



# Propagator

The Monthly Newsletter of the South Orange County Amateur Radio Association

## In This Issue

President's  
Message .....1

Meeting .....2

SAQ VLF.....3

WFD Testing....4

Slinky Antenna  
Pt 2.....4

Elmer Saturday  
.....5

Membership  
Report.....5

Nets/Repeaters.  
.....6

Swap Meets are  
Back!.....6

Financial Report  
.....8

Soara Library . 9  
Sale Mail List. .9

## General Meeting

January 24,  
2022 7:00 PM

[Join Meeting Online](#)

## Presidents Message - January 2022

SOARA is participating this year, for the first time, in Winter Field Day, (WFD) 2022 on Saturday, January 29, 2022. Our participation is limited, as we're going to have shortened operating hours, running from 11:00 Saturday until dark, or until we get cold, hungry, etc. While, like summer Field Day, WFD does run for 24 hours, 11:00 Saturday until 11:00 Sunday, we're opting to take it easy this first year, to see how well it is received and gauge the level of enthusiasm of our members.

We'll set up, coincidentally with SOARA Elmer Saturday at Gilleran Park, 09:00 Saturday the 29th, and be up and running by 11:00, the official start time. We're going with simple wire and verticals for antennas, will have 3 or 4 radios on the air, and intend this as a low key, minimalist exercise, just as we might be doing during the early stages of a major emergency.

Accordingly, a small contingent of SOARA folks descended on Gilleran Park this past Saturday, the 22, to experiment, and to see what worked, and what didn't. Our group consisted of: Ed,ED, Heiko,OI, Jaime,YOG, Alex,FTL, George,SNX, Joe,KCE, and Ray,H. Sorry if I missed anyone. We set up Ed's SuperAntenna, Heiko's off-center fed dipole, and Ray's Sigma HF-X80 Vertical. Fortunately, Saturday was the ARRL SSB North American QSO Party, so there was no shortage of stations on the air, and we made a number of contacts in short order. This was perfect for verifying antennas, tuners, etc, and choosing which will work well on WFD.

We urge all to come out, sometime after 9:00 am and before 5:00 pm and check our WFD out, and even jump in and operate or log in a relaxed, low pressure setting. Although we will submit a log, our abbreviated operating hours means we can't be competitive, so we're just out there to have fun and learn. Think of it as an extended SOARA Elmer Saturday.

Members are responsible for their own lunches, drinks, etc. We will provide coffee and donuts, in the AM, and maybe if there's enough interest, we can set up a no host pizza run. Prepare for any weather, but as of now, the NWS is predicting partly cloudy, with 60° at 9am, 72° at noon and 66° by 5 pm.

To get more information about WFD go to: <https://www.winterfeldday.com>. We will also be giving more information on our upcoming virtual monthly meeting, Monday evening. Hope to see you out there.

**73 to all,  
Ray, AE6H**

## **[General Meeting Online at 7pm, January 24<sup>th</sup>](#)**

Guest Speaker: Chris Carbajal K6KJ, President & Sr. Engineer at Pyramid Communications and SOARA Member

Pyramid Communications is the leading manufacturer of in-vehicle (aka vehicular repeater systems or VRS) units for public safety. Based in Irvine, California, Pyramid Communications develops and manufactures two way radio VRS units for various levels of public safety first responders, all made right here in the USA. This presentation will be an introduction to what VRS products are and how Pyramid has recently developed a new VRS system for the California Highway Patrol. We go through a brief history on the California Highway Patrol radio system and possibly discuss some of the new challenges of public safety radio systems and the current trends of state-wide radio system of the future. Of course, we will see how this all ties back to our favorite pastime of amateur radio.

Chris Carbajal - K6KJ has been working in the commercial and public safety radio field since 1995, just shortly after gaining his novice amateur radio license in 1993. The blessings of being able to work in a field where he get to "play with radios" on a daily basis is fantastic. His passion and understanding for radios has been a key part of his success over the past many years. Chris has been with Pyramid Communications since 2000 and has held positions in the technical areas of the company since his beginning days there. Chris currently serves as the Chief Technology Officer and President of Pyramid Communications.

Please join the SOARA meeting on GoToMeeting from your computer, tablet or smartphone. [Click here to join the meeting](#)

You can also dial in using your phone. United States: +1 (571) 317-3129  
Access Code: 512-657-557

Erik Wresch  
W6INE

**Contacting Soara:** Questions about SOARA? Postal mail: P.O. Box 2545, Mission Viejo, CA 92690  
Send e-mail to [membership@soara.org](mailto:membership@soara.org) or leave a message at 949-667-0173  
Facebook: K6SOA Twitter: @K6SOA

## [SAQ VLF Transmitter - A bit of History](#)

Here is the Dropbox of screen shots and videos of the historic SAQ station Christmas Eve broadcast.

<https://www.dropbox.com/sh/eoxj0wttj4i5dh4/AAD7m8sZYhTbWyRe6wiu6otba?dl=0>

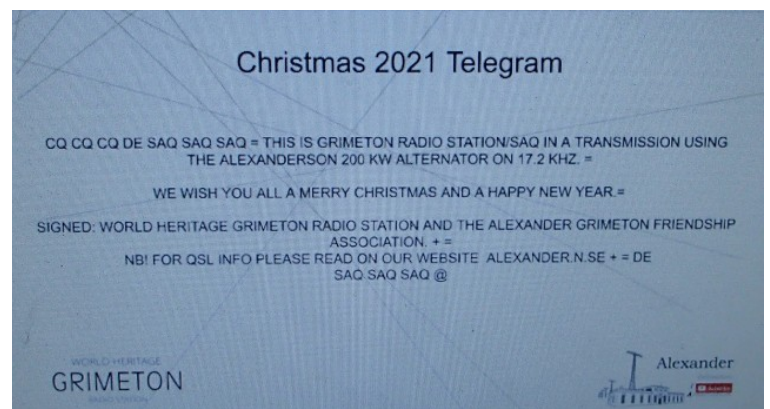
Before WWII, the VLF spectrum 15-30 kHz was the only frequencies that were thought to have transoceanic range--by pure groundwave day or night---HF was little know yet. So, in the 1920's-1930's they were used for sending overseas telegrams. Stations were set up in Europe, US, Hawaii and Far East. The US stations were on Long Island on the East Coast, and Point Reyes on the West Coast. Part of the reason for setting up RCA as a company was to design and construct these stations.

The actual transmitting method was developed by a Swedish engineer working for RCA, Ernst Alexandersson. Since no high power vacuum tube technology for VLF existed at the time, Alexandersson came up with using an AC alternator wound to generate the carrier--17.2 kHz instead of 60 hz. It produced about 200 kw.

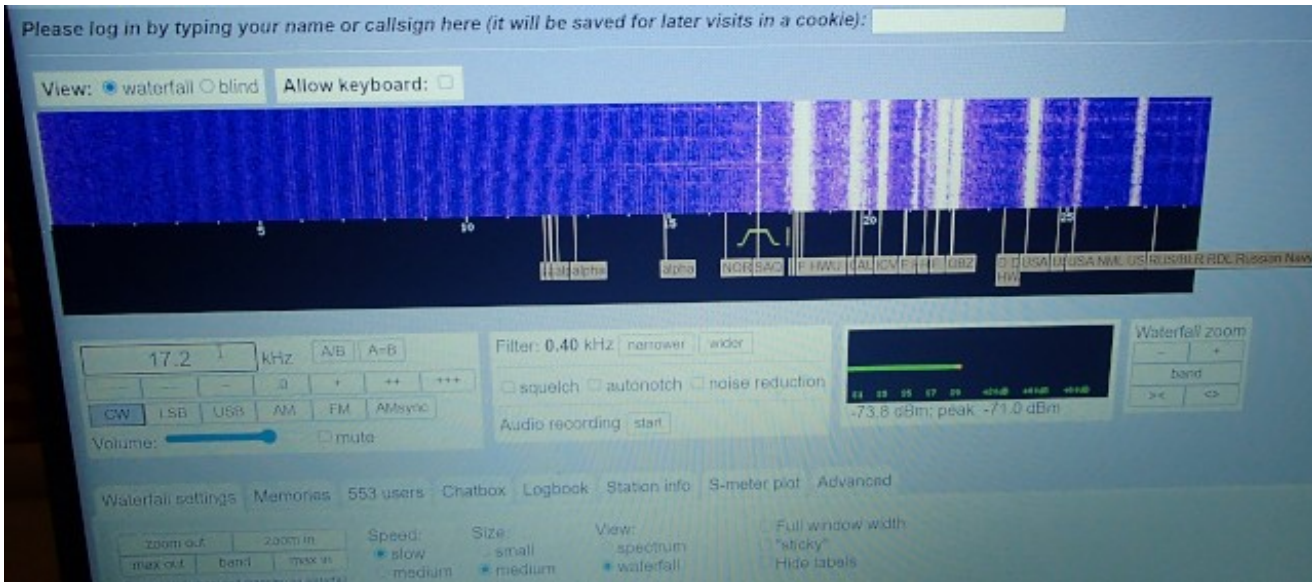
During the war, it was discovered that submarines could receive these VLF transmissions underwater--but nothing higher. So, after the war, the world's navies expropriated the frequencies--many times the actual stations--and the telegram business went to HF stations, and ultimately to undersea cables.

The Swedish station SAQ is the only one left in working order--all the others are long dismantled. The Swedes have doggedly kept the station up as a memorial to countryman Alexandersson, and it is even an official UNESCO World Heritage Site now. I visited the station in 2003 after going to a folk festival in Denmark.

They traditionally fire up the station two times a year--in July and Christmas Eve. They put a video live on you tube, and I tuned the Netherlands wide band SDR on another lap top showing how it was received there. On the screenshot of the SDR you notice there is a bunch of transmissions just above it--they are submarine communication transmissions--HWU is one--a strong NATO submarine station in central France. The whole idea of these transmissions is to give the subs all the info they need without transmitting back--that would disclose their position.



**Contacting Soara:** Questions about SOARA? Postal mail: P.O. Box 2545, Mission Viejo, CA 92690  
Send e-mail to [membership@soara.org](mailto:membership@soara.org) or leave a message at 949-667-0173  
Facebook: K6SOA Twitter: @K6SOA



New or old, VLF antennas have to be huge for the long wavelengths--SAQ has six tall pylons stretched over 2 km, with a massive ground screen underneath it all--all longwave antennas have to be massively grounded to work at all. The Swedish navy has a submarine station--but it's not SAQ--it's on the other east coast covering the Baltic.

Today the longwave is mostly a relic band, but historically it's important where radio began

Kriss Larson KR6ISS

## [Winter Field Day Testing at Gilleran Park](#)

Well we had fun, Ray, AE6H and Ed, WA6ED set up vertical antennas and I know that Ray worked 20 and 40 meters, I set up an Off center fed Dipole and worked 15 and 20 meters and also tried out George's, N6SNX dipole with some success. Jaime, KJ6YOG and Alex, K6FTL were very helpful in setting things up and taking them down. Joe, K7KCE came by and checked everything out in preparation for winter field day next Saturday.

Thanks for the good work everyone.

**Heiko AD6OI**

## [Slinky Antenna Part 2](#)

First, I stopped work on a horizontal slinky antenna. Supporting the antenna was more complicated than I liked. Using fibreglas support rods and guying was more than I wanted for a portable antenna.

**Contacting Soara:** Questions about SOARA? Postal mail: P.O. Box 2545, Mission Viejo, CA 92690  
Send e-mail to [membership@soara.org](mailto:membership@soara.org) or leave a message at 949-667-0173  
Facebook: K6SOA Twitter: @K6SOA

So, I'm moving on to a vertical slinky antenna. I have a MFJ tripod and extendable mast. I plan in the warmer months to build a variable height slinky with a pulley and report measurements. If the measurements prove positive, I will investigate using a stepper and an Arduino to control the slinky thus tuning the antenna. Perhaps derivative efforts will evolve into something like a CrankIR. Here is an interesting link to something similar to the CrankIR.

<https://adjustiwave.com/products/>

**73,  
Ed, WA6ED**

### **[SOARA Elmer Saturday, 1/29/22 Gilleran Park, Winter Field Day!](#)**

The next SOARA Elmer Saturday is Jan 29, 9am to noon, the same place, Gilleran Park, and overlapping winter field day. We will have coffee and donuts available. We will be fully supporting SOARA's winter field day event. So, show up and have some fun. We can also break out and talk about whatever we want. I'm not sure if I could stop people even if I wanted to. All you need is to have other like minded discussion participants. Please be mindful of the operators and distance your conversations as not to interfere. No cross talk!

I plan to bring some t-hunting equipment for demo and possibly Q&A. While, at this point, I don't plan to hide any T's. It might actually happen, so bring your tri-phasic-super-duper-finder with cross polarization. At least, you can show it off to others and get envy points.

**73,  
Ed, WA6ED**

### **[SOARA Membership Report](#)**

We are at 232 total active members. 209 paid dues and 20 unpaid. Two new membership applications are in process. I'm still working on those 20 unpaid. I won't give up. At least until before the cut-off before the elections. I plan to email a final notice at the end of the month to those unpaid members.

If you need your badge or SOARA custom lanyard attend some SOARA events. I try hard to attend most all events. I can also print you a new badge if it's faded or the dog ate it.

After we close off membership renewals, I plan to update the Repeater User's Guide & Membership Manual. Content suggestions welcome.

**73,  
Ed, WA6ED**

**Contacting Soara:** Questions about SOARA? Postal mail: P.O. Box 2545, Mission Viejo, CA 92690  
Send e-mail to [membership@soara.org](mailto:membership@soara.org) or leave a message at 949-667-0173  
Facebook: K6SOA Twitter: @K6SOA

## [SOARA Nets and Repeaters](#)

We all understand that amateur radio is about communications, but it is much more than that. It includes learning from others, interacting with others, teaching others, and improving our service (hobby).

Having said that I would like to talk about our nets and our repeater system.

On Temple Hill in Laguna we have six repeaters, three FM and three D star and they can be linked within their modes.

On Santiago Peak we have two FM repeaters that can operate stand alone or as a linked set.

When we have recurring nets such as Tuesday, Wednesday and Saturday, they link automatically about five minutes before the net is due to start.

Tuesday, 147,645, 224.640, 447.180 and sometimes 146.025, are linked at 7:55pm.  
Wednesday I manually link 147.645 with 447.180 and sometimes 224.640, at 6:55pm.  
Friday, we link the repeaters if there is a request otherwise the net is at 7pm on 447.180.  
Saturday , 147,645, 224.640, 447.180 and sometimes 146.025, are linked at 8:55am.

This happens every week so please listen before you key down.

On a different note I would like all of you to use our repeaters more often, especially the Temple Hill repeaters in Laguna. Whether you enjoy talking on FM or on D star we can accomodate you.

**Heiko AD6OI**  
**Director of Communications for SOARA**

## [Swap Meets and Auctions are Back](#)

One of the most fun I have as an electronics enthusiast and amateur radio operator is attending electronic swap meets and auctions. They are great places to pick up some cables, used ham gear, test equipment and much more.

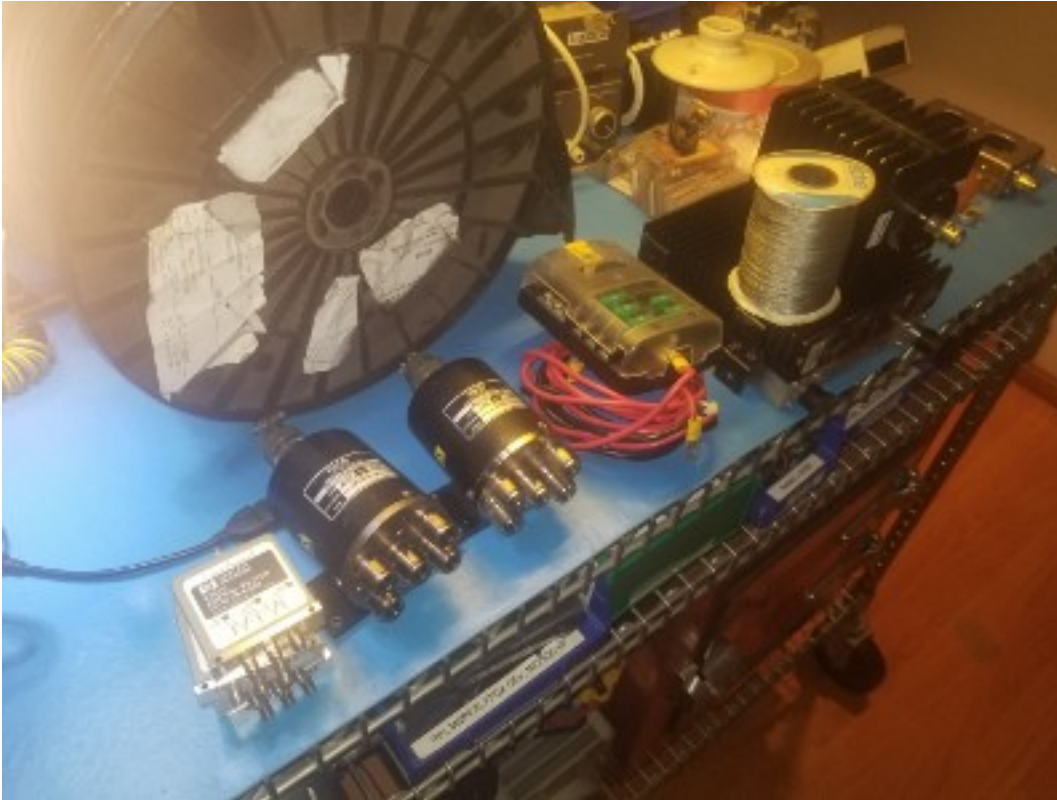
We have two local swap meets that are up and running monthly.

The TRW Swap meet is held on the last Saturday of each month. The swap meet hours are 7:00 AM to 11:30 AM., located on the southeast corner of Aviation Blvd. and Space Park Drive (one traffic signal south of Marine Ave.) in Hawthorne, CA. More information can be had at [W6TRW Swap Meet](#) The next one will be on November 27, then December 25 and January 29. Yes, they even happen on Christmas – attendees are pretty dedicated. SOARA has a booth where excess club equipment is being sold by Heiko, AD6OI. There were about 40 vendor booths in September. My find last month was a roll

**Contacting Soara:** Questions about SOARA? Postal mail: P.O. Box 2545, Mission Viejo, CA 92690  
Send e-mail to [membership@soara.org](mailto:membership@soara.org) or leave a message at 949-667-0173  
Facebook: K6SOA Twitter: @K6SOA

of 1" wide gold foil adhesive tape, a 3" dial indicator 0.0005 marks and a collection of RF connectors.

The Claremont Amateur Radio Society (CARS) Radio/Electronics Swap meet is held on the third Saturday of each month, except December. 6:00am to 11:00am, at the parking lot of Granite Creek Community Church 1580 N Claremont Blvd, Claremont, CA 91711. There are usually 15 or so vendors selling radios, components and other items. I picked up a AR-22 antenna rotor and control box rebuilt and tested for \$40. The next swap meet is January 29, which unfortunately conflicts with SOARA Saturday.



There was also a used equipment sale at Silicon Salvage in Anaheim. They had a really diverse selection of RF gear, test equipment and assorted stuff. I got 4 HP latching coax SPDT 26.5/18 GHz switches, a couple of Narda 4 pole 1KW coax switches, 2x 1GHz RF attenuators, Teflon wire, 10KV wire and a big roll of Shielded Cat5e cable and more for \$140. This is a great surplus sale and it is definitely worth going to when they have them.

There is also the former ACP Swap Meet, used to be held on the 4<sup>th</sup> Sunday of each month at Edinger and Grand in Santa Ana. This event has mostly faded away and there were no vendors the last two months, but I mention it just in case it re-appears. Finally, SOARA is holding an auction at our November General Meeting. There rules will be different than at prior SOARA auctions to make the auction go more quickly and to avoid the many unsold items that plagued prior SOARA auctions. Details on auction rules and item limitations will be sent to all members by email are in this Propagator.

Finally, AD6OI is running a swap meet at his house, 4 Parrell in Foothill Ranch on Saturday mornings for the next few months. If you want to buy, stop by. If you want to sell, bring a table for your stuff and a chair. Contact [ad6oi@soara.org](mailto:ad6oi@soara.org) for details.

Remember, one person's "junk" is another person's "treasure".

**Dale - W6EDT**

**Contacting Soara:** Questions about SOARA? Postal mail: P.O. Box 2545, Mission Viejo, CA 92690  
Send e-mail to [membership@soara.org](mailto:membership@soara.org) or leave a message at 949-667-0173  
Facebook: K6SOA Twitter: @K6SOA

**SOARA Statement of Income and Expenses**  
**October 1 - December 31, 2021**

3 Months Ending	December 2021	2020	Increase (Decrease)
General Account:			
Income:			
Memberships	6,293	9,539	(3,247)
Other	1,479	199	1,280
Total Income	7,772	9,738	(1,967)
Expenses:			
Repeaters:			
Site rental	1,050	1,050	-
Utilities	407	415	(9)
Equipment & Maintenance	-	484	(484)
Property Insurance	-	-	-
Total Repeaters	1,457	1,950	(493)
All Other Expenses	2,715	183	2,532
Total Expense	4,171	2,132	2,039
Net Income	3,600	7,606	(4,006)
			-
Beginning Cash- October 1	25,697	20,661	5,036
Ending Cash- December 31	<b>29,297</b>	<b>28,267</b>	<b>1,030</b>

**Raffle Account:**

Received	860	919	(59)
Spent	1,095	1,072	23
Current Year Cash	(235)	(153)	(82)
Beginning Cash	2,044	2,214	(170)
Ending Cash	<b>1,809</b>	<b>2,061</b>	<b>(252)</b>

Note: If any member has questions about the financials, please contact the Treasurer or any board member.

**Ron Mosher - KOPGE**  
**SOARA Treasurer**



## [SOARA Library](#)

As some of you have already heard the AD6OI/SOARA Library is now up and running at our house. (Please see attached picture for details). This library contains ARRL Handbooks, Repeater location guides, Tech modification books, radio and electrical books and a wealth of radio related information. For now the library will be open from 1pm to 4pm on Saturdays, and other times by appointment, if you call first, either by radio or telephone. E-mail will also work but allow at least 24 hours for a reply.

**Thank you**  
**Heiko AD6OI**  
**Director of Communications for SOARA**

## [SOARA Equipment For Sale Online Site](#)

Based on numerous requests from SOARA members for a place to post Ham Radio related items for sale to other club members, we have set up an opt-in based Mailman mailing list on our server. Interested SOARA members are invited to join the mailing list. The SOARA organization and Board of Directors do not provide any warranty or guarantee for the items being advertised, buyer beware!

To subscribe, navigate to:

<https://soara.org/mailman/listinfo/forsale>

Enter your "real" email address, not your at "soara dot org" alias. You must be able to send and receive email from the address you provide.

Once subscribed, you will receive email when other members post items for sale. When posting to the list, you should provide an accurate description of the item for sale, its condition, and asking price. Replies to postings should be sent to the poster of the item, and not the list.

The archives of postings are publicly available on the web here:

<https://soara.org/pipermail/forsale/>

This mailing list may be suspended or discontinued at the discretion of the SOARA Board of Directors should that become necessary.

**Brian, NJ6N**

# 2022 SOARA Calendar

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
General Meeting 7:00 PM	24 Online	28	21	18	16	20	18	15	19	17	21	-
Program	Vehicle Repeaters	-	-	-	Spring Auction	Field Day Prep	-	-	-	-	-	-
FCC Ham Exam 6:00 PM		-	-	-	-	-	-	-	-	-	-	-
Education Classes 8:00 AM			13	17	15	-	17	14	18	16	13	-
SOARA Elmer Saturday 9:00 AM	29 WFD Gilleran	Mar 5	26 Murray Center	23 Murray Center	28 Gilleran Park	25 FD Gilleran	23 Gilleran Park	27 Gilleran Park	24 Murray Center	22 Murray Center	26 Murray Center	-
SOARA T-Hunt 1:00 pm	<a href="#">updates</a>	<a href="#">updates</a>	<a href="#">Updates</a>	<a href="#">Updates</a>	<a href="#">Updates</a>	<a href="#">Updates</a>	<a href="#">Updates</a>	<a href="#">Updates</a>	<a href="#">Updates</a>	<a href="#">Updates</a>	<a href="#">Updates</a>	<a href="#">updates</a>
Board Meeting	31	Mar 7	28	25	23	FD	25	22	26	24	28	-
Special Events	<a href="#">Quartz-fest 17-23</a>	<a href="#">Palm Springs</a> <a href="#">Yuma</a>		<a href="#">Visalia DX</a>	<a href="#">Dayton Ham-vention</a>	<a href="#">ARRL Field Day 25-27</a>	HRO Ham Jam		<a href="#">SOARA Picnic 18</a>	<a href="#">JOTA 16-18</a>		<a href="#">SOARA Holiday Party TBA</a>
Major HF Contests		<a href="#">ARRL DX-CW 20-21</a>	<a href="#">ARRL DX-SSB 6-7</a> <a href="#">CQWPX SSB 27-28</a>		<a href="#">CQWPX CW 29-30</a>	<a href="#">ARRL Field Day 25-27</a>			<a href="#">CQWW RTTY</a>	<a href="#">CQWW SSB</a>	<a href="#">CQWW SSB</a>	
Volunteer Events	<a href="#">OC Chili Run</a>	<a href="#">Paws Fur Pink</a> <a href="#">OC Chili Run</a>	<a href="#">OC Chili Run</a> <a href="#">Baker to Vegas</a>	<a href="#">Dessert Storm Rally</a> <a href="#">Ride for Rwanda</a>	<a href="#">HD Trails</a> <a href="#">LH Marathon</a>	<a href="#">ARRL Field Day 25-27</a>	<a href="#">MV Fire-works 4</a>				<a href="#">Vision Quest</a> <a href="#">OC Marathon 7</a>	

Dates subject to Change - Check the SOARA Web Site (<http://www.soara.org>) to verify locations and times or click on the live links in the table

**Contacting Soara:** Questions about SOARA? Postal mail: P.O. Box 2545, Mission Viejo, CA 92690  
Send e-mail to [membership@soara.org](mailto:membership@soara.org) or leave a message at 949-667-0173  
Facebook: K6SOA Twitter: @K6SOA

# SOARA Information

**SOARA** meets at the Norman P. Murray Center, 24932 Veterans Way, Mission Viejo, CA on 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, except June. Exams are at 6pm. Prior registration is not required and walk-in applicants are welcome. For June, exams are held at Field Day. For further information, email Sean Reigle, AJ6B, at [aj6b@soara.org](mailto:aj6b@soara.org).

**SOARA Library:** SOARA has many amateur radio related books such as hand books, books about electrical theory, etc. available to lend out to club members. Contact Heiko Peschel [ad6oi@soara.org](mailto:ad6oi@soara.org) for more info.

**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, or [repeater@soara.org](mailto:repeater@soara.org).

	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	-	(pvt)	Santiago Peak. (C)
	440	—	445.660	-	(110.9)	Laguna Beach
D-STAR	440	—	445.705	-	(K6SOA B)	Laguna Beach
	440	—	447.180	-	(pvt)	Santiago Peak. (C)
D-STAR	1.2G		1282.600	-	(K6SOA A)	Laguna Beach

## **Nets:**

- 40 meter HF (7.200 MHz +/- , Sundays @ 8 AM
- 10 meter HF (Technicians Welcome) (28.415 +/-) Sundays @ 9 AM
- General Membership Net - UHF/VHF (447.180, 147.645 & 224.640): Tuesdays @ 8 PM
- Astronomy - VHF 147.645: Wednesdays @ 7 PM
- D-STAR (146.115 C module): Wednesdays @ 8 PM
- Dinner Net - 147.645, 224.640, 447.180: Fridays at 7 PM
- Tech Net - 147.645, 224.640, 447.180: Saturdays @ 9 AM
- California Rescue Communications (Gordo Net) HF (7.250 MHz +/- for QRM): Weekdays @ 8:30AM
- MVRACES - 447.180: Tuesdays @ 7PM
- Tri-Cities RACES - 146.025: Wednesdays @ 8 PM
- LNACS - 147.645: Thursdays @ 7 PM
- OC Parks Fire Watch - 447.180: Thursdays @ 8 PM

## **SOARA OFFICERS**

**President:** Ray Hutchinson, AE6H 949-322-8468  
[ae6h@soara.org](mailto:ae6h@soara.org)

**V.P.:** Erik Wresch, W6INE 714-883-7694  
[w6ine@soara.org](mailto:w6ine@soara.org)

**Secretary:** Charles Schultz  
[NY6I@soara.org](mailto:NY6I@soara.org)

**Treasurer:** Ron Mosher, K0PGE 949-363-0047  
[k0pge@soara.org](mailto:k0pge@soara.org)

## **SOARA DIRECTORS**

**Repeater:** Brian Roode, NJ6N 949-257-2749  
[nj6n@soara.org](mailto:nj6n@soara.org)

**Publications:** Dale Tyler W6EDT 949-360-1717  
[w6edt@soara.org](mailto:w6edt@soara.org)

**Membership:** Ed Barnes, WA6ED 949-468-7706  
[wa6ed@soara.org](mailto:wa6ed@soara.org)

**Education:** Steve Kuver, K6UVR 949-874-1972  
[k6uvr@soara.org](mailto:k6uvr@soara.org)

**Technical:** Tom Hobbs, AE6SH 949-830-8131  
[ae6sh@soara.org](mailto:ae6sh@soara.org)

**Communications:** Heiko Peschel, 949-421-7910  
[ad6oi@soara.org](mailto:ad6oi@soara.org)

## **SOARA APPOINTMENTS**

**Past President:** Tom Hobbs, AE6SH 949-830-8131  
[ae6sh@soara.org](mailto:ae6sh@soara.org)

**Activities Coordinator:** Joe Perrigou K7KCE  
[k7kce@soara.org](mailto:k7kce@soara.org)

**S. Saturdays:** Ed Barnes, WA6ED 949-468-7706  
[wa6ed@soara.org](mailto:wa6ed@soara.org)

**Raffle:** Bill Colvin KM6FOY [km6foy@soara.org](mailto:km6foy@soara.org)

**Testing:** Steve Kuver K6UVR [k6uvr@soara.org](mailto:k6uvr@soara.org)

**Website:** George Robinson KN6OFF  
[kn6off@soara.org](mailto:kn6off@soara.org)

**Ambassador:** Spencer Ammermon, NG6K  
[ng6k@soara.org](mailto:ng6k@soara.org)

**Contacting Soara:** Questions about SOARA? Postal mail: P.O. Box 2545, Mission Viejo, CA 92690  
Send e-mail to [membership@soara.org](mailto:membership@soara.org) or leave a message at 949-667-0173  
Facebook: K6SOA Twitter: @K6SOA