

The PROPAGATOR

February, 2005

The Monthly Newsletter of South Orange Amateur Radio Association

BELOW 500 KHz	Another Wet T-hunt	Section Manager Visit																																						
<p>SOARA member Kriss Larson, KG6UOS, will present a talk on Long Wave radio. Many American hams may be unfamiliar with long waves since we do not have any ham bands in that frequency range. What Long Wave communications has been done by hams in the U.S. has been conducted as "Part 5" experimental stations.</p> <p>For many years Kriss has been member of the Long wave Club of America (LWCA), and has contributed articles to the organization's magazine. KG6UOS recently delivered a long wave lecture for the members of the SCADS Short Wave Listeners group.</p> <p>In addition to his radio hobby interest, Kriss is an accomplished accordionist. He is the leader of a Scandinavian folk band. When the King of Sweden was visiting Disneyland, Kriss's band was selected to be a part of the entertainment . <input type="checkbox"/></p>	<p>It's super bowl Sunday, all of the pre-game parties are in high gear, and it just looks like the clouds are going to open up at any time. Still, it is the first Sunday of the month and time for the SOARA T-hunt to start. Hard core hunters will chase a hidden transmitter in any weather. They may moan about the rain, or the heat, or the snakes, but they always show up.</p> <p>At the first chirp from the "T" my s-meter was pegged and we were off. Richard, K6RBS, and I both selected new starting spots. He confirmed that the signal was "hot" — I was starting to worry about RF exposure!</p> <p>I tracked the signal to a nursery, where I left the car and started on foot. Halfway through the nursery the clouds opened up and I had to find shelter. None of the plants offered significant shelter and the only refuge I could find was in an outhouse. While there I made contact with Richard. He was in the area, but I didn't know where.</p>	<p>The featured speaker for January was Carl Gardenias, WU6D, the new Orange Section Manager(SM). Carl told us that he had to deviate a bit from his usual presentation, because SOARA has such a large group attending our meetings. The January attendance was 55 members.</p> <p>In the first part of Carl's talk, he described the organization of the Orange Section which includes Orange, Riverside, San Bernadino, and Inyo counties. The size of the section presents a problem to the SM in visiting club meetings and events in such a large and active section.</p> <p>In addition to describing the Orange Section operation and the various volunteer positions through which local hams can contribute to the hobby, he described the relationship to the ARRL, both the national and the local (South Western) Division.</p>																																						
<h2 style="text-align: center;">New Members</h2> <p>A hearty welcome to SOARA's new members:</p> <p><i>Joined in January:</i></p> <table border="0"> <tr><td>Doud Avaux,</td><td>KG6WLC</td></tr> <tr><td>Pete Arnt,</td><td>KF6SWN</td></tr> <tr><td>Howard Hawkins,</td><td>N6HRA</td></tr> <tr><td>Robert Salkeld,</td><td>N1HE</td></tr> <tr><td>Tom Hobbs,</td><td>AE6SH</td></tr> <tr><td>Jeff McCloud,</td><td>AG4TJ</td></tr> <tr><td>Daniel LePage,</td><td>WA1OOH</td></tr> </table> <p><i>Transferred from HROC:</i></p> <table border="0"> <tr><td>Max Bauer,</td><td>AB6NS</td></tr> <tr><td>Bill De Smith,</td><td>K6BWZ</td></tr> <tr><td>Ronald Denos,</td><td>KG6BAN</td></tr> <tr><td>Peter Ernster,</td><td>WA6TQQ</td></tr> <tr><td>Norma Fish,</td><td>KB6TLV</td></tr> <tr><td>George Jacob Jr.,</td><td>N6VNI</td></tr> <tr><td>Frank Rossio III,</td><td>KK6YQ</td></tr> <tr><td>Lorne Sherley,</td><td>K6OMD</td></tr> <tr><td>Edwin Snyder,</td><td>KC6ITV</td></tr> <tr><td>George Stokes,</td><td>WT6U</td></tr> <tr><td>Steve Wallis,</td><td>WA6PYE</td></tr> <tr><td>Jim Martin,</td><td>KG6AGR</td></tr> </table>	Doud Avaux,	KG6WLC	Pete Arnt,	KF6SWN	Howard Hawkins,	N6HRA	Robert Salkeld,	N1HE	Tom Hobbs,	AE6SH	Jeff McCloud,	AG4TJ	Daniel LePage,	WA1OOH	Max Bauer,	AB6NS	Bill De Smith,	K6BWZ	Ronald Denos,	KG6BAN	Peter Ernster,	WA6TQQ	Norma Fish,	KB6TLV	George Jacob Jr.,	N6VNI	Frank Rossio III,	KK6YQ	Lorne Sherley,	K6OMD	Edwin Snyder,	KC6ITV	George Stokes,	WT6U	Steve Wallis,	WA6PYE	Jim Martin,	KG6AGR	<p>After the rain let up and I could go on, I followed the signal past an archery range and finally met Richard at Alton and Irvine Blvd. Soon the signal was so strong that I was receiving it without an antenna on the radio. In a short time we were in a park and at the transmitter site. We were proud puppies when we found that we were the first ones there. In about ten minutes Karl, KF6MDF, showed up. We were humbled to learn that he had started the hunt about a half hour late! We offered to relinquish first place to him (based on hunting time), but he declined.</p> <p>Kareem, KG6USK, and Patty had prepared a feast of hamburgers, hot-dogs, salad, and drinks for the weary hunters. Howard, KG6GI, and Lou, KG6FCT, showed up shortly and enjoyed some food and fellowship before going on to quickly find the transmitter. Brian, NJ6N, was on the trail, but he was scheduled to host a pre-game party at his house and had to drop out of the hunt to take care of that responsibility.</p>	<p>Carl explored, in the second half of his talk, the "Whys" that get people to enter Ham radio, what sparked their interest initially, and what keeps them interested. He hopes to use information from discussions with club members to make the Orange Section more in tune to the needs of various clubs and individual members.</p> <p>We would like to thank Carl for taking time from his busy schedule to visit us and for keeping us aware of the many functions and activities of the ARRL. <input type="checkbox"/></p> <p>Next month the Dave and Richard team will hide the "T". I hope we can match the layout that Patty and Kareem set up. Thanks guys for the hunt and the BBQ.</p> <p>73</p> <p>Dave, KG6QCI <input type="checkbox"/></p>
Doud Avaux,	KG6WLC																																							
Pete Arnt,	KF6SWN																																							
Howard Hawkins,	N6HRA																																							
Robert Salkeld,	N1HE																																							
Tom Hobbs,	AE6SH																																							
Jeff McCloud,	AG4TJ																																							
Daniel LePage,	WA1OOH																																							
Max Bauer,	AB6NS																																							
Bill De Smith,	K6BWZ																																							
Ronald Denos,	KG6BAN																																							
Peter Ernster,	WA6TQQ																																							
Norma Fish,	KB6TLV																																							
George Jacob Jr.,	N6VNI																																							
Frank Rossio III,	KK6YQ																																							
Lorne Sherley,	K6OMD																																							
Edwin Snyder,	KC6ITV																																							
George Stokes,	WT6U																																							
Steve Wallis,	WA6PYE																																							
Jim Martin,	KG6AGR																																							



The Way I See It:

Protecting the Amateur Radio Service.

SDG&E to Offer Broadband Service Over Electric Lines

By James S. Granelli, Times Staff Writer

San Diego Gas & Electric Co. said Tuesday that it would launch a pilot program offering some customers broadband Internet access over power lines, making it the first electric utility in the state to test the latest high-speed technology.

But the broadband connection would be a byproduct of what the utility really wants: a way for customers and the company to better manage electric service.

SDG&E spokesman Ed Van Herik said the company had not yet ironed out many details of the test, including how many customers would be included.

The utility, a unit of San Diego-based Sempra Energy, serves San Diego County and south Orange County, where the broadband providers are primarily regional phone giant SBC Communications Inc. and cable companies such as Cox Communications Inc.

An SDG&E executive, Lad Lorenz, revealed the pilot project at the end of a daylong hearing on the status of broadband deployment. The meeting was held in the San Francisco offices of the state Public Utilities Commission, which issued a preliminary report on broadband deployment statewide.

Lorenz said SDG&E wanted to make sure that broadband over power lines, or BPL, could provide customers such services as minute-by-minute prices to help them manage their use of electricity. The network also would have to provide the utility with some operational benefits, such as precise data on any problems with the lines, he said.

The municipal utility in Manassas, Va., the only city entirely covered by BPL, also powers such services as traffic cameras to help monitor congestion and other problems. Coming up with a profitable business model has been the primary deterrent to expanding BPL

Shares of Sempra rose 38 cents to \$39.38

on the New York Stock Exchange.

L.A. Times, Feb. 9, 2005

BPL may be coming to a power line in your neighborhood soon. If it does, and if it interferes with your ham radio reception how will you handle it? Yes, you can report it to the company (SDG&E) and to the FCC, but the experience from other sections of the country, as reported by the ARRL, is not encouraging.

Yes, BPL operates under Part 15 and ham radio is a licensed service and . . . It hasn't been that easy for other hams. Let's imagine a complaint by a ham operator. What the ham says: "I am receiving severe interference from your BPL transmissions. I never had this kind (or this much) interference before."

What the BPL company (SDG&E) hears: "I want you to stop conducting your business so I can enjoy my hobby. Anyway, the FCC approved our test (or use) of this system." They are not going to be sympathetic! After all, their job may depend on the continued operation of the BPL service. You may be put off with statements like: "Our engineers have made measurements, and we are well within the limits of radiation allowed." It may be that the best response you can hope for is for the utility to promise to look into your complaint and to make their own measurements.

If the occasion arises, you will need to be well prepared with a history of measurements from prior to the BPL deployment. Since BPL occupies frequencies 80 MHz and below, it is primarily HF operators who face the threat of interference. From the ARRL reports it appears that all of the HF bands are likely to be affected.

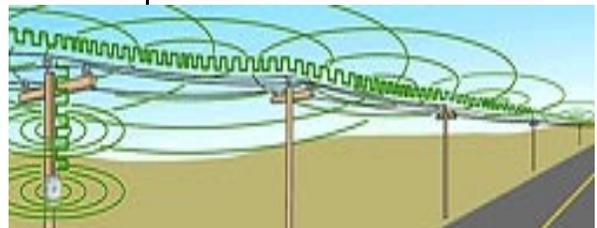
To collect preBPL noise level measurement data you will want to use your regular communications receiver or transceiver. After all, that is where you will be receiving BPL interference if it comes to your neighborhood. I believe that log books (for logging QSOs) are still readily available as give-aways from the radio companies. A regular log book is readily adapted to making regular measurements of background noise levels. Of course, you can make your own

log sheets on the computer.

Entries should include: Date, Time, Frequency, Mode, Bandwidth (receiver setting), S-Meter reading, and a column for Comments. Entries should be made on a fairly regular schedule. The idea is to get enough readings that they will represent a valid measure of the normal background noise.

You will want to search for fairly quiet frequencies (on some bands and at some times this will be easy). Local BPL interference won't go away when the bands are "dead," so data showing very low S-meter readings on the background are valid. Don't fall into the trap of only recording when the band is quiet. Try to build a picture of the real nature of the noise background—at your location—over time.

On occasion you could make tape recordings to build an audio log of the background. The audio recordings do not have to be taken as regularly. They will provide a means of comparing "normal" background to BPL interference (if it shows up). Audio recordings can be identified with a voice record of the date, time, band, etc.



You may never have a need for the data you collect, but if you ever find that you are fighting to rid your neighborhood of BPL interference, it will be too late to collect the reference levels. You don't want to be faced with a skeptical and hostile BPL ISP provider with the FCC leaning toward their point of view and find that you don't have any ammunition other than your assertion that "the airwaves used to be quieter." The situation may appear clear cut to us hams, but we are not the ones who have to be convinced. Take some time and start collecting data now. □

Year 2005	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
General Meeting 7:00 PM	24	28	21	18	16	20	18	15	19	17	21	No meeting
Program	WU6D (Org. SM)	KG6UOS "Long Waves"	N6NHP "Ham Radio & Astro."	AA6MH Calif. ACS	Spring Auction	Field Day Prep.	Show & Tell	K3AW Video on Antennas	K6RIX Radio KFI	TBD	Fall Auction	—
VEC Testing	24	28	21	18	16	20	18	15	19	17	21	—
SOARA T-Hunt	9	6	6	3	1	5	10	7	11	9	6	4
Board Meeting	31	3/7	28	25	23	27	25	22	26	24	28	
ARRL Field Day						25/26						
SOARA picnic								7				
SOARA Holiday Party												4

Metric Century

Saturday, February 19, SOARA members Heiko, AD6OI, Patty, AD6OH, and Ray, AE6H, assisted the organizers, Team Big Bear, by providing communications for the Borrego Springs Metric Century Bikeathon. The ride consisted of three simultaneous events: the 10, 34, and 64 mile courses, winding around the town of Borrego Springs and the Anza Borrego State Park. The event was co-sponsored by the town of Borrego Springs, and the Borrego Springs Rotary club as a fund raiser. The riders and radio operators braved alternating sun and rain, but the event was both fun and successful. Note: 64 miles is roughly equal to 100 kilometers, hence the term "Metric Century". □

Class Notes

The current SOARA class for new hams going for their technician class license is off to a flying start with 23 students. There is a broad cross section of participants, with a number of scouts, several members of the LDS church, some family groups, and SOARA family members. The ages range from 12 years and up. A common factor is that all of the students appear interested and motivated, so instructing the classes is both fun and challenging.

The class is being coordinated by Chad, KQ6TL, our education director and instructors are John, AC7GK, Heiko, AD6OI, Dale, W8RRV, Ray, AE6H, and a presentation by Jim, K6EEE. SOARA is happy to sponsor the class for so many new hams, and we wish them success. □

Repeater Systems Status

There has been quite a bit of activity with the Laguna Beach repeaters this past month as we continue with the upgrade program at this site.

2-Meter Repeater - The power amplifier failures are a result of the changes to improve the usable range of the 2-meter repeater and reduce the de-sense problem that I have written about in the past. By reducing our transmit power from the 100 watts we used to run to 25 watts has really improved the range of the repeater.

The power amplifier is rated at 160 watts, and it really dislikes being run at 15% of its rating. The result has been two failures of

some quite expensive RF transistors. Without the power amplifier, the site was transmitting with 5 watts which is why many of you had problems hearing the machine.

We are in the process of acquiring a more suitable amplifier which will be installed within the next couple of weeks. Meanwhile, we have borrowed an amplifier from one of the members until the arrival of the replacement

.220 Repeater - We have removed and modified our 224.100 repeater from the site making equipment changes to interface with our updated controller system.

Standby Power System - We have also cut-over to our new back-up power system to

two of the three repeaters. With this new system we should be able to survive many hours of loss of prime power. While there is a mobile engine generator set on the site, this protects the repeaters in the event that the generator is reallocated to another location in an emergency.

Santiago Peak - With the merger with the HROC group, the management of the 447.180 repeater becomes SOARA's responsibility. Testing is underway to find a way to improve its receiver sensitivity. Any site activity will have to wait until later in the spring when the access to the site becomes more practical.

Howard Brown, KG6GI
Repeater Director □

The PROPAGATOR



South Orange Amateur Radio Association
P.O. Box 2545
Mission Viejo, CA 92690

Meeting: February 28, 2005 at 7:00 PM Kriss Larson, KG6UOS

☛ **SOARA** meets at the Mission Viejo Community Center, 26932 Veterans Way, Mission Viejo, the third Monday of every month at 7:00 PM. Changes to the meeting time or place are announced in this newsletter and on the 147.645 two-meter repeater.

☛ **License Exams:** Amateur License Exams are given prior to SOARA meetings. Exams are from 5:00 to 7:00 PM. Walk-in applicants are welcome. For information call Paul Levey, NZ1M, at 949-481-5454.

☛ **Contacting SOARA:** Questions about SOARA? Send e-mail to: info@soara.org, or leave a message at 949-249-1373.

☛ **Web Site:** SOARA maintains a web site with current club information. The URL is: <http://www.soara.org>.

☛ **Repeaters:** The Laguna Beach, San Clemente, and Trabuco repeaters are open. The Santiago Peak repeaters are closed. For details or questions on the repeaters contact the Repeater director, KG6GI.

2m — 147.645 - (110.9) Laguna Beach
2m — 146.025 + (110.9) San Clemente
2m — 145.240 - (110.9) Trabuco
220 — 224.100 - (110.9) Laguna Beach
220 — 224.640 - (123.0) Santiago Pk. (C) 440 —
445.660 - (110.9) Laguna Beach
440 — 447.180 - (131.8) Santiago Pk. (C)

☛ **Nets:** SOARA 2 m repeater open net is held Tuesday 8:00 PM 40 meter HF net (7.250 MHz +/- for QRM), Sunday 7:30 AM.

SOARA OFFICERS

President: Ray Hutchinson, AE6H 949-496-8020
ae6h@soara.org
V.P.: Jim Yetter, K6LIO 949-581-3123
k6lio@soara.org
Secretary: Robin Whaling, KG6MCA 949-2153095
kg6mca@soara.org
Treasurer: Steve Perluss, KR6CE 949-364-6195
kr6ce@soara.org

SOARA DIRECTORS

Repeater: Howard Brown, KG6GI 949-581-2634
kg6gi@soara.org
Publications: Dale Griffith, W8RRV 949-830-3767
w8rrv@soara.org
Membership: Jim Riedel, K6EEE 949-498-0922
k6eee@soara.org
Education: Chad Edwards, KQ6TL 949-493-3063
kq6tl@soara.org
Technical: Bob Grant, W6CIC 909-780-4788
w6cic@soara.org
Communications: Dave Seroski, KG6QCl. 949-459-7153
kg6qci@soara.org

SOARA COMMITTEES

Activities: Position Open
Testing: Paul Levey, NZ1M 949-481-5454
nz1m@soara.org
Website: Richard Saunders, K6RBS 949-361-1438
k6rbs@soara.org