President's Message -- The ARRL SW Division Convention

By Steve Champion, AE6NX

In September, Ben & I had the opportunity to go to the ARRL Southwestern Division Convention in Riverside. I had not been to an ARRL convention, so I was not sure what to expect. I thought that those of you who also haven't been to one might be interested to hear about it.

I have attended several conventions related to Electronics and Software, to Homeschooling, and even to Physical Therapy (which is Anne's profession). Some have been stimulating or inspiring, but others have been dry or downright boring. So it was with a mixture of excitement and trepidation that I set off early on Saturday morning.

The convention ran from noon on Friday until noon on Sunday. Ben & I were able to make it there for the whole of Saturday. We had looked up the schedule on the web site beforehand, so we knew the topics of the various sessions and had tentatively chosen some that looked interesting. The day was broken into six 50-minute sessions, with four to six choices in each time-slot. The registration fee was only $20 for me, and Ben was free.

The trade exhibits and the W1AW Special Event Station were open all day, so there were things to do during timeslots that did not provide an appealing topic. Of course, there were some slots during which I would have liked to see more than one talk, but that's unavoidable at a conference.

So what did I learn? Well here is a quick synopsis of what I brought back:

Joe, WB2JKJ taught me that there is another way to approach Ham Radio with kids. He teaches English, Geography and other things using ham radio as a medium. Some kids want to study for the license exam as a result, but that is more of a by-product than a target. I thought this was a fascinating approach. Particularly interesting is Joe's assertion that kids absolutely love learning CW, and that spelling can be taught using CW.

Ben spent much of his time operating the W1AW Special Event Station, and had a blast. He tells me that the IC-7800 does not work well with the receiver unplugged, despite the $10,000 price tag. He also found out that the antennas for the station were hauled up the outside of the hotel to the twelfth floor using a rope.

If I walk round even a small trade show enough times, I can always find one more thing to look at or buy. The trade exhibits provided the opportunity to spin the knobs on some interesting radios. I was particularly interested to see the insides of the Elecraft HF kits up close. Also of interest were some flashlights with a 3W white LED. I still have spots in front of my eyes from that! One company was selling copper pipe J-Poles. That in itself was not new to me, but I have not seen a 6-meter one before. That's quite a piece of plumbing. Unfortunately, no Flea Market at this convention (one is planned for next year's in San Diego).

Ben attended the Youth Forum. He remarked that he was surprised to find so many young hams there.

I was rather disappointed with a session entitled "Recruiting New Hams". I was expecting to hear some interesting perspectives, but unfortunately the presenters were unsuccessful in adapting material from a much longer session at Dayton. Also, the topic seemed to be presented as if the Emergency Communications aspect of Ham Radio is the only angle worth advertising to the public - although that may not have been the presenters' intention.

I went to a session about WA6MHZ's radio museum. I knew that it would be quite popular, but was surprised that it was "standing room only". Some interesting and very rare radios were on display, as well as lots of photos.

A session on Tropo Ducting between Hawaii and California was interesting. It was fascinating to hear recording of meter-bending SSB signals (and even fully quieting FM signals) from Hawaii. It was interesting to learn that it is a common and predictable occurrence on 144, 440 and 1296MHz.

I attended a session about remotely controlled HF stations. It is an interesting way of making a station available to those without HF facilities, and such stations are increasing in number.

Overall, I very much enjoyed the trip, so I will seriously consider going again in the future. Next year's convention will be in San Diego - September 22nd-24th, 2006. That is a bit more of a drive than Riverside, so if I go I will most likely stay overnight. Perhaps I'll see you there!

73, AE6NX

Steve champion, AE6NX

CVARC Meeting: October 13th

Jeff Reinhardt and Rob Hanson will be our speakers for our October 13 CVARC club meeting. The meeting will begin at 7:30 PM at the Elks Lodge on Conejo School Rd., with a social session prior to the meeting from 7:00 to 7:30. Hope to see you there.

License Examinations On October 9, 2005

By Jeff Reinhardt, AA6JR

CVARC hosts FCC License Examinations at 8:30 AM on the second Sunday of even numbered months at the Ventura East County Sheriff Station on Olsen Rd. (near the Reagan Library). CVARC conducts exams for all license classes . Exam candidates must bring a form of government issued photo I.D., the original AND a photocopy of any existing license or Certificate of Exam Element Completion, a Social Security (or government issued Taxpayer I.D.) number, and $14 ARRL VE Exam fee (cash is preferred). No advance reservation is necessary, walk-ins are welcome. Advance notice is needed for special circumstances, such as reading the exam to sight-impaired candidates. If you have any questions, contact CVARC VE Coordinator Jeff Reinhardt at 818-706-3853.

Candidates For CVARC Board Positions

Elections for the 2006 CVARC Board will occur at the November club meeting. We are in desperate need for volunteers for the Vice President and Treasurer positions. We must fill these two positions to have a viable club next year! The Public Relations and Social positions are also open. If you can fill one of these positions please talk to Steve Champion or myself at the October club meeting or give me a call, Ken Larson 805-495-9435. We really need your. Here are the board positions for which we currently have volunteers: President: Steve Champion AE6NX Vice President: Open Treasurer: Open Secretary: Ben Champion AE6NY Editor/Publisher: Neil Waybright KG6QEL Operations: Ken Larson KJ6RZ Technical: Hugh Bosma KF6HHS Education: Karl Moody AE6TO Public Relations: Open Social: Open Member at Large: Greg Lane K7SDW Member at Large: Mike Pershing KD6IJF

Pictures from the ARES/RACES Activation During The Thousand Oaks Fires

Roy Deschene, KE6UMW, manning the ARES/RACES radio station at the Borchard community Center Red Cross Shelter. We also had an ARES/RACES radio station (provided by Terry Graves K7FE) set up at the Thousand Oaks Community Center Red Cross Shelter next to Thousand Oaks High School.

The Thousand Oaks Emergency Operations Center (EOC) was a busy place during the fire. ARES/RACESS had a radio station (provided by Karl Moody, AE6TO) set up at the EOC. Had telephone and cell phone service gone down, our ARES/RACES radio station would have been the only means of communications in and out of the Thousand Oaks EOC.

Solar Minimum Explodes

Solar Minimum Looking Strangely Like Solar Max

Solar minimum is looking strangely like Solar Max.

[Editor's Note: Bruce Elbert, K6ZB, forwarded this article to me. I thought it would be interesting to put it in our newsletter since it discusses in more detail the solar flare activity that we talked about at our last CVARC meeting.]

September 15, 2005: Just one week ago, on Sept. 7th, a huge sunspot rounded the sun's eastern limb. As soon as it appeared, it exploded, producing one of the brightest x-ray solar flares of the Space Age. In the days that followed, the growing spot exploded eight more times. Each powerful "X-flare" caused a shortwave radio blackout on Earth and pumped new energy into a radiation storm around our planet. The blasts hurled magnetic clouds toward Earth, and when they hit, on Sept 10th and 11th, ruby-red auroras were seen as far south as Arizona.

So this is solar minimum?

Actually, solar minimum, the lowest point of the sun's 11-year activity cycle, isn't due until 2006, but forecasters expected 2005, the eve of solar minimum, to be a quiet year on the sun. It has not been quiet. 2005 began with an X-flare on New Year's Day--a sign of things to come. Since then we've experienced 4 severe geomagnetic storms and 14 more X-flares. "That's a lot of activity," says solar physicist David Hathaway of the National Space Science and Technology Center in Huntsville, Alabama.

Compare 2005 to the most recent Solar Max: "In the year 2000," he recalls, "there were 3 severe geomagnetic storms and 17 X-flares." 2005 registers about the same in both categories. Solar minimum is looking strangely like Solar Max.

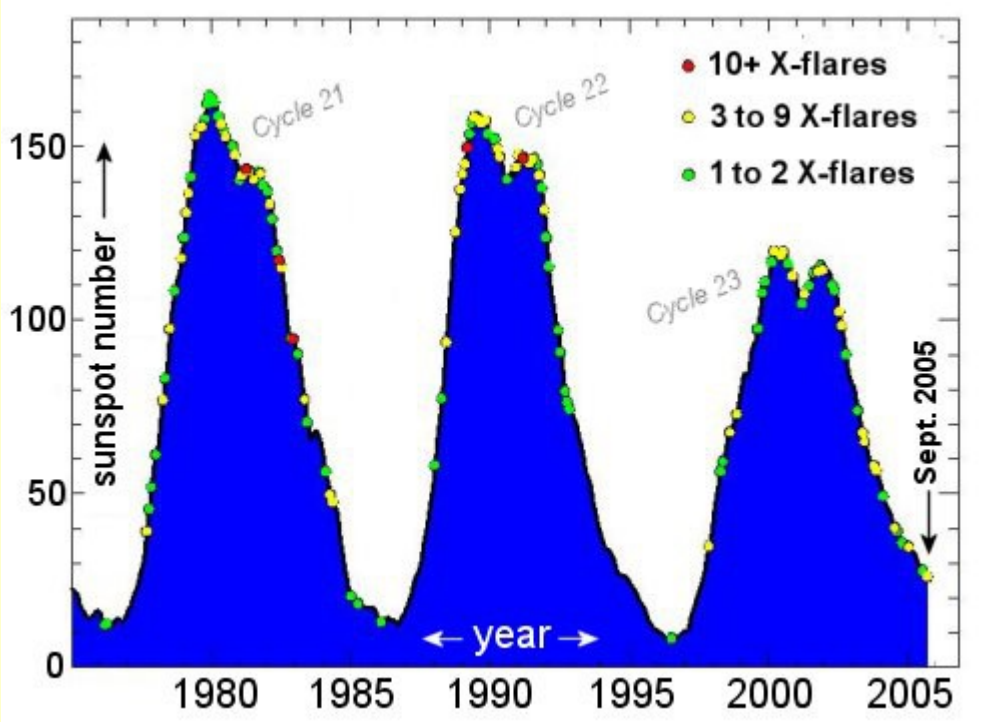
Scientists like Hathaway track the 11-year solar cycle by counting sunspots. When sunspot numbers peak, that's Solar Max, and when they ebb, that's solar minimum. This is supposed to work because sunspots are the main sources of solar activity: Sunspot magnetic fields become unstable and explode. The explosion produces a flash of electromagnetic radiation--a solar flare. It can also hurl a billion-ton cloud of magnetized gas into space--a coronal mass ejection or "CME." When the CME reaches Earth, it sparks a geomagnetic storm and we see auroras. CMEs can also propel protons toward Earth, producing a radiation storm dangerous to astronauts and satellites. All these things come from sunspots.

As expected, sunspot numbers have declined since 2000, yet solar activity persists. How can this be?

Hathaway answers: "The sunspots of 2005, while fewer, have done more than their share of exploding." Consider sunspot 798/808, the source of the Sept 7th superflare and eight lesser X-flares. All by itself, this sunspot has made Sept. 2005 the most active month on the sun since March 1991.

Weird? Much about the sun's activity cycle remains unknown, Hathaway points out. "X-ray observations of flares by NOAA's Earth-orbiting satellites began in 1975, and CMEs were discovered only a few years earlier by the 7th Orbiting Solar Observatory. Before the 1970s, our records are spotty."

This means we don't know what is typical. Scientists have monitored only three complete solar cycles using satellite technology. "It's risky to draw conclusions" from such a short span of data, he says.



Above: Sunspot counts and X-flares during the last three solar cycles. Note how solar activity continues even during solar minimum. Credit: David Hathaway, NASA/NSSTC.

Hathaway offers a cautionary tale: Before 2005, the last solar minimum was due in 1996 and the sun, at the time, seemed to be behaving perfectly: From late-1992 until mid-1996, sunspots began to disappear and there were precisely zero X-flares during those long years. It was a time of quiet. Then, in 1996 when sunspot counts finally reached their lowest value-bang!-an X-flare erupted.

"The sun can be very unpredictable," says Hathaway, which is something NASA planners must take into account when they send humans back to the Moon and on to Mars. Returning to 2005: is this year an aberration--or a normal rush to the bottom of the solar cycle? "We need to observe more solar cycles to answer that question," says Hathaway. "And because each cycle lasts 11 years, observing takes time."

Meanwhile, Hathaway is waiting for 2006 when solar minimum finally arrives. Who knows what the Sun will do then?

SEND THIS STORY TO A FRIEND Author: Dr. Tony Phillips | Production Editor: Dr. Tony Phillips | Credit: Science@NASA

Event Calendar 2005

Date	Event	Comments
July 3	Moorpark Fireworks	Support for Moorpark's 3rd of July Fireworks

July 12	Technician Class	CVARC Technician License Class Begins
July 14	CVARC Club Meeting	General CVARC Club meeting
Aug. 11	CVARC Club Meeting	General CVARC Club meeting
Aug. 14	FCC License Exam	Begins at 8:30 am at East County Sheriff's Station
Sept. 8	CVARC Club Meeting	General CVARC Club meeting
Sept. 27	Technician Class	CVARC Technician License Class (TENTATIVE)
Oct 9	**FCC License Exam**	**Begins at 8:30 am at East County Sheriff's Station**
Oct. 13	**CVARC Club Meeting**	**General CVARC Club meeting**
Nov 10	CVARC Club Meeting	General CVARC Club meeting

Radio Amateur Civil Emergency Service

Ventura County Area 2 R.A.C.E.S. members are encouraged to check in every Tuesday night at 7:00 pm on the Area 2 Check-in Net. Specific ARES/RACES times and frequencies are as follows:

ARES/RACES Times And Frequencies

Area	**Time**	**Mode**	**Frequency**	**Pl**	**Repeater**
County	7:30-8 pm	Voice	146.880 -	127.3	WA6ZTT
County	7:30-8 pm	Voice	224.020 -	127.3	WB6ZTR
County	Before 6:30 pm	Packet	145.710	No pl	Hospital Net
County	RACES Simplex	Voice	147.570	No pl	____
Area 1	7:00-7:30 pm	Voice	147.930 -	127.3	WB6WEY
Area 2	**7:00-7:30 pm**	**Voice**	**146.850 -**	**94.8**	**Grissom - K6AER**
Area 2	**Simplex**	**Voice**	**147.555**	**No pl**	**___**

Area 2	**Backup Repeater**	**Voice**	**147.885 -**	**127.3**	**Bozo - N6JMI**
Area 2	**Amgen Repeater**	**Voice**	**449.440 -**	**131.8**	**KE6SWS**
Area 3	7:15-7:30 pm	Voice	147.915 -	127.3	WB6ZTQ
Area 4	7:15-7:30 pm	Voice	146.970 -	127.3	WB6YQN
Area 5	7:00-7:30 pm	Voice	145.400 -	No pl	N6FL
Area 6	7:00-7:30 pm	Voice	147.975 -	127.3	N6AHI
Area 7	7:00-7:30 pm	Voice	146.985 -	127.3	WB6ZTX
Area 8	7:00-7:30 pm	Voice	145.280 -	100	KN6OK
6 Meter	6:45-7:00 pm	Voice	052.980 -	082.5	K6SMR

Net Control operations for the weekly ARES/RACES Area 2 check-in is run from the ARES/RACES communications center at East County Cheriff Station on Olsen Road each Tuesday at 7:00 PM. Visitors are welcome and have the opportunity to operate the station equipment. Contact Jerry Goldman KC6SO (805) 241-9187 if you plan to attend. RACES members, should remember that their RACES card is issued for only two years. When your card is due to expire call Jackie (805) 646-2551 at the Office of Emergency Services in Ventura to renew your card. For questions concerning ARES/RACES call Area 2 Emergency Coordinator Ken Larson KJ6RZ (805) 495-9435 or go to the ARES/RACES secion of the CVARC website at http://www.cvarc.org.

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ARRL

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The Conejo Valley Amateur Radio Club is an ARRL affiliated Special Service Club. Meetings are held on the second Thursday of each month, unless otherwise noted. Meeting location is at the Elks Lodge, 158 Conejo School Rd., Thousand Oaks, CA. Meetings start at 7:30 pm. with a pre-meeting social and technical assistance session, for those who are interested at 7:15 pm. Meetings are open to the public, and members are encouraged to bring their friends.

Return to CVARC

Editors: Ken and Paula Larson