November Auction

It's time, again, to dig through your collection of old rigs, antenna tuners, SWR meters, keys and such to make room for some new gear. Maybe even some new old gear. Bring your treasures to the SOARA auction and take home some cash. Or better yet, buy some neat equipment at the auction to take home.

Arrive early to display and tag your treasures. The club supplies tags on which you can indicate (by your call sign) who is selling the gear and any minimum bid. The auctioneer might get generous with your gear and sell it for a quarter! Well maybe that is what it is worth, but if you have a minimum price in mind, be sure to indicate that on the tag.

During the auction the high bidder will take the item and tag to the tellers who will record the transaction and collect the bid money. At the end of the auction the tellers will add up all of the sales for each seller and distribute the money. The club keeps a 10% fee.

Malcolm, KO6SY, will not be able to run this auction due to work commitments, but we will have the services of Hieko, AD6OI, and a couple of volunteer auctioneers. Come out and join the fun — and see how the substitute auctioneers perform. It will be fun, even if you don't buy any new gear. □

Membership Renewals

Membership renewals have been coming in at a good rate, but there are still several members who have not been heard from. If you are one of those, why not take care of your annual membership dues now. The operating expenses for the club (repeater site and utility bills, newsletter printing and mailing) come primarily from the dues income.

Dues can be paid by check or over the internet using PayPal. Do it today. □

Activities

SOARA's year end holiday party is coming up very soon. Yes, it is not until December, but it is the first Sunday in December. That is only three weeks away.

It will be held at the Dragon Buffet in Lake Forest. The address is 24416 Murlands Blvd. just south of Ridge Route. We will gather at 5:00 PM. As the restaurant name implies it is a buffet and they have a wide choice of foods. The cost for the meal is $9.99, pay at the restaurant. For senior citizens (over 60) there is a 15% discount. If you watch for fliers in the mail you may find a 15% discount coupon. There will be activities after we eat.

Since December 5 is the first Sunday of the month there will be a SOARA T-hunt. The hunt will start at the regular time, 1:00 PM and should be over in time to attend the party. Richard, K6RBS, and Dave, KG6QCI, will be the hunt masters (they will hide the "T") that day.

If you are looking for more activities early in the day on that Sunday, see Heiko's announcement on page 3. □

Weekday Morning Net

Gordon West has a 40 meter net each weekday morning between 8:30 AM and 9:00 AM. The theme is emergency communications. In the event of a major emergency, the net frequency of 7.250 MHz would be used for out-of-area communications. This net is well supported by SOARA members who are affiliated with their local RACES and ARES city groups.

On Sunday mornings at 7:30 AM, the SOARA 40 m net meets on that same frequency (or near to the frequency depending on interference). Both nets are open to anyone who wishes to check in. □

SOARA Video

Who is that man with the video camera, and what is he up to? That is Dave, KG6QCI, SOARA's Communications Director, and he has been capturing scenes of SOARA events. At the October meeting we saw a compilation of shots he entitled "SOARA Only." It was an entertaining review of the club activities of the past year.

Many of the shots were from Field Day where you could relive the work of putting up the antennas, the awe at their staying up, and then the excitement of operators racking up points with hurried contacts. From there we went to the picnic. You could almost smell the hot dogs and hamburgers cooking. Sort of makes you want to do it all over again next year. □

T-Hunt Report
By Kareem, KG6USK

The transmitter was hidden in Thomas B. Riley Wilderness Park with the yagi pointing to true north. The park is located 6 miles East of the 5 freeway on Oso Parkway. The park entrance is located at the corner of Oso Parkway and Coto de Caza Drive in the community of Coto de Caza.

The first in the hunt was Richard, K6RBS, at 38 min. the second was Dave, KG6QCI, at 50 min. They both played it very well, working as team and using the triangulation method, they where able to arrive at the T in a short time.

Followed in third was Karl, KF6MDF, at 68 min. I must say, he did a good job given the fact that he was working alone and was able to arrive in a short time too.

Tony, AE6QT, Howard, KG6GI, and Matt, KE6ALM, also participated in the hunt. It turned out to be more of a challenge than I first expected. The hunt lasted until 5:00 PM, when the park closed. □

The Way I See It:
Understanding Radio Theory Without Math.

the way I see it

PSK 31 Part Two - Transmitting
By Malcolm, KO6SY

In part one (September) I described how to receive signals quickly and easily. I hope you all had success and copied many QSO's. Now the challenge is how to generate the PSK transmission without terrorizing others on the band!

First of all, if you were able to receive, we know you have a sound card. If you are enjoying surround sound stereo from speakers plugged into the output of the sound card, now would be a good time to disconnect them. You will need to construct a cable from the sound card output (speaker out) to the Mic input of your rig. You could cheat by going out and buying a "rig blaster" or something similar, or you can go to one of the many PSK web sites and "do it yourself". A typical circuit is given at the end of this article and includes the RS232 interface. All you need are the connectors for the rig and speaker out jack, plus a small isolation transformer that can be obtained from Radio Shack and a few resistors to keep the signal level low. Remember the Mic input to your radio only needs a few millivolts and the sound card output is capable of one volt or more output. We will talk about how to keep this under control from the software, but it is always good practice to keep it attenuated also.

You could also use a line input on your rig if one is available, but the method using the mic. is guaranteed. It also allows you to use the VOX on your rig to key up the transmitter. There are other ways to interface between the computer and the rig to key up using the PSK software, but the aim of this article is to get you going quickly. Once you have experience in the mode, you will want to try a keying circuit controlled from the RS232 output of the computer. This would be essential if you have no VOX circuit. The VOX will detect the PSK tones and key up the radio so make sure VOX is selected.

With the cables complete and connected to the mic input and computer we are ready to start the PSK software and have a QSO.

Depending on what software you are using there will be a control panel to set the transmit drive level. This is essential as the audio output from the speaker jack is fed into the rig's mic input. You will need to set this very low, unless you have something wrong with the way you built the cable interface and have too much attenuation between computer out and mic in.

Make sure the transmitter is connected to a dummy load and VOX is on. Switch the transmit meter so you can see ALC level, and adjust the audio out and mic input until the ALC drops to 0. Yes zero, or coming from the other direction watch for the ALC to just come off the zero. When you first switch on, the ALC could well be full scale; this is not a good place for it to be. With the level at a suitable setting on the ALC, check the power output. DO NOT EXPECT TO SEE 100 WATTS OUT. In fact most QSO's are made with power levels of 25 watts or less. If there is more than 25 watts displayed, then back off the transmit power or even the audio input. Although, if you back the audio input too far then the VOX may drop out. You may need to adjust the VOX sensitivity to ensure that you have proper VOX action at all times.

How do we make a contact? Remove the dummy load and put the rig back on an antenna. Tune to 14.070MHz, find a clear channel around the 1KHz point on the PSK display, and put out a CQ. This is usually a preconfigured script that will be set up with your call sign and should automatically stop once the script ends. You may want to check this on a dummy load before putting it on the air to make sure the sequence is correct. This is what the sequence should be:

1) Select the CQ script.

2) Make sure it appears in the transmit window and includes your call sign, I usually like to send out three lines of CQ.

3) If the script did not automatically start the output, then click on the TX button.

4) Watch for the TX to key up and make sure there is little or no ALC.

5) When the script ends, watch for the TX to drop. If it doesn't then click on the RX button or even the TX again. If you want it to stop automatically, you will

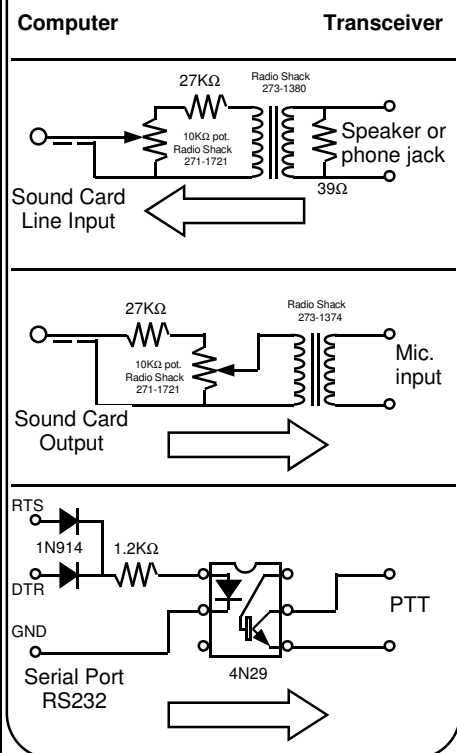have to edit the string and enter a RX command into the end of the script.

6) Watch for the pile up as lots of stations call you back!

Once you make a contact, the first thing to ask is how your IMD looks as this will be the measure of how good and clean the signal is that you are transmitting. If you have not set up the ALC correctly, or if you have some bad ground loops, then there will be a high probability that you will be given a bad report.

You are now fully operational with PSK31. As you find your way around the software you will see all kinds of tricks. The best are the preconfigured scripts which save you typing time. You can have all your station information in one script, the home location in another, and all your credit cards and passwords in yet another.

Happy Warbling   □

PSK-31 Cable Circuits

Computer   **Transceiver**

27KΩ   Radio Shack
              273-1380

10KΩ pot.
Radio Shack
271-1721   Speaker or
                              phone jack
                         39Ω

Sound Card
Line Input

27KΩ   Radio Shack
                     273-1374

10KΩ pot.
Radio Shack   Mic.
271-1721   input

Sound Card
Output

RTS
1N914   1.2KΩ
DTR   PTT

GND
                         4N29
Serial Port
RS232

Year 2004	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
General Meeting 7:00 PM	26	23	15	19	17	21	19	16	20	18	15	No meeting
Program	WB6NOA	W6XD	K0OV		Auction	FD prep					Auction	
VEC Testing	26	23	15	19	17	26	19	16	20	18	15	—
SOARA T-Hunt			7	4	2	6	11	1	5	3	7	5
Propagator Deadline	18	15	7	11	9	13	11	8	12	10	7	
Board Meeting	2/2	3/1	22	26	24	28	26	23	27	25	22	
ARRL Field Day						26/27						
SOARA picnic								1				
SOARA Holiday Party												5

Reserve the Date!

Hi to all: I have committed myself to supporting two races in the next 30 days and I'm looking for volunteers. On Saturday the 20th of November at 8a.m. in the Cleveland National Forest I would like 5 or 6 volunteers. The race should be over by 3p.m. It is a very scenic location, but three spots need either 4-wheel drive or a good pick-up truck.

Also on Sunday the 5th of Dec. starting at Fashion Island and finishing at Back Bay Dr. and Jamboree Rd. is the next Orange County Marathon and 5K. It will run from 7a.m. to about 3p.m., and I'm looking for ten or twelve people for that event. T-shirts and munchies are among the rewards for working these events. If you can help with either or both of these events, please call me at (949) 859-3868, or send me an e-mail at ad6oi@cox.net.

Thank You, Heiko (AD6OI) □

EDUCATION

A class is being planned for January. It has been some time since the club has sponsored a Technician Class, and the details are being worked out now. The dates will be announced soon. If you have friends who are interested, let them know about the class. You can contact Chad Edwards at: kq6tl@soara.org □

THE WHITE HOUSE
September 30, 2004

This letter is in response to a SOARA letter expressing concern about BPL

Dear Mr. Hutchinson:

On behalf of President **b**ush, thank you for your letter about the deployment of Boradband over Power Line (BPL) systems. We appreciate your sharing your thoughts on this important issue.

President Bush has set an aggressive goal for all Americans to have universal and affordable access to broadband services by 2007. One way to achieve that goal is to encourage the development and deployment of new broadband technologies and networks. The Administration believes that BPL has the potential of being the "third broadband wire" into U.S. homes, thus accelerating the availability of affordable broadband services to all Americans. For that reason, the President has called for new technical standards to make BPL possible.

The Administration also recognizes the potential interference risks associated with BPL for amateur radio operators and is dedicated to ensuring that BPL systems do not harm radio users. To reduce the potential risks, the Department of Commerce's National Telecommunications and Information Administration (NTIA) is working closely with the Federal Communications Commission to develop mechanisms to mitigate potentially harmful BPL interference based on more than 10 million measurements of currently operating BPL systems. The study, which can be found on-line at www.ntia.doc.gov/ntiahome/fccfilings/2004/bpl, proposed specific techniques to mitigate interference from BPL to radio systems. The NTIA intends to examine these proposals in a Phase 2 study that will also consider potential long-distance interference from mature, widespread BPL deployments.

While the Administration supports expeditious deployment of BPL services, we will continue to protect America's radio users. Thank you again for taking the time to write.

Sincerely,
Heidi Marquez
Special assistant to the President and Director of Presidential Correspondence

The **PROPAGATOR**

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

Meeting: November 15, 2004 at 7:00 PM
Fall Auction

☞ **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: i*nfo@soara.org*, or leave a message at 949-249-1373.

☞ **Web Site:** SOARA maintains a web site with current club information. The URL is: **h t t p : / / w w w . s o a r a . o r g .**

☞ **Repeaters:** The SOARA 2-meter, 70 cm and 224.100 MHz repeaters are open to all licensed hams.

SOARA	2m	—	147.645 **–** (110.9)	Laguna Beach
SOARA	2m	—	146.025 **+** (110.9)	San Clemente
SOARA	2m	—	145.240 **–** (110.9)	Trabuco
SOARA	220	—	224.100 **–** (110.9)	Laguna Beach
SOARA	440	—	445.660 **–** (110.9)	Laguna Beach

The SOARA 220 and HROC 440 repeaters are shared by members of both clubs. Each machine is subject to the operating rules of its respective club. Call KG6GI for details.

SOARA	220	—	224.640 **–** (123.0)	Santiago Pk. (C)
HROC	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.

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