April is here to stay and with Tax Day we would like to remind everyone that our Club is a non-profit organization and we certainly can benefit from donations of any kind.

I’m happy to report that Field Day preparations are well under way and we will be ready to have a great run this year.

Speaking about running, many members of our Club supported the Orange Police Department at the Baker to Vegas relay foot race (see page 16) with great success. Many thanks to those that helped.

Remember to attend the weekly radio nets; they are a way to keep in touch with other members and also a way to maintain an active presence in the underused ten meters band.

Yes, I know that the propagation is not optimal but that should be a motivation to try better equipment, not an excuse to go do something else.

After all, we pride ourselves to be the best (or only) means of communication when there is a major event or disaster, such as fires, floods, earthquakes or even much worse, lack of solar activity.

At any rate, I hope to see you all personally at the next general meeting.

73.
DE AF6CF

--- OCARC---
APRIL 17th Meeting

The Speaker for the April 17th meeting will be Dennis Kidder, W6DQ and he will talk about time and timing. Do not waste any time and come listen to his presentation. We are sure you will have a good time!

In This Issue:

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The PREZ SEZ</td>
</tr>
<tr>
<td>CLUB INFORMATION</td>
</tr>
<tr>
<td>General Meeting Minutes</td>
</tr>
<tr>
<td>Upcoming OCARC Events</td>
</tr>
<tr>
<td>Red Cross Events</td>
</tr>
<tr>
<td>OCARC History – Part 14</td>
</tr>
<tr>
<td>Heathkit of the Month</td>
</tr>
<tr>
<td>OCARC B2V race support</td>
</tr>
<tr>
<td>Mystery homebrew radio</td>
</tr>
<tr>
<td>OCARC Board Minutes</td>
</tr>
<tr>
<td>NASA on Sunspot Cycle</td>
</tr>
<tr>
<td>Renew your membership</td>
</tr>
<tr>
<td>Companies that support us</td>
</tr>
</tbody>
</table>

The next general meeting will be:

Friday, April 17th
@ 7:00 PM
We will be meeting in Room 208
In the east Red Cross Building
2009 Board of Directors:

President: Nicholas Haban, AF6CF  
(714) 693-9778  
AF6CF@w6ze.org

Vice President: Kristin Dankert, K6PEQ  
(714) 544-9846  
K6PEQ@w6ze.org

Secretary: Kris Jacobs, KC6TOD  
(562) 691-7898  
KC6TOD@w6ze.org

Treasurer: Paul Gussow, W6GMU  
(714) 624-1717  
W6GMU@w6ze.org

Membership: Bob Eckweiler, AF6C  
(714) 639-5074  
AF6C@w6ze.org

Activities: Dan Dankert, N6PEQ  
(714) 544-9846  
N6PEQ@w6ze.net

Publicity: Ken Konechy, W6HHC  
(714) 744-0217  
W6HHC@w6ze.org

Technical: Hank Welch, W6HTW  
(562) 697-2239  
W6HTW@w6ze.org

2009 Club Appointments:

W6ZE Club License Trustee: Bob Eckweiler, AF6C  
(714) 639-5074  
AF6C@w6ze.org

Club Historian: Bob Evans, WB6IXN  
(714) 543-9111  
bobev@netzero.net

RF Editor (rotating): Nicholas Haban, AF6CF  
(714) 693-9778  
AF6CF@w6ze.org

WEB Master: Ken Konechy, W6HHC  
(714) 744-0217  
W6HHC@w6ze.org

Assistant WEB Master: Bob Eckweiler, AF6C  
(714) 639-5074  
AF6C@w6ze.org

ARRL Awards Appointee: Arnie Shatz, N6HC  
(714) 573-2965  
N6HC@aol.com

OCCARO Delegate: Steve Brody, N1AB  
(714) 974-0338  
stevebrody@sbcglobal.net

Monthly Events:

General Meeting:  
Third Friday of the month  
at 7:00 PM  
American Red Cross  
601 N. Golden Circle Dr.  
(Near Tustin Ave. & 4th St.)  
Santa Ana, CA

Club Breakfast:  
First Saturday of the month  
at 8:00 AM  
Jagerhaus Restaurant  
2525 E. Ball Road  
(Ball exit off 57-Freeway)  
Anaheim, CA

Club Nets (Listen for W6ZE):

7.086 ± MHz CW OCWN  
Sun- 9:00 AM – 10 AM  
Rick KF6UEB, Net Control

28.375 ± MHz SSB  
Wed- 7:30 PM - 8:30 PM  
Bob AF6C, Net Control

146.55 MHz Simplex FM  
Wed- 8:30 PM - 9:30 PM  
Bob, WB6IXN, Net Control

VISIT OUR WEB SITE  
http://www.w6ze.org

for up-to-the-minute club information, the latest membership rosters, special activities, back issues of RF, links to ham-related sites, vendors and manufacturers, pictures of club events and much much more.

Club Dues:

Regular Members ...$20  
Family Members* ...$10  
Teenage Members ..$10  
Club Badge** ........$3

Dues run from Jan thru Dec and are prorated for new members.

*Additional members in the family of a regular member pay the family rate up to $30 per family.

**There is a $1.50 charge if you’d like to have your badge mailed to you.
OCARC General Meeting Minutes
March 20, 2009

The OCARC March General Meeting was held at the Red Cross complex in Santa Ana at 7:00 pm on Friday evening March 20, 2009. There were a total of 38 members and guest present. There was a quorum of directors present, with the following officers absent – Hank Welch W6HTW and James Noll AF6DE.

Nicholas AF6CF asked all the members and guests to introduce themselves. Three new members joined our group Cam WB6V & Sue Burke N6ROR and W6KJC Kris Cutting.

Kristin K6PEQ introduced our guest speaker – Jim Newcomb from Lido Mounts. Jim gave a presentation on all the products that Lido Mounts makes which makes installation and display of amateur radio gear easy without having to drill holes. He demonstrated the many innovative products offered by his company. If anyone has any questions, Jim can be reached by emailing him at jim@lidomounts.com. The full line of products can be viewed on their website www.lidomounts.com and the products are available at HRO in Anaheim.

Bob Evans WB6IXN had an announcement regarding a store he found in Santa Ana – Action Electronics, they have a wide assortment of connectors and other ham related items. He also brought in some catalogs from Pan Pacific Company offered at Action Electronics to share with interested parties.

Motion to approve the minutes of the February General Meeting by Paul W6GMU and seconded by Dan N6PEQ.

Nicholas AF6CF reported that he and George N6VNI met at Nicholas’ storage unit to check on the four cartons belonging to the club to find four military masts in tact. These are for use by the club.

It was pointed out that in July and September the normal board meeting dates conflict with holiday weekends, so the meeting will be postponed by a week – July 11th and September 12th.

Paul W6GMU gave an update regarding Field Day at Los Alamitos Joint Forces Base. The Field Day captain spaces are being filled; Cathy Gardenias K6VC will be the YL station (think PINK). Volunteers are needed for set up and tear down. Bob Eckweiler AF6C gave what Field Day is all about.

Respectfully submitted by:
Kristine Jacob KC6TOD
OCARC Secretary
Upcoming OCARC Events!!!
(Check the club website for updates and additions http://www.w6ze.org)

April 17, 2009 (Friday 7:00pm) “Precision Timing and Frequency Standard”
Dennis Kidder - W6DQ, will be our April guest speaker. Dennis, a very dynamic presenter, will talk on measurements. He will also be bringing equipment and providing a demonstration.

May 15, 2009 (Friday 7:00pm) “General Meeting”
The program for the May meeting is pending. Check back often for updates.

June 19th (Friday 7:00pm)
“Heil Presents”
Speaker: Chip Margelli - K7JA of Heil Sound will present our June Program. He will be showing us the new Heil product line. He’s also an innovative entertainer in his own right.

The Orange County
Amateur Radio Club “OCARC”
P.O. Box 3454
Tustin, CA 92781
Web: http://www.w6ze.org
Email: ocarc_info@w6ze.org
Subject: Upcoming Red Cross Events

Good Evening Everyone,

It's my privilege to inform you and your organization about two great events coming up in the very near future hosted by the Disaster Communications program at the Orange County Chapter of the American Red Cross.

First, our annual May-Day event is coming up on Saturday, May 2. This is a great opportunity to learn more about EmComm groups operating in Orange County, meet fellow emergency communications volunteers and professionals, learn new tips and tricks, and share your own ideas.

Second, we have teamed up with Gordon West, WB6NOA to offer a weekend two-day Tech to General License Upgrade Class on the weekend of June 6 & 7. This class is specifically targeted to emergency communications volunteers in Orange County and is being offered at a greatly reduced cost from the norm.

Informational flyers for each of these events are attached to this e-mail. Please feel free to distribute these flyers within your organization or partner groups as you see fit.

Sincerely,

Tom Woodard, KI6GOA
Disaster & Client Services Specialist
American Red Cross - Orange County Chapter
Office: (714) 481-5300
E-Mail: twoodard@oc-redcross.org
1994

The OCARC of 1994 ushered in a new Board with Chris Breller, KJ6ZH, wielding the gavel. The 6.6 magnitude Northridge Earthquake shook up club members at 4:30am on Jan 17! The Club voted not to work in the upcoming (1995) ARRL Southwestern Division Convention to be held on the Queen Mary.

With sunspots improving 10M propagation again, the members were reminded that the Club’s 10-10 number is 18,000, obtained back in 1975. The Club dues at this time were noted as: regular member: $12.00, teenage member: $6.00, and additional family members: $6.00 each.

Field Day found the Club operating class 4A at the MCAS, Tustin, in the corner of the Marine Corp Helicopter Base nearest Red Hill & Barranca. Past President Jane Breller, KC6TAM, provided the cooking for Field Day. The Club scored 3,102 QSO’s for 8,078 points. OCARC was 6th place in the Nation and 1st in CA for Field Day.

Many club members helped to staff the Orange County Fair Ham Radio Booth sponsored by OCCARO. During the summer, Bob Tegel KD6XO recruited about ten club members to provide communications for the California Classic Horse Carriage Event.

The Club Breakfast moved to the Wildflower Restaurant on Grand Ave in Santa Ana (the old Le Grande Café location). The Annual Club Auction took place on Oct. 21. We netted about $250 from the Auction. At year’s end, the OCARC voted to move the meetings from the Anaheim EOC to the Red Cross Center, Golden Circle Drive, off 4th Street in Santa Ana.

The annual Christmas Dinner was held on Dec. 10, 1994, at Marie Callenders Restaurant on First St. in Tustin. Gifts were exchanged.

1994

In January 1995, president Jim Roberts, N6XTJ was at the helm as the Club officially moved the meeting location from the Anaheim EOC to the American Red Cross Chapter Headquarters, 601 N. Golden Circle Drive, in Santa Ana. The OCARC badges (engraved round plastic) sold for $5.00 at the time.

Alex Alexander W6RE and Bob Buss KD6BWH were taking turns airing Newsline tapes on the club’s Wednesday night nets. The Newsline audio report was down loaded by telephone onto a tape recorder—and then the tape recorder was played through the 2M rig for the net broadcast. Bob KD6BWH was learning how to take over the Newsline net duties from Alex W6RE, who had performed the duty for many, many years.

The Club elected Bob Buss, KD6BWH, to replace Alex, W6RE, as Assistant Director for the Orange Section and represent our Club. The Club began selling tickets for raffle of a new Kenwood 2m radio. The ‘O.J. Simpson Soap Opera’ kept members glued to their TVs! Bob, KD6BWH, began officially airing Newsline for the Club on the 2M Net in April.

Ken Konechy, W6HHC, and Bob Eckweiler, AF6C, were Field Day co-Chairmen. Field Day found the Club once again at the USMC Air Station in Tustin between Warner & Dyer off Red Hill on June 24-25, the same site since 1991. In 1995, the ARRL annual Field Day was 63 years old for amateur radio! Channel 7 ran the OCARC Field Day Announcement on their Weekly Calendar. Frank Smith, WA6VKZ, handled chow chores very successfully for Field Day! The Club amassed 2,597 QSOs for 6,944 points. We were 1st in our Class for California!

As soon as FD was over, the club members turned their attention to assisting with the staffing of the Orange County Fair Amateur Radio Booth. The 2m Kenwood radio was raffled at the June Meeting. HAMCON ’95 (ARRL Southwestern Division Convention was held aboard the Queen Mary on Sept. 3-5, 1995. The duties of all OCARC Officer positions were published in Aug. 1995 ‘RF’ newsletter.

Bob Tegel KD6XO recruited club members to provide communications for the California Classic Horse Carriage Event. The 2m Kenwood radio was raffled at the June Meeting. The Annual Club Auction took place Oct. 20, 1995, with Club profits equaling $182.50, with only 7 sellers!

The Club Christmas Dinner was held on Dec. 10, 1995, at the Marie Callenders Restaurant, then located on 1st Street, in Tustin.

(To be continued next month

…Bob Evans, WB6IXN, Club Historian)
Heathkit of the Month

by Bob Eckweiler - AF6C

Note: I was unable to find time to write an article this month due to another time wasting venture. The father of my good friend Larson April Jr., who evidently follows this series, volunteered to fill in. - AF6C

The Heathkit Lakota C-7 Kilowatt Transmitter
Of all the ham transmitters built over the years only a few came equipped to run the full legal amateur power. Add-on external linear amplifiers became popular after the growth of SSB, but surprisingly, the two complete full legal power transmitters were older AM units featuring plate modulation.

The first was the E.F. Johnson Desktop Kilowatt, and even it cheated a bit by using its Viking transmitter as the exciter part of the unit. The Johnson Desktop Kilowatt was actually built into a metal desk and ran a pair of 4-400A final tubes in class-C and plate modulated them by a pair of 810s in push-pull for AM. The amplifier part of the transmitter mounted where the file drawers would be in a standard desk. Optional drawers were available on the other side of the desk for user storage, logbooks, etc. The receiver could sit atop the desk unimpeded.

The other full legal limit transmitter was the Heathkit Lakota C-7 which was introduced 50 years ago on the first day of this month. This was before political correctness; and Heath at the time was naming much of its ham gear after American Indian tribes. Unlike most Heathkits of the time, the Lakota was actually comprised of multiple kits that assembled into one unit. Also, much like the Johnson Kilowatt, this unit was housed in a piece of furniture - a low cupboard instead of a desk. The low cupboard made up one kit, the exciter section a second, the amplifier section a third, the power supply a fourth, and the modulator section the fifth. An additional kit, a custom microphone, was also included. While each of these kits were separate with their own name and packaging, they could only be purchased as a combined package, which was given the same name as the amplifier section - Lakota. Let's look at each of the components individually:

Rosebud Enclosure:
One has to talk about the furniture part first. Heath gave it the nomenclature of Rosebud. No, this has nothing to do with the movie, Citizen Kane. Instead it refers to the Rosebud River in Montana near where Heathkit had its research reservation - situated on the Wyoming-Montana border. The low cupboard was unique to say the least. It was made from Walnut and was in the style Lyle's Antiques refers to as "Sitting Bull". The exciter was accessible through the top of the cupboard and the amplifier controls through a door in the front. The power supply and modulator sat on the raised floor of the cupboard and were only accessible by unscrewing wooden panels in the back. There were also unused drawers that could hold linens, dish towels and bric-a-brac, or spare rolls of solder and miscellaneous electronic components, depending upon whether the owner was a bachelor or not.

Heathkit had always been an avid, though limited, manufacturer of furniture kits. There have always been speaker cabinets, wooden cabinets for their hi-fi gear, a hutch that held their clock, and many other examples. In the 1990's Heath actually went deeper into the furniture kit business and included a separate kit furniture catalog that could be removed from their electronic kit catalog.

Crook - Custer - Gibbon Power Supplies:
The Power supply was named the Custer. Originally the Lakota was to be handled by three separate power supplies, one each for the exciter, the modulator and the amplifier. They were named the Gibbon,
the *Crook* and the *Custer* respectively. The *Crook* got delayed because of a conflict with the *Rosebud*, and the *Gibbon* (alternately known as the *Terry*) was split from the *Custer* when it appeared that the *Custer* could handle the whole *Lakota* demand by itself.

**Sioux Exciter:**
The exciter was rather ordinary. It's design came pretty much from the *Cheyenne MT-1* (reviewed recently) and another little known Heathkit transmitter called the *Sioux*, which never made it into production. When not in use the exciter, which took over the *Sioux* nomenclature, lay in wait inside the *Rosebud*. The *Sioux* could not be run barefoot, but did have a moccasin mode.

**Comanche Modulator:**
The modulator was named the *Comanche*. This name was not for the indian tribe as was the *Comanche MR-1 Receiver* reviewed a few months ago; instead it was named for a famous horse of the 1870's and well remembered on the Heath reservation. The modulator's name became a joke among the users of the *Lakota* as the transmitted audio tended to make the speaker sound "hoarse". However this audio problem was actually caused by the microphone. The Modulator used a pair of high power tubes using, instead of filaments, Gatling emitters that were originally to be part of the Custer assembly, but were not believed to be needed in the final assembly.

As the Heathkit C-7 was nearing production. Heath's research reservation was working on a new microphone. It was based on the oversized studio mic of the time known as the *Bighorn*. Heath developed a much smaller version of that mic, but in doing so they lost a lot of the audio response that made the original mic so famous. Heath named the mic the *Tomahawk*, but users and Heath Engineers commonly referred to it as the *little bighorn*.

**Lakota Amplifier:**
Finally, we get to the *Lakota* amplifier. To say the least the *Lakota* was massive. Specifications gave its capability in horsepower instead of kilowatts. It had tremendous dynamic range and used the latest (at the time) fire-stick emitters operating in parallel. With all its strength it had one fault. Using so many polarized components the *Lakota* amplifier tended to shed the arrows that mark polarity and they would land on the power supply below, often causing damage.

**Personal Observations:**
When working, this fine Heathkit put out a loud signal. Even with the hoarse quality of its audio, it was heard across the nation and onto other continents. Unfortunately production was stopped after just a few months on June 26th. While the reason Heath stopped production after such a short run was never given, the problem was surmised to be failure of the *Custer* power supply. As large as it was, it couldn't handle the powerful *Lakota*. The original design of *Custer*, being reinforced by *Crook* and *Gibbon* to supply additional power probably, would have resulted in success. Perhaps even if the Gatling emitters were incorporated, as well as extra iron the designers were offered, this would have resulted in a normal life-span for the *Custer* power supply.

One other serious problem that I encountered with the *Lakota* was also due to the power supply. Being heavy it caused the wood that made up the floor of the cupboard to sag severely. At first I tried supporting the floor by placing a cigar box under it. The box was crushed. Next a platform from a small aluminum chassis was tried without success. Finally a stand welded of steel bar-stock was constructed that fit tightly under the cupboard floor below the *Custer* power supply. This last platform worked!

Still, the *Custer* quickly died. It was beyond repair and I scrapped the whole transmitter. The only part I
kept was the little platform I built, after three tries, to keep the power supply from coming through the floor of the cabinet. Now, every year on April first and again on June 26th, I sit down next to the platform, pour out a shot-glass of **George Dickel** (no ice -'cause water's for bathin'), and think of the **Lakota**, **Sioux**, **Comanche**, **Crooke**, **Gibbon** and **Custer**. As I sip my Whisky I reminisce about the **Lakota**, the **Sioux** and the **Cheyenne** all under **Sitting Bull** overpowering **Custer**; and **Comanche** also falling by the power of the **Lakota**. I can almost hear sounds ringing in the **Little Bighorn**. When I finish the whisky, I place it gently on the steel platform, which is known as **Custer's Last Stand**.

73s,
-Larson April the First
Since 1985, law-enforcement running teams have entered in a competitive foot-relay-race through the desert. This race, known as “Baker-to-Vegas” (and aka B2V), is a 120 mile long race, that starts outside Baker (CA), runs through the desert to Shoshone and finishes at the Hilton Hotel in Las Vegas. The B2V race is broken into 20 “legs” or stages. This year 245 different law enforcement teams participated. The runners of the Orange Police Department have been supported for many years with communications by hams belonging to COAR (City of Orange Amateur Radio) RACES, the OCARC members, and Communications Volunteers from Cypress. This year, twelve OCARC members helped the OPD running team by providing communications over the entire racecourse.

The COAR RACES activities for the 2009 races began nine months before this year’s race began. The COAR B2V communications project required the following five phases:

- Planning Sessions
- Equipment Testing Workshops
- Equipment Set-up for the Race
- Staffing and Operating the B2V event
- Post B2V Review Sessions

The City of Orange plan was to set up five communications centers along the B2V race course in order to provide a “communications backbone” to support the mobile units used during the race.

- Ibex Pass, CA
- Shoshone, CA
- Pahrump, NV
- Sandy Valley Road, NV
- Las Vegas, NV

Two weeks before the event, four of the communication station equipment groups were set-up in back yards (field day style) to see if equipment worked and all of the connectors and cables and software and settings were ready.

Fig 2 – The Equipment-Testing Workshop really began to look like “Field Day” when operators from the COAR “Follow Vehicle” Showed Up.

L-R – Nicholas-AF6CF, Mike-WA6OUE, Ken-W6HHC, David-KG6RWU, Kathleen-K6IBH, and Bob-AF6C

(Photo by Ken W6HHC)

The B2V race this year began on Saturday, March 14. However, to assure that the communications equipment was properly set-up in place and working well, some hams left home on Thursday or Friday for set-up.

The most elaborate communications station for OPD is located at Sandy Valley Road. This is halfway between Pahrump and Las Vegas and near the top of the mountain pass. The Sandy Valley location (shown in Fig 3) is critical for connecting both sides of the mountain. A cross-band repeater is set-up for the use of COAR at this location.
The Sandy Valley communications station uses a 440 MHz beam for communications on the East side of the mountain into Las Vegas and 2M high gain vertical for communications on the West side of the mountain as far as Shoshone and Ibex Pass.

Fig 3 – The Sandy Valley Road location is in the middle of “no where”. The trailer of George-KK6KN provided a wind-free location for communication operations. Gerry KB6JBL is wearing the warm coat on a cold night.

(Photo by Mike KF6WRM)

During the B2V race, COAR Follow-Vehicle drove alongside or near the OPD runner with full communications equipment including an APRS beacon. The Orange PD Follow-Vehicle is shown in Fig 4. The OPD Follow Vehicle carries a driver, a timer, a back-up runner, and a radio operator along with an APRS beacon.

Fig 4 – This photo shows the OPD runner (Team #60) running uphill towards Ibex Pass with the OPD Follow Vehicle right behind to provide water, fruit and communications.

(Photo by Mike KF6WRM)

Fig 5 – The Communications Center located in Shoshone is about 1/3rd of the way through the race. Rich-KR6BA is shown staffing the radio.

(Photo by Mike KF6WRM)

Fig 6 – The Communications Center located in Pahrump (Nev) is close to half-way point and was supported by: (L-R) Ken-W6HHC, Nicholas-AF6CF, and Bob-AF6C.

(Photo by Michelle Micallef of OPD)

Fig 7 – The Las Vegas Communications Center was located near the Finish Line. (L-R) are Dieter-N6ZKD and Steve-KI6DDE.

(Photo by Bill W6VKO)
The 440 MHz link from Las Vegas to Sandy Valley Road was over the top of the mountain ridge shown in Fig 8, and required a high gain beam and perhaps required a bit of “knife edge” propagation.

The Las Vegas Communications Center used a high gain 16-Ele 440 MHz beam to provide communications with Sandy Valley Road on the other side of the mountain ridge.

(Photo by Bill W6VKO)

The OPD running team started the race at 5 PM on Saturday afternoon and took a little over 16 hours to complete the Baker-to-Vegas 120 mile foot-relay-race. The OPD running team finished that race at the Hilton Hotel around 9 AM on Sunday morning. The Orange PD running team finished 6th place in their class of 16 teams and placed 45th overall in the race.

On leg #10 of race Orange PD Team #60 runner, Officer Adam Jevec, is shown running through Pahrump just before midnight. The OPD team continued running through the night and reached the finish line around 9 AM in the morning.

(Photo by Bob AF6C)

The “yellow COAR shirts” represent most of the 33 Hams who helped the Orange PD with communications during B2V. On the left are representatives from the B2V Race Communications Committee. All names are identified in the Feb RF newsletter.

(Photo by Ken W6HHC)
Mystery Radio

We believe this is a radio; however, the cigar brand is unknown...
The OCARC Board meeting was held at the JagerHaus Restaurant in Anaheim, at 8:00 AM Saturday, April 4, 2009. There were a total of 15 members and visitors attending. There was a quorum of directors present, with the following two officers absent: Bob- AF6C and James AF6DE (resigned).

**DIRECTOR REPORTS:**
- Treasurer Paul W6GMU reported $4483.36 in the bank with 1 new member and seven checks pending.
- Ken W6HHC reported on the success on the Baker to Vegas Race, 12 members of OCARC helped with communications for the Orange PD department.

**OLD BUSINESS:**
- RF Newsletter “Rotating” Editors
  - April is Nicholas AF6CF, May is Ken W6HHC
- QSL Printing and Mailing – the QSL cards have been sent to Lee Barrett, he will reply with cost and time frame.
- Guest Speakers – Kristin has the remainder of the year covered.
- Morse Code Class Kristin K6PEQ and Larry K6YUI held the class on Saturday, March 7th, 1:00 PM 4 students participated. A second class will be held tentatively in June.
- Field Day June 26th-28th, 2009
  - Larry K6YUI will be organizing the equipment for Field Day
  - Larry K6YUI and Paul W6GMU will provide a one page update for the April Newsletter
  - Field Day planning meetings to be held immediately following each month’s board meetings (first Saturday of each month)
  - Discussed chuck wagon – Kris KC6TOD said the menu for Saturday night will change to spaghetti and meatballs. Friday night’s steak dinner will remain the same for the hard work of those volunteers.

**NEW BUSINESS**
- **Board Meeting Date Changes**
  - July Board Meeting will be July 11th
  - September Board Meeting will be September 12th
- **Board Member Resignation**
  - Due to personal conflicts James Noll AF6DE has resigned as Director-at-Large. Paul W6GMU made the motion to accept James’ resignation and Kristine KC6TOD seconded the motion.
  - Nicholas AF6CF recommended asking George N6VNI to take the position of Director-at-Large. George (who was at the board meeting) accepted the opportunity. It will be presented to the club at the April meeting for a vote.
- **Financial Activities Report**
  - Ken W6HHC and Paul W6GMU have worked to finalize some issues and clearly specify deposits.
  - Kristin K6PEQ resolved with Jagerhaus the Christmas party deposit – we currently have the deposit for 2009 holiday party and a $200.00 credit.

Respectfully submitted:
Kristine Jacob KC6TOD, Secretary
April 1, 2009: The sunspot cycle is behaving a little like the stock market. Just when you think it has hit bottom, it goes even lower.

2008 was a bear. There were no sunspots observed on 266 of the year's 366 days (73%). To find a year with more blank suns, you have to go all the way back to 1913, which had 311 spotless days: plot. Prompted by these numbers, some observers suggested that the solar cycle had hit bottom in 2008.

Maybe not. Sunspot counts for 2009 have dropped even lower. As of March 31st, there were no sunspots on 78 of the year's 90 days (87%).

It adds up to one inescapable conclusion: "We're experiencing a very deep solar minimum," says solar physicist Dean Pesnell of the Goddard Space Flight Center.

"This is the quietest sun we've seen in almost a century," agrees sunspot expert David Hathaway of the Marshall Space Flight Center.

Above: The sunspot cycle from 1995 to the present. The jagged curve traces actual sunspot counts. Smooth curves are fits to the data and one forecaster's predictions of future activity. Credit: David Hathaway, NASA/MSFC. [more]

Quiet suns come along every 11 years or so. It's a natural part of the sunspot cycle, discovered by German astronomer Heinrich Schwabe in the mid-1800s. Sunspots are planet-sized islands of magnetism on the surface of the sun; they are sources of solar flares, coronal mass ejections and intense UV radiation. Plotting sunspot counts, Schwabe saw that peaks of solar activity were always followed by valleys of relative calm—a clockwork pattern that has held true for more than 200 years: plot.

The current solar minimum is part of that pattern. In fact, it's right on time. "We're due for a bit of quiet—and here it is," says Pesnell.
Renew Your OCARC Membership

It's that time of the year again. Time to renew your OCARC membership for 2009, if you have not already done so.

Help continue to support your growing club. There are many entertaining monthly meetings, speakers and events planned for this year. But it can't happen without your support for OCARC.

Dues can be paid at the monthly club meetings, club breakfasts or via snail mail. Regular dues are only $20. Additional family members are $10 (Total). Membership for teenagers is only $10 as well. What a deal!

OCARC
P.O. Box 3454
Tustin, CA 92781
PLEASE SUPPORT OUR SPONSORS

The following organizations support our club’s events in numerous ways. Please consider them when making your Amateur Radio and Electronics purchases:

A&A Engineering
http://www.a-aengineering.com/

ADI / Pryme Radio Products
http://www.pryme.com/

Burghardt Amateur Center
http://www.burghardt-amateur.com/

The DX Store
http://www.dxstore.com/

Elecraft
http://www.elecraft.com/

Ford Electronics
http://www.fordelectronics.com/

Ham 4 Less.com
http://ham4less.com/

Ham Radio Outlet, Anaheim, CA
http://www.hamradio.com/

Hamstore.com
http://www.hamstore.com/

Heil Sound
http://www.heilsound.com/

Hobby Radio stop
http://www.bearcat1.com/scanners.htm

ICOM Elmer.Com
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http://www.cometantenna.com/

Nifty Ham Accessories
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