



The

Propagator

The Monthly Newsletter of the South Orange Amateur Radio Association

January 2011

IN THIS ISSUE

Jan. Meeting	1
Part Report	1
QST de AE6SH	1
Ham of Year	2
W6ETS, Winner	2
T-hunt: Dec.	2
T-hunt: Jan.	2
Antenna Story	3
2011 Calendar	4
Club Directory	4

SOARA Party 2010

The 2010 SOARA dinner was well attended by fifty three members, friends, and family. If you missed it you missed a great time. By all reports everyone enjoyed the food and fellowship. The venue offered a more comfortable space which will allow for growth. It has been decided that the change to the Casta Del Sol country club was so well received that it is tentatively booked for 2011 on December 3rd, so mark your calendars now. Making this years event most enjoyable was the sharing of stories. We offered the floor to those who wished to share a story of a memorable experience involving ham radio in the past year. Well I can tell you that I was overwhelmed with the heartfelt stories that were told. All I can say is that the true holiday spirit is shown year round to many of us. I knew how much I enjoy the hobby and most importantly the friends I have made, but I had no idea how profound that feeling was throughout the membership. Words cannot describe the warmth felt in my heart after hearing those stories. What a way to close out the year and start a new one. As they say this alone was worth

January Meeting

Happy New Year 2011

Club meetings resume after holidays: January meeting is on the 4th Monday, Jan. 24. Murray Center is closed for MLK day on the 3rd Monday.

"It's Your Club"

Come and see some of the benefits of membership that you may be missing. Also have input into coming events and meeting topics. SOARA's Vice President, Timothy McGowen, AF6GL, will be reviewing the benefits of membership and moderating a discussing to get your, the members, feedback into what you would like to see in the future. Find out what your fellow club members are interested in for the club. As always this will incorporate fellowship with your fellow hams.

the price of admission. Hope to see you all at the meetings this year!

Timothy, AF6GL, Activities Chair

**Meeting
January
24, 2011
7:00 PM
N.P.
Murray
Center
Veterans
Way
Mission Viejo**

QST de AE6SH



We made it to the end of another year. Was their really any doubt that the end would come? Kind of like questioning weather the sun will rise and set.... It will happen ready or not! How we are

positioned to view the event is the real issue. This year SOARA's position as we greet a new year is pretty good and the view is bright. We

have a strong start to 2011 with membership renewals slightly ahead of last year at this time and some new activities on the horizon. We will of coarse have our usual activities i.e.: Field Day, Auction's, Picnic, Testing etc... But we will also have some new activities (stand by). Keep an eye on the website and an ear on the weekly net for more info about the latest happenings in your club. I want to thank each of you for a great 2010 and join you in taking in the wonderful view of 2011. I hope that everyone's Holiday season is warm and joyous and the New Year better than any before.

73'
Tom

Ham of the Year



The Richard Coyne, WW7D, Ham of the Year award was presented to Spencer Ammermon, NG6K, at the annual year end dinner on December 3. Spencer, 15 years old earned his first license just over two years ago. He soon upgraded to General Class, and in March of 2010 passed the exam for his Extra Class license. He is currently studying for the General Radio-telephone Operator License (a commercial license). Spencer is actively involved in most of the SOARA activities. Congratulations Spencer on your achievements.

Door Prize Winner



Ernie Sencer, W6ETS, (left) was the winner of the door prize at the SOARA dinner in December. The prize was an ICOM IC-80AD hand held radio (D-STAR capable) and a DV-Access Point adapter. Ernie headed SOARA's VE testing team for several years. Presenting the prize is Timothy McGowan, AF6GL, SOARA's Vice President and Activities Chair.

SOARA supports four D-STAR repeaters, three for digital voice mode and one high speed data repeater.

T-Hunt News



Richard, K6RBS, Sips coffee and waits, out of the rain, after being the first to find the hidden T on Sunday, January 2, 2011. The sad look is because he is feeling sorry for the other hunters who did not locate the transmitter before the rain started.

Richard will hide the transmitter for the next hunt to be held on the first Sunday of February. Perhaps he was thinking of possible hiding places as he waited.

January Hunt

Laura and I started thinking about a hiding place and decided to go as North and East as we could. This took us to Villa Park and Orange. After a couple of scout trips we settled on 33.820068 -117.781004 at an elevation of 447 feet. This location was only accessible by the river trail on Santiago Creek or a small bike path and looked like it would have a fair amount of reflection and multipath propagation. Exactly what the "fox" wants and the hunters despise.

I decided to use a 3 element Yagi to direct the energy down towards the "El Toro Y". This would help hunters pick it up sooner and then make some of the reflections more of a problem. Perfect!

After an hour and twenty minutes RBS pops up on the repeater and says he's found it.. It has now started to rain so Richard and I huddle at the back of the truck and wait for the rest. At about 1435 Gray comes sloshing in, and a short time later the "team" of Dale W8RRV and Carl make their landing.

Mark, KD6WLY

Field Day 2010 Results

SOARA's Field Day entry in 2010 earned us the standing of 16th in the country for Class 3A entries. We were second in California and tops in the Orange Section. Congratulations and thanks to all who participated in last year's Field Day exercise.

We are looking forward to an even greater, and more fun, Field Day in 2011.

December Hunt

Just a quick note to let you know that Mark (KD6WLY) and his XYL Laura (K6VIX) were the first to find Sunday's hidden T in just over one hour.

The transmitter was hidden just over the side of Alta Laguna Park in Laguna Beach, running about one watt into a horizontally polarized four element beam pointed in the general direction of Santiago Peak. This provided a relatively good signal into the Mission Viejo/Laguna Hills areas with plenty of reflections. The problem here was that if you started there, there was no way to get to the transmitter directly.

Kriss (KR6ISS) was the second hunter to locate the transmitter followed by Richard (K6RBS) and his cohort Mike (NM6X), followed shortly after by Joe (W6BGR).

Thanks to all for making this a fun hunt!
Gray, WA6BJY



The 2011 Calendar for SOARA events is located on the top portion of page 4. Be sure and check out the dates for special events.

As plans are developed through the year the dates will be added to the calendar.

Come to the January meeting on January 24 for a discussion of possible activities. Your input and reaction is wanted.

Hamfest

January 29, 2011
(Saturday)
9:30 AM - 4:30 PM
Palm Springs, CA
The Desert Rats
&
Palm Springs
DXClub
<http://www.desertrats.am>



A Better G5RV

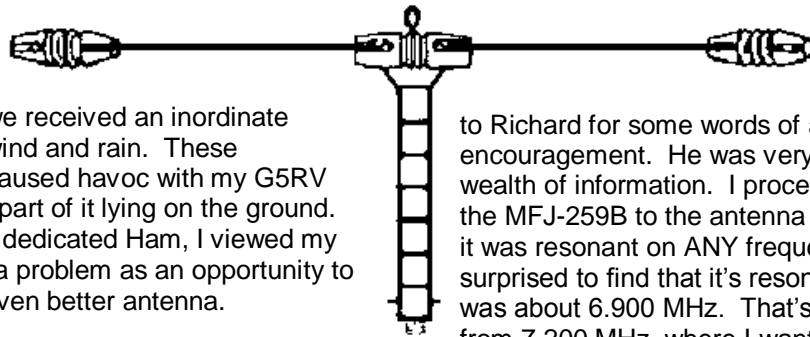
A few days before

Christmas we received an inordinate amount of wind and rain. These conditions caused havoc with my G5RV and I found part of it lying on the ground. So, like any dedicated Ham, I viewed my little antenna problem as an opportunity to rebuild an even better antenna.

I browsed the internet looking for the perfect G5RV. There is a great deal of controversy about this antenna. Many Hams feel it is a great 20 meter antenna but a compromise as a multiband antenna. I found that MY G5RV was very finicky to tune. So difficult, in fact, that on several occasions I went outside to see if the antenna had fallen to the ground.

In my search for a G5RV that will better meet my needs, I stumbled across an article about a better G5RV. I found it on the net site <http://www.karinya.net/g3txq/g5rv/> left section under G5RV. Look at section "D. Can we do better"? (Also see WWW.W5DDL.org) I was intrigued with Brian Austin, ZS6BKW/G0GSF, ability to get an SWR of <1.2 on 40m, 17m and 12 m WITHOUT a tuner and much of 20m and 10m. Brian cut the top horizontal section to 93 ft. and the vertical feed section was 39.8 ft. of 400 ohm ladder line. My G5RV was 102 ft. across the top section and the feed line was about 31'.

With this information at hand, I set out to make my G5RV even better. I trimmed the top section to 93 ft. and I replaced the 450 ohm feed line with a 40 ft. section. A little long, so I could trim it to my operating frequency. I raised the antenna to 40 ft., and anxiously ran to my station to tune-up using the "perfect G5RV". Well, I was stunned to find out that not only had I NOT created the perfect G5RV but I couldn't get the antenna to tune on 40 meters... even with an external tuner. Brian was able to get his G5RV to "tune up" on 40 m and 20 m WITHOUT a tuner. I couldn't even get mine to tune WITH a tuner. What went wrong? Well after analyzing my problem, I realized I had two resources, my MFJ-259B antenna analyzer and Richard, K6RBS. I had to get serious



about this antenna. I made a call

to Richard for some words of advice and encouragement. He was very helpful, with a wealth of information. I proceeded to connect the MFJ-259B to the antenna to determine if it was resonant on ANY frequency. I was surprised to find that it's resonant frequency was about 6.900 MHz. That's not too far from 7.200 MHz, where I wanted to operate.

Maybe there is hope for this antenna. So, I started to experiment. I first folded the 450 ohm ladder line back onto itself in sort of a tight Z shape to see if I could "trick" the ladder line into acting like it was shorter. I watched the SWR drop down to close to 2:1. That told me that I needed to shorten the ladder line by about the amount of the folded feed line. Then I began trimming the ladder line. Six inches at first, then about one inch at a time as I got closer to 7.200 MHz. I tracked my progress on paper just to keep things straight. I was elated to find that when I had trimmed the feed line to about 38 ft., the SWR dropped to below 1.5. I then switched to 20m and found that the SWR at 14.200 MHz was 1.4:1. Forty and 20 meters resonate without a tuner, just as Brian Austin had found.

The next day I gave the antenna a real world, on the air test. My first contact after the modification was Argentina, which is no big deal, I know but this was on 40 meters and because of my antenna location, I find it very difficult to get into South America.

The G5RV is now very easy to tune on both 20 and 40 meters and seemed to tune well on 15 and 10 meters as well.

Before the G5RV, I used a 40 meter Carolina Windom then moved to an 80 meter Windom. I was never happy with the performance of either antenna. For that reason I moved to a G5RV. I feel the G5RV outperformed both of the Windom's but this last modification made to the G5RV beats them all.

So my efforts were not in vain. Antenna design and construction can be very frustrating but it can also be the source of great satisfaction.

Howard Hawkins
K6BYU

Year 2011	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	—
Program					Spring Auction						Fall Auction	—
VEC Testing	24	28	21	18	16	25 Field Day	18	15	19	17	21	—
SOARA T-Hunt	2	6	6	3	1	5	3	7	4	2	6	4
Board Meeting	31	Mar 7	28	25	23	27	25	22	26	24	28	
Special Events					20-22 Dayton				9-11 SW Div Hamcon			
ARRL Field Day						25-26						
SOARA picnic								7				
Holiday Party												3

☛ **SOARA** meets at the Mission Viejo Community Center, 26932 Veterans Way, Mission Viejo, the third Monday of every month at 7:00 PM. For the months of January and February the third Monday is a holiday and the meeting is held on the fourth Monday.

☛ **License Exams:** Amateur License Exams are given prior to SOARA meetings. Exams are from 5:30 to 7:00 PM. Prior registration is encouraged, but walk-in applicants are welcome. For information call Mike Slygh, NM6X, at 949-305-1374.

☛ **Contacting SOARA:** Questions about SOARA? Postal mail: P.O. Box 2545, Mission Viejo, CA 92690. 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
D-Star	2m	—	146.115	+	(K6SOA C)	Laguna Beach
	220	—	224.100	—	(110.9)	Laguna Beach
	220	—	224.640	—	(123.0)	Santiago Pk. (C)
D-Star	440	—	445.660	—	(K6SOA B)	Laguna Beach
	440	—	447.180	—	(131.8)	Santiago Pk. (C)
D-Star	1.2G	—	1282.600	—	(K6SOA A)	Laguna Beach

☛ **Nets:** SOARA UHF/VHF open net is held Tuesday 8:00 PM 40 meter HF net (7.200 MHz +/- for QRM), Sunday 8:00 AM.

SOARA OFFICERS

President: Tom Hobbs, AE6SH 949-830-8131
ae6sh@soara.org

V.P. Tim McGowen, AF6GL 760-310-7634
af6gl@soara.org

Secretary: John Anderson, NJ6A 949-581-9847
nj6a@soara.org

Treasurer: Tom Parkes, KI6DDB 714-224-2982
ki6ddb@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: Horst(KD7JHR) & Marie(KD7JHS)
Zitzmann . . 949-768-8552
kd7jhr@soara.org or kd7jhs@soara.org

Education: Hal Silverman, WB6WXO 714-897-5002
wb6wxo@soara.org

Technical: Brian Roode, NJ6N 949-495-5336
nj6n@soara.org

Communications: Kris Marciniak, KI6IUC 949-680-9906
ki6iuc@soara.org

SOARA COMMITTEES

Activities: Tim McGowen, AF6GL 760-310-7634
af6gl@soara.org

Testing: Mike Slygh, NM6X 949-305-1374
nm6x@soara.org

Website: Richard Saunders, K6RBS 949-770-5099
k6rbs@soara.org

Ambassador: Heiko Peschel, AD6OI 949-859-3868