



The Pasadena Radio Club *Bulletin*

April 2008

2007 ARRL November Sweepstakes (SSB)

By (W6)Eli Lazarov

The object of the ARRL November Sweepstakes Contest is for stations in the United States and Canada (including territories and possessions) to exchange QSO information with as many other US and Canadian stations as possible on 160, 80, 40, 20, 15 and 10 meter HF bands.

The contest has two separate and independent branches. One is the CW branch which takes place on the first weekend in the month and the second one is the Phone Contest which takes place on the third weekend of November.

The full description and rules for the 2007 contest can be found at:

<http://www.arrl.org/contests/rules/2007/novss.html>

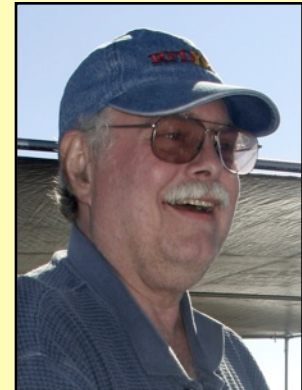
I left the L A house for Ray's (KJ6NO) desert location (Palm Springs area). When I arrived at noon, Ray and Roz (AE6WT) were already setting up to operate.

The gear was: Ray's Yaesu FT-847, on full 100 watts, powered by an Astron SS-30M, using an Alpha Delta



**Randy
Hammock
KC6HUR**

**April 22nd
Speaker**



This month we are pleased to welcome Randy Hammock, KC6HUR, who will talk about the Calnet linked repeater system on the 440 MHz band.

This is an excellent system that covers much of California.

PathFinder Digital Autotuner, connected "through the window frame" (using the MFJ-4602 Antenna Feedthrough Panel) to a second, longer cable leading to a Hustler 5BTV HF vertical with all the required radials, mounted on a short pipe a few inches above ground, in the back yard.

Upon startup, we noticed that power out was very limited and we were not really "getting out". The first suspect was the radio. Ray had a "spare" Kenwood TS-440S (built-in tuner), so we changed the radio and went back on the air. After several attempts at contacts,

we noticed the same (lack of) results. It was time for the second suspect: the cable.

A quick cable change (the one from the radio to the MFJ

See Sweepstakes, page 3

Crown City HF

Tom Berne, W6TAG

More on the Ionosphere

Last month we introduced the layers of the ionosphere and learned which of them help us (by refracting) and those that make radio communication more difficult (attenuate). You heard that the lower the frequency used and the greater the ionization of the ionosphere the more the refraction (bending) by the ionosphere. Together these determine the highest frequency that can reliably be bent back to earth and therefore give long distance HF communication, called the "maximum usable frequency" or "MUF".

Put in practical terms, if we have an F-layer that suffers from low ionization due to poor solar radiation (as we do now), or at nighttime and/or seasonal variation the higher HF frequencies like 28, 24 and 21 MHz (10, 12 & 15 meters) will most often be above the "MUF" and are of little use for DX. However, the lower frequency amateur radio allocated bands at the other end of the HF spectrum such as 3.5 and 7 MHz (80 & 40 meters) probably will refract and yield reasonable DX, particularly at night when the D-layer (which absorbs) rapidly fades. On the other hand as ionization levels rise up a few short years from now and/or during the daylight (longer in summer) the higher HF frequencies open up and the mid-range ones, particularly 14 (20 meters, the DX workhorse), will regularly work very well during daylight and well on into the night. Although propagation can get rather complicated, these basics are the keys to understanding what bands to use when and help you to understand what you observe when you are "on the air" using HF.

An old adage in amongst experienced hams is the importance of spending time listening to your radio and when you do, use what you have read in this column to see if you can explain what you are hearing in the HF bands.

Next month this column will take a holiday from the topic of "Propagation". Because Field Day will be here soon I thought it would be a good time to have a guest authored contribution by Ray Overman, KJ6NO, on "Contesting".



Sub-audible Tones

Bruce Nolte, N1BN

Linked Repeater Systems

The HF bands offer the "big gun" for long range communications but tend to need large antennas and radios. This is not a problem if we are exploring the hobby or contesting aspects of Amateur Radio but may not serve personal or tactical communications needs.

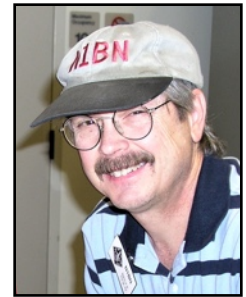
Local single repeaters are great for local or moderate distance communications and continue to prove their value for personal and disaster needs. It could be a call home at the end of the day or helping support a situation like the recent fires on Catalina Island, as DCS did so well recently.

But what if we want or need to talk hundreds of miles - longer range than the normal single repeater is designed to do? In those times Ham Radio has an answer - linked repeaters. Linked repeater systems come in many flavors but the easiest ones to use are like the fine Condor Connection on the 222 Mhz band. Yes, you do have to buy a 222 Mhz rig to use it. But once you do, and once you have programmed your transceiver for the nearest Condor repeater you have the power to communicate from the Mexico border to north of Sacramento using a linked set of 14 repeaters. Go to www.condor-connection.org for more information.

This month we are pleased to welcome Randy Hammock, KC6HUR, who will talk about the Calnet linked repeater system on the 440 MHz band. This is an excellent system that covers much of California. www.cal-net.org

In California there is little in the way of linked systems on the 2 meter band but we do have many choices on 222, 440 and 1.2 Ghz. You can get a taste of linked coverage on the 146.820 - (no PL) W6FNO system. W6FNO has a site on Johnstone Peak that is linked to a site on 9,000 foot Onyx Peak. Go to www.w6fno.org for more information.

73 de N1BN



PRC Member Interview

Meet Cynthia Berne, N6NCE, Club Secretary

Cynthia was born in Pasadena, and has spent most of her life in that area where her great grandparents came in 1890.

“My husband, Tom, was a Ham when we met. He became one when he was in high school, then dropped out for a while, becoming active again when our son was old enough to be interested. He got me interested as well as two of our three children: our son John AJ6O, our daughter WD6CVQ, and several neighbors. In the 1970’s and 80’s a group of us traveled together each summer to Shaver Lake in the Sierras. We used to travel in tandem, using Ham radio in the cars.

Recently, Tom and I were invited to a neighborhood meeting of Ham radio operators in Silver Lake. Our Neighborhood Council was going to do some emergency work, planning for an earthquake or other emergency. There we met other Hams in the area and we have been active in that ever since. We both became CERT (Community Emergency Response Team) members. This group works with the Fire Department, and they were the ones who, during the recent fire, manned the evacuation at Marshall High School before the Red Cross showed up. Essentially, we help the Fire Department with communications when they get overwhelmed. We also helped with traffic and emergency work at the Hollywood Parade as well as at the LA Marathon. I think the group is terrific, from all walks of life and very interested in helping. Tom and I have trained the neighborhood CERT members who are not Hams how to use both GMRS and FRS radios, which are good for a short distance and the people don’t have to be licensed to use them.

Other interests have included being host families to many students from foreign countries, as well as scuba diving. We have dived all over the world and have traveled to many countries where our exchange students live. We enjoy snow skiing and hiking with our Golden Retriever, Ziggy.

I think Ham radio will continue to thrive, particularly in regards to providing emergency communications at the neighborhood CERT level.



So, that is the story of Cynthia, our new Club Secretary. She is a fairly new member of our club, but one who has stepped in to lend a hand. She is a lovely woman who has made a very valuable addition to our group. Thanks, Cynthia.

This article marks the return of a popular feature of past Bulletins, the member interview. Thanks to the efforts of Merrie Suydam, AB6LR, many members were introduced to the rest of the club. For a time, Merrie was writing one of these every month and it was taking a toll on her available time. We are very pleased to have more of these good articles, profiling our newer active club members. We won’t require one every month, but will happily receive and share a new one any time.

Sweepstakes, continued from page 1

panel), revealed we had a bad connector on the radio side. Further “testing” (by wiggling the line at the connector while the cable was hooked up to an MFJ antenna analyzer) confirmed it.

Upon cable replacement we noticed immediate improvement. Now we were ready to go!

We operated from the Orange ARRL-section, as a Multi-Operator W6KA, which was established in 1953. Therefore, our exchange was:

(QSO Serial #)-M-W6KA-53-ORG. QSOs were logged using N3FJP’s Contest Log.

The initial goal was to “sweep”: contact all 80 ARRL sections (and get a mug!). As time progressed, propagation had signals coming in from exciting sections: Canada’s AB, BC, ON, Puerto Rico (PR), and several east coasts: NE, NNJ RI.

Later in the evening, we switched back to the FT-847 and used it till the end of the contest.



See Sweepstakes, page 4

From the Editor

John Minger, AC6VV

More about KC6HUR

When I learned that Randy Hammock was to be our guest speaker this month, I started looking for a photo of him and a brief biographic sketch to help pique your interest. The photo turned out to be the hard part. The only one with any resolution turned out to be a 25-year-old snap of Randy jumping out of an airplane as a skydiver. Now that ought to draw some attention, eh? Luckily a mutual friend had some good snaps.

That skydiving shot does offer a hint of the many different activities KC6HUR has tackled. He has been an American Red Cross certified Advanced First Aid Instructor and CPR Instructor. He is an avid equestrian. Randy's background is in Electrical Engineering and Computer Science. He developed computer software for several employers, working on NASA's Deep Space One Project, Galileo Project, Cassini Program and Shuttle Radar Topography Mission. His Amateur Radio interests are many, including ARISS, IRLP, and Echolink. He has been president of JPLARC, vice president of The Goddard Amateur Radio Club, and maintains the IRLP node of Calnet. We are eagerly anticipating his Calnet presentation Tuesday night.

How Do You Read Your Bulletin?

There is now an ongoing discussion regarding the future of the printed version of this newsletter. The topic of what it costs to print and mail it has been raised many times in the past, usually when the latest postage rate increase comes along. These two expenses are a substantial part of what your club dues are paying for today. Although the club's treasury is in good shape and there is no pressing need to cut costs in a hurry, membership appears to be down somewhat and the long-term future of our printed bulletin is again being called into question.

I ask you to think about how you read the Bulletin today and then consider what it would be like to receive it via the Internet. That would mean you would either read it on your computer screen or decide to print out these eight pages at home. On the plus side, you would see all the photography in color. On the other hand, ink-jet printers need care and lots of "feeding". If you have a laser printer, you could save a few bucks, but then end up seeing black and white photos. If you want to see what it



looks like online, just go to the club's web pages at <http://www.qsl.net/w6ka> and download the latest Pasadena Radio Club Bulletin.

Decisions, decisions! Give this some thought and then let your board members know what you want. If you think the extra cost of having the Bulletin delivered to your mailbox every month is worth it, make sure they know how you feel. - 30 -

Sweepstakes, continued from page 3

Contacts were made on 80, 40, 20 and 15 meters.

At some point, we went outside and watered the ground rod and mast to improve the ground's condition on the lower bands.

I "retired" at about 11PM but Ray and Roz stayed on.

When I woke up the next day, Roz was on the radio, "working it". I joined her and we kept on. Ray joined us a little later.

As things progressed on the second day, we noticed that propagation was dropping, we kept hearing the same stations, and that we would not be able to sweep. However, at the end we succeeded in getting 124 contacts, with a total score of 14,136 points!

That qualified us for a pin!



Result analysis

QSOs by band

80m: 24
40m: 33
20m: 62
15m: 5

Top 3 QSOs by section

SCV: 11
SV: 9
WWA: 6

A super-duper time was had by all!

Pasadena Radio Club

Meeting Minutes

taken by Cynthia Berne N6NCE

Board of Directors, 11 March, 2008

Meeting started at 7:30 PM with the following members in attendance: President Peter Fogg, Tom Berne, Cynthia Berne, Ray Overman, Harry Brumer, Bruce Nolte, John Minger, Mike Dinko, Pamela Royce, and Phil Barnes-Roberts.

REPORTS

SECRETARY: The Jan. 8 Board minutes were approved as corrected. The Feb. 26 General Meeting minutes were approved.

TREASURER:

Harry Brumer reported the PRC assets as of Mar. 10, 2008: \$5020.62.

The report was accepted.

VICE-PRESIDENT: Bruce reported on future speakers. The February speaker was Dick Norton on the ARRL. The March speaker will be Allen Wolff KC70 on the subject of his Mini DX expedition. The April speaker will be Randy Hammock KC6HUR on the subject of CALNET.

Bruce mentioned the Appreciation plaque was presented to the Klenks. A sum of \$52 was collected at the general meeting for the memorial to Sandy Klenk.

HEALTH AND WELFARE: Bruce announced that former PRC member Harvey Hetland N6MM died recently. The memorial service is Thursday, March 13 at 11AM at the Westminster Presbyterian Church on No. Lake Avenue. A notice of his death will be in the Newsletter.

NEWSLETTER: John Minger announced that the cutoff date for membership is April 1. He will put the renewal form in the March Newsletter as an insert, not a tear off.

REFRESHMENTS: Cynthia Berne will provide refreshments in March; Pamela Royce in April.

OLD BUSINESS: There were 2 new members at the last general meeting.

NEW BUSINESS:

1. Harry brought up the idea of sending the Newsletter online to all members who can receive it. The present mailing cost is \$92.80 per month. There

was agreement. Peter will ask at the next meeting how many need it as a hard copy.

2. **FIELD DAY:** (June 28-29) All of the Board members who visited two sites agreed that we should go to the Art Center. Advantages included: no traffic as it is a cul de sac, level parking lot, better security than other site, excellent exposure for RF to the east, has no power lines nearby and has several tall trees for antennas and shade.

Peter has a verbal, not written, OK from the Center. He will finalize the arrangements.

Motion made to use this site: moved by Tom. Seconded by Ray, Motion carried.

Price of \$300 to use the site was waived by the Center.

Need someone to stay there at night for security. Generator noise was discussed. It was decided to charge batteries during the day. Do not need to charge them at night.

Tom Damberger WA6EHD will perhaps be asked if group can use his hydrogen fuel cell.

People will need headlamps and/or flashlights.

Saturday night food was discussed but no decision was made by the Board. A La Cañada pizza place which charges \$125 for 25 people (\$5 each) was mentioned as a possibility.

Peter mentioned that there is a need to find a new place to store the club's 30-foot tower for two reasons: one, to relieve the Bassetts of the responsibility of storing the equipment and two, to allow more convenient access to the equipment for all of the Club members.

3. A motion by Harry was dropped for lack of a second.

4. Liability insurance. Pamela questioned the limits of our liability insurance. Peter and Bruce will look at the old records, and give them to Pamela to look over. This can be a future agenda item.

5. Bruce will take the plaque located in Kaiser/PRC radio room and have this year's and last year's PRC Presidents and Vice Presidents put on it.

Board Meeting adjourned at 8:35PM.

General Meeting, 25 March, 2008

Meeting was called to order at 7:05 PM by President Peter Fogg. Peter welcomed everyone and asked if there were any visitors present.

See Meeting Minutes, page 6

Meeting Minutes, continued from page 5

Vice President Bruce Nolte introduced the speaker Allen Wolff, KC7O, who gave a talk on his DXpedition to Grand Exume Island, in the Bahamas. During the DXpedition, he made contact with members of the PRC-Harry Brumer, John Minger and Hal Frank to list a few. To end the program, he showed members how to make QSL cards on the computer.

At 8:10 there was a break before the business meeting.

Treasurer Harry Brumer reported that the PRC has \$5020 in its account. He reminded members that membership dues are due as of April 1st.

Bruce reported on his visit with the Klenk family where he delivered the document of appreciation signed by the membership. He said that \$52 was collected at last month's meeting for the memorial to Sandy Klenk at the Scout Headquarters.

Peter thanked John Minger again for the recent Bulletin and remarked on its excellent quality. He took a poll as to which members present did not have access to the Bulletin if it were sent by the Internet. Everyone present could receive it by email. To email copies could save the PRC about \$100 per month.

Peter announced a workday with Don Girard, an active 84 year old ham, not a PRC member, to finish putting up a tower for him, and asked members to

volunteer to help this coming weekend, March 29-30.

Peter and the board are moving along with planning Field Day 2008, to be held June 28-29. He is in conversation with the Art Center personnel, who have assured him verbally that the place is available, but he is waiting for a written commitment. Before that, the Special Events person there will meet with him and Security for a walk through. There will be both handicapped and regular restrooms available. Peter distributed a Field Day Band Captain's Check List, made by Paul Gordon, and asked for volunteers to man the bands. Tom Berne will run 40 meter phone; Bruce will run a 2 meter FM station. Volunteers are welcome to help them or to captain their own band.

Refreshments will be done by Pamela Royce in April.

Allen Wolff KC7O ran the Go Pack contest. Winner was the one who packed the lightest bag/pack. Contestants were Bruce Nolte N1BN, Lee Zanteson W6FPO, Paul Gordon N6LL, John Minger AC6VV and Allen Wolff KC7O. The winner was Bruce.

Phil Barnes-Roberts suggested the club members who have old (not too old) *QST*, *CQ*, or *73* amateur radio magazines drop one off in the magazine rack when visiting their doctor or dentist. He passed out stickers to glue over the address label. The labels say, "This magazine has been left by a member of Pasadena Radio Club" and gives our website URL

Pasadena Radio Club meets the fourth Tuesday of each month at 7:00 p.m. in the Kaiser Permanente Walnut Center, located at 393 East Walnut Street, at the corner of Los Robles Avenue in Pasadena. Enter the parking structure at the Los Robles Avenue entrance and mention "Pasadena Radio Club" over the security intercom. Everyone is welcome to attend. Please sign in at the front desk and they will direct you to the meeting room.

Membership in the Pasadena Radio Club is open to anyone interested in Amateur Radio. Dues are \$30 per year, \$15 for students. Request a membership application at the club's mailing address, on the club website, www.qsl.net/w6ka, or in person at the monthly meeting.

The Pasadena Radio Club, W6KA, conducts a weekly net every Tuesday night, except on meeting nights, at 7:00 p.m. The frequency is 145.180 MHz (-) PL 156.7. All licensed amateurs are invited to participate.

The club has a packet station on 145.630 and on 223.600 (crossband capable) with a PBBS of W6KA-10 and a Node of MIRDOR.

There is an unofficial e-group site for club members at <http://groups.yahoo.com/group/PRC-Club/>. All members are invited to join as this allows for quick dissemination of information to members via e-groups e-mail.

Bulletin Submissions – please submit any articles or ideas for future articles via e-mail to AC6VV at [arrrl dot net](mailto:arrrl@net), please include "PRC" in the subject. Any other modes of submission may be arranged in advance on an individual basis. Submissions are due by the Friday after the board meeting.

Permission is granted to use articles in this issue as long as "Pasadena Radio Club Bulletin" is credited.

Please submit any address or e-mail changes to the Treasurer.

<i>President</i> Peter Fogg	KA6RJF Peter dot Fogg at sbcglobal dot net (626) 797-9125
<i>Vice-President</i> Bruce Nolte	N1BN n1bn at altrionet dot com (626) 257-5502
<i>Secretary</i> Cynthia Berne	N6NCE cberne at juno dot com (323) 665-6289
<i>Treasurer</i> Harry Brumer	K7IB k7ib at arrl dot net (626) 355-4501
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<i>Bulletin Editor</i> John Minger	AC6VV (323) 256-0046 ac6vv at arrl dot net


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Club, and amateur radio hospital
emergency communications

and Phil's phone number. The idea is to get more people interested in ham radio.

Mike Dinko mentioned that the *Amateur Radio Newsline*, which is played on the club net (Tuesday evenings except on meeting nights), is also available on www.QRZ.com before the time it is played on the net.

There being no further business, the meeting was adjourned at 8:35PM.

Refreshments

Drinks and cookies -- this month are provided by Pamela Royce, W6PNW.



This Month at the General Meeting:
Tuesday, April 22nd, 2008 @ 7:00 pm

Randy Hammock, KC6HUR
The Calnet Repeater System

FIRST CLASS

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SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
April 20	April 21	April 22	April 23	April 24	April 25	April 26
Passover		PRC Club Meeting 7:00 pm	Kaiser Net 147.270 Mhz 12:15 pm 7.228 Mhz 12:45 pm		Arbor Day	TRW Swap Meet
April 27	April 28	April 29	April 30	May 1	May 2	May 3
		PRC Net 7:00 pm 145.180 - PL 156.7				
May 4	May 5	May 6	May 7	May 8	May 9	May 10
		PRC Net 7:00 pm 145.180 - PL 156.7				Fire Service Day
May 11	May 12	May 13	May 14	May 15	May 16	May 17
Mothers Day		PRC Net 7:00 pm PRC Board 7:30 pm				Chino Hills Swap Armed Forces Day
May 18	May 19	May 20	May 21	May 22	May 23	May 24
		PRC Net 7:00 pm 145.180 - PL 156.7				
May 25	May 26	May 27	May 28	May 29	May 30	May 31
	Memorial Day	PRC Club Meeting 7:00 pm	Kaiser Net 147.270 Mhz 12:15 pm 7.228 Mhz 12:45 pm			TRW Swap Meet