



PROPAGATOR

The Monthly Newsletter of the South Orange Amateur Radio Association

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Meeting

May 16th, 2016

7:00 PM

N.P.
Murray Center
Veterans
Way
Mission Viejo

SOARA Spring Auction

All are welcome to attend the SOARA Spring Auction on Monday, May 16 at the Norman P Murray Center in Mission Viejo at 7pm. For more information on the SOARA live auctions, including the rules, click [here](#) or see page 6 of the Propagator. A regularly scheduled FCC licensing examination will occur prior to the meeting at 6pm.



We have a lot of new hams in the club and seasoned hams that would be glad to take an antenna, radio, or mic off your hands. So, please bring in your ham-related items, regardless of how new or old and help your house look a little cleaner, (which helps XYL aggro too!) help your pocket-book and SOARA in the process.

If you are interested in selling, please be sure to arrive well in advance of the meeting (5:30-6:30) to prepare your lots for sale, so we can start on-time. Thank you!

President's Message

May 2016

Greetings! By now you've probably learned the results of the SOARA Officer election this month. The New Officers for the next two year terms are:

President: (myself), Ray Hutchinson, AE6H,
Vice President: Sean Reigle, AJ6B,
Secretary: Lambert Matias KK6WOW, and
Treasurer: Lori Carey, KK6ORR.

No real surprises there though, because the newly elected are all elected or appointed incumbents. Also, each of us were unopposed.

While I'm very grateful that the membership has expressed their faith in my and the other officers abilities to serve your club, and we're all proud to do so, simultaneously, I'm a little disappointed. We've been announcing the election, we called for open candidate nominations from the floor at the March regular meeting, as provided for by the club constitution and bylaws. Still no one else stepped forward to meet the challenge and offer their name as a candidate for any of the officer positions.

We have a club of over 200 paid active members, and I know there's loads of talent within this great group, still no one came forward expressing any sort of interest. As president previously, as did Tom, AE6SH after (and before) me, we have always tried to make the operation of the club as open, transparent, and inclusive as possible. We welcome members to attend and observe board meetings, offer solutions or opinions, and we attempt to include membership input and participation in all aspects of the club.

My intent here is to encourage each of you to consider becoming a little more interested and involved in the operation of your club by asking your officers questions, helping out on committees, and yes, even running for officer and director positions at each annual election. Even I, when voting would like the option of voting for someone besides myself. By the way, we're still seeking an Activities Chair person to oversee the planning of our several annual social activities (summer picnic, holiday party, etc.). That would be a great start and an eye into the inner workings of your club. Please consider it, it might even turn out to be fun!

73 de Ray, AE6H



SOARA Spring Auction
May 16

SOARA Saturday
May 21

Dayton Hamvention
May 20-22

CQ-WPX CW
May 28-29

ARRL Field Day
Jun 24-26
[FD Info](#)

VEC License Exams

6pm—before the General Meeting

Please see our [website](#) for more info.

Walk-ins ok.

Extra | General | Technician Exams

Get Ready for Field Day 2016



SOARA will be sponsoring ARRL Field Day again this year at Gilleran Park in Mission Viejo. Make sure you clear your calendar for Saturday, June 25 and Sunday, June 26. Set up begins on Friday, June 24 at 3pm. Hope to see you there! More information is available on the website at www.soara.org.

Despite the Internet, cell phones, email and modern communications, every year whole regions find themselves in the dark. Earthquakes, fires, storms, tornadoes, ice and even the occasional cutting of fiber optic cables leave people without the means to communicate. In these cases, the one consistent service that has never failed has been Amateur Radio. These radio operators, often called

“hams” provide backup communications for everything from the American Red Cross to FEMA and even for the International Space Station.

“Field Day” is the climax of the week long “Amateur Radio Week” sponsored by the ARRL, the national association for Amateur Radio. Using only emergency power supplies, ham operators will construct emergency stations in parks, shopping malls, schools and backyards around the country. Their slogan, “When All Else Fails, Ham Radio Works” is more than just words to the hams as they prove they can send messages in many forms without the use of phone systems, internet or any other infrastructure that can be compromised in a crisis. More than 35,000 amateur radio operators across the country participated in last year’s event.



The GOTA station at Field Day at Gilleran Park - 2015

Volunteers Needed

Tomorrow is the **Orange County Marathon (May 1)**. We have most spots filled, but let me know if you can help. Overall, there will be more than twenty operators, including several with special skills like working directly with two police departments. If you have any special event experience, or are interested in getting some, I would like to talk to you.

Elsewhere you will read about our plans for Field Day, SOARA Saturdays, and other fun things. **I would like to encourage our members to become more active in your participation with the club.** Our group of net controls has years of experience and some could use a break once in a while. In order to achieve this I would like to ask some of you to step forward and become additional net controls for the Tuesday night net. If you feel that this is something that you would like to try, please get in touch with me or any other member of the board.

Thanks,
Heiko

Communications Director for SOARA ad6oi@soara.org
(949) 859-3868



The K7RA Solar Update 4/29/16

At 0121 UTC on April 29 the Australian Space Forecast Centre released a geomagnetic disturbance warning for April 30 and May 1. Increased geomagnetic activity is predicted due to high speed solar wind coming from a coronal hole. There is a chance of minor storm levels.

Over the past reporting week (April 21-27), average daily sunspot numbers rose from 40 to 43.3, and average daily solar flux declined from 100.8 to 81.9. This is compared to the previous seven days.

Average planetary A index went from 10.9 to 9.4, and average mid-latitude A index rose from 8.9 to 11.6.

Predicted solar flux (from the Thursday April 28 forecast) is 95 on April 29-30, 92 on May 1-2, 90 on May 3-4, 95 on May 5-10, 100 on May 11, 95 on May 12-15, 82 on May 16-24, 80 on May 25, 82 on May 26-29, and 95 on May 30 through June 6.

[WM7D's Solar resource Page](#)

Announced DX Operations website:

<http://www.ng3k.com/misc/adxo.html>

High Desert Trails Performance Rally

Saturday May 7th, 2016

Kicking off its 9th consecutive run, the High Desert Trails Rally has been a part of rally in Southern California since 1973. On dirt roads Southwest of Ridgecrest and North of the Jawbone Canyon Station, the rally takes competitors through fast and flowing valleys and tight and twisty forest sections in the beautiful high desert on county roads. Competitors will tackle over 100 miles of racing flat out.

The High Desert Trails Rally is a performance time trial event. Rally Racing is a motorsport where a driver and navigator (co-driver) race down closed dirt roads, one car at a time, as fast as they can. The cars race against the clock, and not head-to-head. The racing sections are called Special Stages and closed to all non-rally traffic. The vehicles stay on the road and do not go "off-road" into the desert. When not racing on the closed stages, the cars transit with normal traffic.

The cars are specially equipped production based models (Example: Volkswagen Golf, Dodge Neon, Subaru Impreza) and not buggies or tube chassis vehicles. They are all licensed, registered, and insured to drive on public roads. They have roll cages and safety features added along with heavy duty suspension and tires. We invite you to check them out on Friday night between 6:30PM - 7:30PM May 1st in Ridgecrest. Unfortunately this year, due to a change in the route caused by the winter rains, there will be no public spectating area. This means there will be no place you will be able to see the cars race without volunteering.

The rally utilizes hundreds of volunteers to help with communications, timing, and controls. Working a rally is a rewarding challenge that's a lot of fun! This is the best way to see the event up close and get to interact with the drivers and co-drivers. Plan to spend a day outside, and plan to drive your vehicle over smooth dirt roads. We like to provide our workers with goodies like T-Shirts, lunch, waters, and giveaways. Your help is always appreciated by the competitors. Sign up at - <http://highdeserttrails.com/volunteers>

Approximately thirty teams will take the challenge of the High Desert Trails this year. This event kicks off the 2016 California Rally Series Championship. Supporting rally events all over the Southwest, the CRS is celebrating its 42nd season! More info:

<http://www.californiarallyseries.com>

High Desert Trails is also proud to be sanctioned by NASA Rally Sport (NRS), an organization focused on competitor fun and providing support for rally organizers nationwide. Providing tools to the racers, organizers, and fans to increase their enjoyment of rally is one of the core missions of the organization. - <http://nasarallysport.com>

For more information, check out - <http://highdeserttrails.com>

Join us for some fun on the roads of the high desert!

Thanks!
- Kris, KI6IUC

Kristopher Marciniak High Desert Trails Performance Rally - Organizer

Contact: kris@highdeserttrails.com

Phone: 646-535-4240



Driver John Trucks & Navigator Chris Fine tackle a steep downhill section. Picture by Mathew Mendoza of Wheelsdirty.com



Raffle Update

No raffle this month! The raffle gives way to the Spring Auction.

FCC Invites Comments on Petition to Eliminate 15 dB Gain Limit on Amateur Amplifiers

The FCC has put on public notice and invited comments on a Petition for Rule Making (RM-11767), filed on behalf of an amateur amplifier distributor, which seeks to revise the Amateur Service rules regarding maximum permissible amplifier gain.

Expert Linears America LLC of Magnolia, Texas, which distributes linears manufactured by SPE in Italy, wants the FCC to eliminate the 15 dB gain limitation on amateur amplifiers that's spelled out in §97.317(a)(2).

Expert asserts that there should be no gain limitation at all on amplifiers sold or used in the Amateur Service.

More [here](#).

Membership Report

SOARA is now 213 active members. I think this might be a SOARA record! So, now lets have more people on the radio and participating in the events. We have all types of interesting activities. Pick one or more events and just do it! I particularly enjoy the Nets. I occasionally backup Phil on the HF Sunday morning net. Go to www.soara.org and get the details on the calendar.

For May we have two new members and I believe they both recently passed the general test. **Impressive, guys!** (At the time of this writing the FCC ULS didn't show the upgrade.)

- KB6POE Richard Hernandez
- KM6ATX Matt Sandoval

Badges

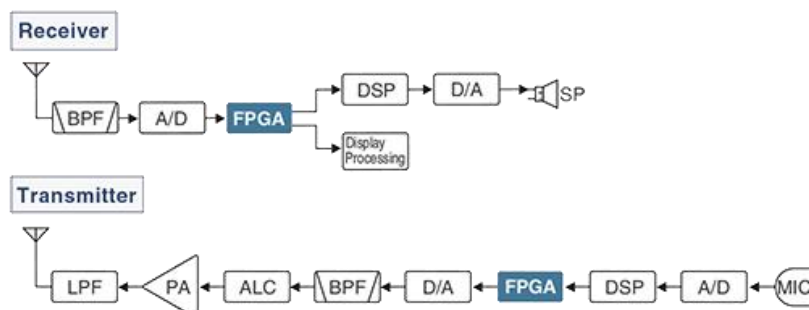
If you want a new badge, email membership@soara.org. Tell me your name and callsign as you want it on the badge. I will make you a new badge with all the handy repeater information on the back. You can pick up badges at most SOARA events. At least, the ones I attend.

Repeater User's Guide & Membership Manual

I have plenty of manuals with a wealth of SOARA information for easy reference.

Icom IC-7300 - In Brief

I now understand why hams have lots of radios. It's definitely an addiction. This wasn't clear to me over a year ago when I was just getting started. I now have my second HF rig. It's actually the third if I count my father-in-law's Kenwood rig in Utah. I had to have the **Icom IC-7300**. This is a full SDR rig. No IF, no mixer, no superheterodyne, all the insides are numbers. Things like multiply, butterflies, FFT, phase correction, it has a high speed A/D converter, hardware math, a TI DSP CPU, and a D/A to a speaker. I know I left out stuff like band pass filters. See the block diagram below. The best part was it works fine right out of the box. I did need an external tuner for the dipole. I really didn't expect the internal tuner to do the job anyway. I'm impressed with the LDG AT-200ProII and the LDG / Icom cable that plugs into the tuner. Icom already upgraded the firmware to 1.12 with some minor tweaks. I was impressed I only had to put the upgrade file on a SD card and the IC-7300 was upgraded in one step. I had to do THREE separate upgrades on the Yaesu FTDX-3000. I'm also addicted to the touch screen. You "see" someone on the padapter touch it and done you are there ready to fine tune. Now, I have one more manual to study in my spare time.



FPGA: Field-Programmable Gate Array

I hope to hear you on the radio and see you at the upcoming SOARA events! Field day will be here before you know it. Go the club calendar at www.soara.org for more information on future events.

73,
Ed Barnes, WA6ED, Membership Director
membership@soara.org

SOARA Saturday Schedule and Events

The April SOARA Saturday, was busy! We had about 19 attendees at Gilleran park . Heiko, AD6OI, brought two dozen donuts, coffee, and radio reference books. We setup emergency power and radios on the folding tables. There were two generators, several solar panels and various battery packs. Ray, AE6H, setup his HF rig with a remote tuner & random wire antenna. He had a noise issue and we finally traced it to my Honda generator. Well, it seems the generator needed to be grounded. Thankfully, Jim, KI6LOM, improvised and stuck a long screwdriver with a piece of wire into the ground. He grounded the generator and the noise was gone! Jim is always good for a practical solution and lesson learned. Steve, K6UVR, & Erik, KK6UZS, setup shop and worked on solar panels. They were connecting and measuring with a multimeter. David Tiao, KK6VQG, brought his PowerPole battery box and Fluke meter. I took lots of pictures. I photographed Sean, AJ6B & Michie, KD6CAT, eating breakfast burritos at the donut & coffee table. Maybe we can start posting more pictures on the SOARA website just for SOARA Saturday. I, WA6ED, setup a UHF/VHF station with Tac-comm modular cases. I was trying to give members ideas for modular & portable emergency communications. Scott Holcomb, KK6WHC, setup a buddy pole antenna, a generator, and HF rig. Bob Hahn, KI6COO brought his dog and took it all in. Dave Gorin, KB6BXD setup his radio with a battery on his own table. He brought his dog too. I like dogs and I'm glad they were there. Kriss, KR6ISS, setup a table on the other side of the batting cages and away from the noise. He had a dipole and his HF rig under test. I'm sure I missed some activities and members. It did become clear to me I need a sign-in sheet just so I can keep track of everybody. Lots of stuff was going on and all in parallel.

May 21 SOARA Saturday at Gilleran Park:

- Antenna analyzers, bring your antennas and analyzers to share readings
- I'm hoping my ham shields will arrive in time for a possible demo
- Setup a radio and connect at the park. Why not?
- Bring your latest project and share information with others.
- Other ideas? We all don't have to do the same thing. This is a forum to share ideas and learn from others.

2016 SOARA Saturday Schedule of Events:

- Jun 18, Gilleran, Field Day prep, equipment checkout, this SOARA Saturday is the weekend before Field day
- Jul 23, Gilleran, setup HF Radio, open for suggestions
- Aug 20, Murray Center, Bring a kit like the Elenco AM/FM Radio, that requires soldering. See kit ordering links in March Propagator issue. Or, find any kit you want to build and we will help you get started. We will help with soldering, oscilloscope, & function generator will be available.
- Sep 24, Oct 22, Nov 26, Murray Center - Open to suggestions

Let me know if you want to help on a future SOARA Saturday. Ideas are welcome.

SOARA Saturday Ideas: See March Propagator issue

73, Ed Barnes, WA6ED



Steve, K6UVR, demonstrating solar at
April's SOARA Saturday

SOARA Live Auction Rules

<https://www.soara.org/activities/live-auction/>

WHEN: Third Monday of May and November
TIME: 7:00pm - 9:00pm
WHERE: Norman P Murray Community Center, 24932 Veterans Way, Mission Viejo

At the May and November general membership meetings, SOARA holds a live auction. The purpose of the auctions is to have a fun way for SOARA members and other Amateur Radio operators to find and sell ham radio and related equipment. Also this is a way for SOARA to generate revenue for the maintenance and repair of the repeaters, fund club functions and purchase additional equipment for the club.

In order to facilitate this we put forth the following rules for all to follow to insure everyone shall have a fair and equitable chance at bidding on items up for auction:

1. Prior to the start of the auction a tag will be placed on each lot (this can be one item or a group of items). Each tag will have a unique serial number on it assigned by the Treasurer. A lot can be one item or a group of items. If you have many small items for auction, please consider grouping them into a lot as there is typically not enough time to auction numerous small individual items. The seller must neatly write their (1) Call sign or name, (2) any minimum (starting) bid and (3) whether the lot is a donation to SOARA. Items not marked with a minimum bid or donation status will be considered to have no minimum bid and NOT a donation to the club.
2. The lot will then be placed on display for inspection by prospective bidders. Once submitted for auction an item cannot be removed prior to the completion of the auction (please, no private sales!) Any known problems with the lot should also be noted on the tag attached to it.
3. SOARA does not make any guarantee or warranty on any item or lot. BIDDERS BEWARE of what you are bidding on. All sales are final and no refunds will be given.
4. When a lot is sold a separate card will be generated with the winning bidder's call sign or name and the final dollar amount. This card will be given to the Treasurer to be logged into the auction tracking system. At the end of the auction, all bidders shall pay the club Treasurer or his agent. All sellers shall be paid minus the club's commission at the end of the auction. Any lot not sold or that did not get its minimum bid shall be removed by the seller at the close of the auction.
5. During the event, the person conducting the auction shall take bids from the floor on the lot until the highest bid is reached. Once the auctioneer has declared a lot "sold" they will move to the next lot. If, for some reason, a dispute over the winner of a lot occurs, then the lot will be auctioned a second time. If a lot has a minimum bid on it, the owner of the lot may at his/her direction agree to a bid prior to the end of the bidding on the lot. If the owner is not present, then the minimum bid shall be the lowest bid accepted to sell the lot.
6. SOARA shall receive 10% of the proceeds of lots not marked as a donation and the seller will receive 90%. SOARA will receive 100% of the proceeds of lots marked as "donation."
7. Once a lot for auction enters the building it is no longer available for private sale. The seller is prohibited from having "second thoughts" once the auction has started.
8. A copy of these rules shall be posted in the auction area and given to each seller upon placing an item or lot in the sale. Only the President and Vice President can make an exception to these rules after both have discussed the issue. Their decision shall be final but both must be in agreement on the matter or these rules will stand.

As a reminder, SOARA is an IRS 501(c)7 tax exempt social club, therefore membership dues and donations are NOT tax deductible.



Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
General Meeting 7:00 PM	25	22	21	18	16	20	18	15	19	17	21	-
Program	TASMA	LFP Batteries	WU6D	Arnie Shatz N6HC	Spring Auction	Field Day Prep	TBD	SOARA Fair	TBD	TBD	Fall Auction	-
VE Testing	25	22	21	18	16	At Field Day 25	18	15	19	17	21	--
Educational Classes	Tech 23	Extra 20	Tech 19	-	General 14	Tech 18	Extra 16	-	Tech 17	-	-	-
SOARA Saturdays (9am)	30 Murray	27 Murray	26 Murray	23 Gilleran	21 Gilleran	18 Gilleran	23 Gilleran	20 Murray	24 Murray	22 Murray	26 Murray	-
SOARA T-Hunt	10	14	6	3	1	5	3	14	4	2	6	11
Board Meeting	Feb 1	29	28	25	23	27	25	22	26	24	28	-
Special Events	Quartzfest 17-23	Yuma Hamfest 19-20	Palm Springs Hamfest 12	Visalia Intl DX 15-17	Dayton Hamven- tion 20-22	ARRL Field Day 24-26		SOARA Picnic 7	ARRL SW Division	JOTA 14-16		SOARA Holiday Party 4
Ham-Related Swap Meets	TRW 30 C.A.R.S. 16	27 20	26 19	30 16	28 21	25 18	30 16	27 20	24 17	29 15	26 19	31 17
Major HF Contests		ARRL DX-CW 20-21 CQWPX RTTY 13-14	ARRL DX-SSB 5-6 CQWPX SSB 26-27		CQWPX CW 28-29	ARRL Field Day 24-26			CQWW RTTY 24-25	CQWW SSB 26-27	CQWW CW 26-27	
Volunteer Events	OC Chili Run 23	Paws Fur Pink 21 OC Chili Run 27	OC Chili Run 19 Baker to Vegas 19-20	Desert Storm Rally 1-2	HD Trails 7-8 OC Mara -thon 1 Memorial Day 1/2 Mara- thon 30	ARRL Field Day/ Setup/ Ops/ Clean 24-26	4th of July Fire -works 4			Vision Quest		Run for a Claus

*Dates subject to change. Check the [SOARA website](#) to verify locations and times.

K6MSM's
assistant helping
assemble a
Mono Gap 15m



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.

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 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.

	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 Peak. (C)
	440 — 445.660 — (110.9)	Laguna Beach
D-STAR	440 — 445.705 — (K6SOA B)	Laguna Beach
	440 — 447.180 — (131.8)	Santiago Peak. (C)
D-STAR	1.2G 1282.600 — (K6SOA A)	Laguna Beach

Nets:

UHF/VHF (447.180, 147.645 & 224.640): Tuesdays 8:00 PM

D-STAR (146.115 C module):
Wednesdays 7:30pm

40 meter HF (7.200 MHz +/- for QRM), Sundays 8:00 AM.

Gordo Net (HF 7.250 MHz +/- for QRM), Weekdays 8:30AM



SOARA OFFICERS

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Communications: Heiko Peschel, AD6OI 949-859-3868
ad6oi@soara.org

SOARA APPOINTMENTS

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

Activities: **VACANT**—Please contact us (board@soara.org) if you are interested.

S. Saturdays: Ed Barnes, WA6ED 949-468-7706
(temporary - contact us) wa6ed@soara.org

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

Testing: Sean Reigle, AJ6B 714-261-1717
aj6b@soara.org

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