, APRS, tours of the OCSD Dispatch Center, and maybe a few surprises. A BBQ and picnic will be a highlight of this event, and of course, families are all welcome. Ralph Sbragia, KD6FYT will supply more details as we get closer to this event. Looking forward to seeing you there!

OCRACES MEMBER RECEIVES FIRST PLACE FUNDRAISING AWARD

RACES member Delia Kraft, KF6UYW, participated in a Lance Armstrong Fundraiser (LAF) in Austin, Texas last April. Delia has been associated with this group for the past three years. This was the first year for team fundraising in the LAF and she and other members networked into 10 states and raised $250,000 for the foundation. The foundation benefits cancer research and awareness. The 1999 Tour De France winner, Lance Armstrong was diagnosed with advanced testicular cancer in 1996. He was able to fight this dreaded killer and prevail as the winner of the three week, 2,000 mile European race. Delia and her team received first place in the fundraising competition. Congratulations to Delia and the members of her team!

OCRACES MEMBER RECEIVES RECOGNITION

RACES member Roger Woodcock, KF6CJJ, was recently named Employee of the Quarter by his employer, Knott's Berry Farm. Roger was instrumental in the upgrade and installation of the Radisson Resort fire and camera surveillance system. Roger worked closely with contractors, the city, fire department, and hotel management to meet the needs of the project. Roger also created written operating procedures and trained Security staff in the use of the system. The Security Director commented, "Roger went beyond his regular duties while maintaining a vigorous schedule and a positive attitude throughout the project."

Congratulations Roger!

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?

Bomb Threat Assessment

by: Ray Grimes, W6RYS
Chief Radio Officer, OCRACES

Bomb threats to homes, business, and government offices are increasing every year. While 99% of bomb threat calls are hoaxes, such call cannot be ignored or not taken seriously. There are two major reasons people deliver bomb threats. These are that (1) they want to effect a disruption of service or cause inconvenience to one or many, or (2) they have placed a bomb in your facility and are giving you warning to get everyone out, as they don't want anyone injured or killed (if the objective were to kill, they likely would not make the bomb threat call). Who makes a bomb threat? It's often someone associated with an individual or the property. This could range from an associate, an employee, a disgruntled customer, or an angry spouse.

While these situations can be unexpected and often unpredictable, there are some practices which can help to minimize risk. Each workplace should develop a threat assessment team (at least three people). This team will determine if an evacuation is warranted, based on established department procedures. Identify who has ultimate authority to order an evacuation. It is also important to determine who is second in command should the primary authority be unavailable or off site. The authority to evacuate a facility largely rests with this person, as police cannot order a facility evacuation based on a bomb threat only, without physical evidence of an explosive device. The person with evacuation authority may still decide to evacuate as a matter of precaution.

Did You Know? cont'd on pg. 5

Visual  Communications

Coordinator: Jim Carter WB6HAG
Web Page: http://www.qsl.net/wb6hag/

Tri-Agency - The Tri-Agency program remains on hold because the FCC has licensed LA City to operate airborne video in our 2.4GHz amateur band. At this time, the LA County license is pending approval. In the meantime, the ARRL filed an exception with the FCC. Allegedly, complaints from local ATV operators were received regarding interference from LA City operations. This too was a major concern for the Tri-Agency operations.

Field Day – ATV operations are being planned for this year's field day. SSTV will be introduced along with the operation of fast scan video.

Anaheim Drill - Anaheim requested ATV participation in their September exercise. This will be a full-scale chemical MCI exercise that should prove to be an interesting challenge to us.

Loma Ridge - Special thanks goes to the County for providing a dual band Kenwood radio for our ATV operating position.

ATV Report cont'd on pg. 5

Technical Article: Avoiding You At 77 Ghz

by: Ray Grimes, W6RYS
Chief Radio Officer, OCRACES

Intelligent vehicles have been on the minds of auto makers since 1939 when GM showcased the intelligent vehicle at the World's Fair, though the technology to actually make an affordable, reliable, and responsive "smart" car didn't exist until two decades ago. Collision avoidance was high on the list of features that a smart car should have. In the 1960's GM, Ford, and others began building concept cars which were truly "hands off" vehicles. Progress was slow in developing a production car which would include the Advanced Vehicle Control System (AVCS) until microprocessor chips were available which could manage vehicle systems, while consuming little energy and not taking up a trailer to house the computer.

The U.S. Department of Transportation, through a directive from Congress, has developed the Intelligent Transportation System (ITS), bringing a number of technologies together. Over the past five years, this program has received $1.22 billion. Collision avoidance is the main focus of this program, with a net savings in property losses of $26 billion expected, not to mention the tens of thousands of lives saved. Some of the features being studied under the ITS program is longitudinal collision avoidance, intersection collision avoidance, vision enhancement for collision avoidance, safety readiness systems, pre-collision restraint deployment, and an automated highway system.

Of particular interest is that the FCC has assigned 77 GHz as the frequency for crash avoidance systems, though the Japanese have selected 66 GHz (IEEE is proposing that the 77 GHz frequency become an international standard). While these systems are still in development, there are in fact other collision avoidance systems currently being marketed in the U.S. One such system for fleets such as buses and trucks is manufactured under the name of Eaton VORAD Safety Systems. This system features a forward and side looking radar system operating on 24.125 GHz, transmitting a FSK narrow band signal. Closing range and rate are calculated and displayed in the vehicle, along with an audible alarm.

What's next? The rapid development of newer and faster microprocessor chips have made automatic vehicle systems practical and economical. Embedded traffic management highway systems will soon be commonplace. Automatic driver override, with computer controlled emergency braking and evasive steering are about to become realities. Some automobile manufacturers offer night vision TV type systems which have proven to be valuable in identifying hazards in poor visibility conditions. Imagine riding to work in a car which knows the route and will automatically get you there, taking into account traffic flow, road closures and congestion, taking the shortest routing. Thanks to the microprocessor and GPS, all of this is in reach, perhaps within a decade.

from: RF Design Magazine
October, 1998, P. 72
On the Road With 77 GHz",
Lerrer, Roger, Sr.

HDSCS CELEBRATES 20 YEARS

The Hospital Disaster Support Communications System (HDSCS) is now in its 20th year! Twenty years ago at this time, a group of six hams came to St. Jude Hospital in Fullerton to participate in a disaster drill. The interest in having the hams was a follow-up from a response made to a phone outage at that hospital a few months earlier. At the time of this drill there was no network linking hospitals together or any kind of contact to outside agencies via Amateur Radio. We supported internal communications only and were kept busy since walkie talkies weren't common in hospitals yet and the dispatch of victims was not as well coordinated as it is today. St. Jude received 40 patients in a little over an hour during that first drill, clogging the hallways outside radiology and surgery, not to mention the issue of ambulances trying to unload outside the ER. Quite a different experience than what happens in our drills now.
HDSCS cont'd on pg. 5

Field Day cont'd from pg. 1

Each member will need to bring his or her own meat to BBQ. Ffamily members will able to attend the BBQ festivities. An update with details will be sentt to all members 7 to 10 days prior to Field Day.

Field Day 2000 will set the tone for future endeavors. As the membership knows, we have experienced declining participation in Field Day over the last several years. This has run parallel to declining participation in other RACES activities as well. The changes in operating methods and location this year is in direct response to suggestions from the membership for increasing participation. Let's all work together to make this a productive Field Day and a great stepping stone into our Twenty-first Century activities.

WE NEED NEW MEMBERS!

ATV Report cont'd from pg. 3

This will allow us to operate more efficiently. We truly appreciate their support!

SSTV Computer - The ATV Committee thanks Dave Wilson for providing surplus computer parts. Through his assistance, this is allowing us to construct an SSTV base station for Loma Ridge

Did You Know?
cont'd from pg. 5

Search team members must be identified in advance. These should be people who are completely familiar with the facility. Resident search team members should be familiar with the facility to the degree that they would recognize suspicious or out of place items.

There has to be a plan! This plan should address acceptable responses to threats which come into the facility by various methods (verbal, telephone, FAX, e-mail, U.S. Mail, package delivery, etc.). This includes preservation of material which may be considered as evidence, pointing to the originator. Telephone operators need to know how to react to a telephone threat, using a checklist to obtain descriptive information, and to notify police. A command post must also be designated where first responders will gather. An alternate command post site must also be identified in the event that the primary command post is destroyed, inaccessible, or identified as an area of risk. The second part of the plan should address procedures in handling a suspicious object. There must be a separate evacuation plan for bomb threats which differs from any other threat (fire, flood, etc.). The evacuation route must be carefully planned so as to not funnel personnel through a high risk location.

Here is a helpful telephone caller checklist which may assist telephone call takers in professionally handling bomb threats:

1. Why did you place a bomb?

2. When is the bomb going to explode?

3. Where is the bomb right now?

4. What does the bomb look like?

5. What kind of bomb is it?

6. What will cause the bomb to explode?
7. What is your name?

8. What is your address?

A plan is not very useful if it only resides on a shelf. Bomb threat practice is needed to assure that all personnel learn how to properly react to a threat and ordered evacuation. The practice drill also helps to identify parts of your plan which may need rethinking.

While these measures may not be the ultimate solution, they do offer some insight as to the key issues which require discussion within your organization.

from:
Disaster Resource Guide
2000 Edition,
P. 108, "Bomb Threats: Phone Calls Costing Millions",
McGinty, Jim, President,
Protection Planning LLC, Blue Bell, Pa.

HDSCS cont'd from pg. 4

The interest from one hospital extended to the current number of 34 medical facilities in Orange County now supported by HDSCS. HDSCS and OCRACES work together when necessary through an MOU that was formally adopted by both organizations in January of 1996. Congratulations to all HDSCS volunteers, past and present, on achieving 20 years of service to the community!