



PROPAGATOR

The Monthly Newsletter of the South Orange Amateur Radio Association

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Meeting

March 21st, 2016

7:00 PM

N.P. Murray Center Veterans Way Mission Viejo

WU6D - Orange ARRL Manager

All are welcome to the next SOARA General Meeting on Monday, March 21 at 7pm at the Norman P Murray Center in Mission Viejo. This month's speaker is Carl Gardenias, WU6D, Section Manager for the Amateur Radio Relay League Orange Section. HAM Radio Testing is available at 6pm.



Chasers. If you want to grab a few NPOTA contacts from your home station or even mobile, or portable, and are not a registered Activator, then you are a Chaser. If you are a registered Activator, then there are some simple rules that apply. All ACTIVATOR operations must be portable, and within the boundaries of the National Park Unit (NPU) that they are operating as. The one exception is, ops acting as a NPU who live and maintain their home station on land owned by the NPU boundaries qualify. CHASERS may operate from a wide variety of stations and locations, so long as they are outside of the NP unit that they are logging..

ARRL National Parks on the Air (NPOTA)

Since I've been a bit under the weather for the last couple of weeks, following much needed back surgery, my article this month will be a bit brief. You may actually find that a good thing, Hi Hi. My recovery is going extremely well, far better than I was lead to expect, and I look forward to seeing all of you at this upcoming meeting, Monday night.

Now for the article: For those who haven't heard, there's an interesting, even intriguing to me, radio event going on throughout this entire 2016 year. It's designated as NPOTA, or National Parks on the Air, and is in commemoration of the 100 year anniversary of the establishment of the National Parks Service. NPOTA is an ARRL organized event, but relatively informal. A contest of sorts, but usually without the chaos of a rare DX contest, and with 438 potential activations sites and at various dates throughout the entire 2016 year, It's great fun and an opportunity to increase the number of entries in your station log.

Various NP units will have Activator stations on the air at various times throughout the entire year, so if you're relatively new to HF or the world of contesting, this is a great opportunity to gain some experience in these types of operations, and at your own convenience, as time allows. There is an online list showing current Activation schedules as well as future planned ops. Nearly anyone can also become an Activator by registering with the ARRL, reviewing a few simple rules, and heading out to a NP Unit not currently scheduled for activation at the times / dates you wish to operate.

For more information, logging info, rules etc., go to www.arrl.org/npota.

Have fun, and 73 de Ray, AE6H



There are two groups of station: Activators and



SOARA
Saturday
Mar 26

CQ WPX
SSB HF
Contest
Mar 26-27

SOARA
Elections
Apr 1
(by email)

Visalia
INTL DX Conv.
Apr 15-17
See page 5

ARRL Field Day
Jun 24-26
(Get Ready!)

VEC License Exams

6pm—before
the General
Meeting

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

Walk-ins ok.

Extra | General |
Technician
Exams

CQ World Wide WPX Contest

(Next Weekend!)

The WPX Contest is based on an award offered by CQ Magazine for working all prefixes. Held on the last weekend of March (SSB) and May (CW), the contest draws thousands of entries from around the world.

More info is available here: <http://www.cqwpw.com/index.htm>

VOLUNTEERS NEEDED

Since the beginning of the year SOARA has been involved in a series of special events and our operators have done us proud. These events include Paws fur Pink and three Chili Winter Trail Run races. I would like to thank all those who participated: AJ6B Sean, KK6BMK Joe, KK6CHF Jeff, KK6UZS Eric, KK6WFF Jon, K6MSM Mike, KK6PUB Ed, AD6OH Patti, K5MGH Greg, and KR6ISS Kriss. If my memory failed me and I missed you on this list please pardon me.

Our next race will be a big one, The Orange County Marathon on May 1. We will need more than twenty operators for that one 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.

Heiko
Communications Director for SOARA

ad6oi@soara.org
(949) 859-3868



Raffle Report



This month's \$5 raffle prize is another [Icom ID-31A UHF Digital Transceiver](#).

The ID-31A has a look and feel along with a new user interface packed into slim, compact chassis protected with IPX7 submersible construction.

The built-in GPS receiver shows your current position and altitude for GPS position reporting function and the GPS log function tracks your movement. The ID-31A has a micro SD card slot which can be used for storing GPS log, voice memory and memory contents.

The large full dot-matrix display, directional keypad and quick menu button also ease the usability. Accessing a D-STAR (Digital Smart Technology for Amateur Radio) repeater has been made even easier.

Heiko & Hal



February \$5 raffle winner:
David, KK6VQG



The K7RA Solar Update 3/18/16

Solar indicators were lower this week, while geomagnetic indicators were higher.

Compared to the previous seven days, average daily sunspot numbers in our reporting week (March 10-16) were down 12.7 points to 51.7, and average daily solar flux was down 3.2 points to 93.6. Average planetary A index was up 2.8 points to 15.7, and average mid-latitude A index increased from 8.6 to 12.

The latest forecast has a predicted solar flux of 95 on March 18-19, 90 on March 20, 85 on March 21-24, 90 on March 25, 95 on March 26-28, 100 on March 29-31, 95 on April 1-9, 93 on April 10, 90 on April 11-15, 95 on April 16-17, and 90 on April 18-19. Flux values then rise to 100 on April 25-27.

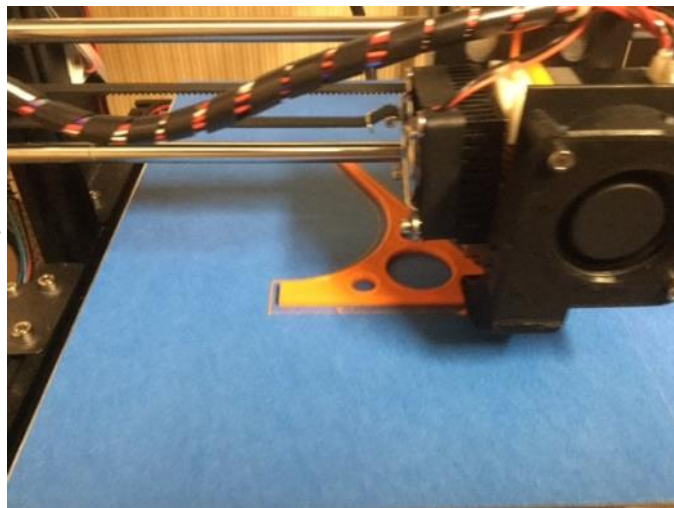
Predicted planetary A index is 16, 8, 6 and 5 on March 18-21, then 6, 8 and 10 on March 22-24, 5 on March 25-31, then 8, 30, 25 and 8 on April 1-4, and 5 on April 5-6. Planetary A index rises to 25 on April 11 and 30 on April 29.

[WM7D's Solar resource Page](#)

SOARA Saturday Schedule and Events

I [Ed, KK6PUB] offered to step in and help on SOARA Saturdays until we find a replacement. Let us know if you want to help! If you have a something you want to share or know more about please contact SOARA. There will be coffee and donuts supplied by SOARA and lots of radio discussions.

For the **March SOARA Saturday** I plan to demo HicTop Prusa i3 clone **3D printer**. Amazon link below. The demo will include Cubify Invent CAD software (cost \$50), the Cura slicer software \$FREE\$, and the printer, not so free. I'm currently designing a HT stand with Cubify Invent. (see photo) I will bring various example parts. For April, since we will be at the park. All are welcome to bring their solar panels, generators, inverters, and batteries for discussion and learning. Lets exchange our experiences and ideas. If you have a portable oscilloscope available, bring it. We will look at sine wave quality off the inverters. Possibly May, I expect to have the ham shield by then. The PCB's have been fabricated and they will be off to assembly soon. This is an Arduino shield that supports UHF/VHF 2M, 70 cm, & 1.25M. This is why I bought the 3d printer. I plan to build an ABS conductive case. August, I thought we might want to learn about how radios work. The Elenco AM/FM radio kit seems like a good start. Later, I want to do something on loop antennas. If you are knowledgeable, please let me know. I have been reading about the noise immunity, is it true?



(Continued on page 4)

Membership Report

We have 193 paid members and 54 unpaid. If you haven't renewed please do so soon. We have elections coming in May. There are currently 250 active members.

We have one new member. Welcome to SOARA! I hope you participate in our events to get the most out of SOARA.

Jim Norman KM6AWX

Badges

I have a large number of requested badges made and waiting. Please see me at the next SOARA meeting and pick up your badge. If you want a new badge let me know. Just 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. I will have it for you to pickup at the next meeting assuming you give me enough notice to make it. If your call sign or ticket changed let me know and I will update the roster.

Repeater User's Guide & Membership Manual

I still have plenty of manuals. This manual has a wealth of information for easy reference.

(Continued on page 5)

(Continued from page 3) - *SOARA Saturday*

Schedule of SOARA Saturday Events & Locations:

- Mar 26 - Murray - 3D Printing process & demo
- Apr 23 - Gilleran - Emergency Power, batteries, solar panels, & generators
- May 21 - Gilleran - HF Radio, prep for field day.
- Jun 18 - Gilleran - Field Day
- Jul 23 - Gilleran - (open for suggestions)
- Aug 20 - Murray - Bring a kit like the Elenco AM/FM Radio, that requires soldering. See kit ordering links below. We will help with soldering, oscilloscope, & function generator will be available.
- Sep 24, Oct 22, Nov 26 - Murray - (open for suggestions)

SOARA Saturday Ideas:

1. Build Kits, requires soldering
 - ◇ <http://www.xtalm.com/kits.html>
 - ◇ http://www.amazon.com/Elenco-Radio-Kit-Combines-Transistors/dp/B008515U1U/ref=sr_1_1?ie=UTF8&qid=1457744519&sr=8-1&keywords=elenco+am+fm+radio
2. Transmitter Hunting 101
 - ◇ Demo T Hunt, make a T Hunt antenna out of PVC and tape measure
 - ◇ Transmitter Hunting, radio direction finding simplified, by Joseph D. Moell, K0OV et al
3. 3D Printing 101
 - ◇ http://www.amazon.com/HICTOP-Leveling-Accuracy-Self-assembly-Printing/dp/B015IH MOSK/ref=sr_1_1?ie=UTF8&qid=1456693421&sr=8-1&keywords=hictop
 - ◇ <http://www.3dsystems.com/shop/invent?redirectFrom=cubify>
 - ◇ <http://www.openscad.org/>
 - ◇ <https://ultimaker.com/en/products/cura-software>
 - ◇ <http://octoprint.org/>
 - ◇ Mastering 3D Printing by Joan Horvath
4. HF Books
 - ◇ ARRL, Your First Amateur Radio Station by Steve Ford WB8IMY
 - ◇ The Complete DX'er 3rd edition by Bob Locher, W9KNI
5. Ham Shield / Arduino
 - ◇ Arduino Projects for Amateur Radio, by Dr Jack Purdue W8TEE & Dennis Kidder W6DQ
 - ◇ Arduino for Ham Radio, by Glen Popiel KW5GP
 - ◇ Ham Radio for Arduino and PICAXE, by Leigh L. Klotz Jr. WA5ZNU
6. Software Defined Radio
 - ◇ https://en.wikipedia.org/wiki/Software-defined_radio
 - ◇ HDSDR, SDR#, SDR Console
 - ◇ ARRL, The ABC's of Software Defined Radio by Martin Ewing, AA6E
 - ◇ ARRL, Digital Signal Processing, by Doug Smith KF6DX
7. Antennas
 - ◇ Understanding Your Antenna Analyzer, By Joel Hallas, W1ZR
 - ◇ SWR Explainer, by Reg Irish, G4LUF
 - ◇ Propagation and Radio Science, by Eric P. Nichols, KL7AJ
 - ◇ Antenna Physics: An introduction, By Robert J. Zavrel, Jr, W7SX
8. Digital modes
 - ◇ RTTY, PSK-31, JT65 & JT9, etc.
 - ◇ <http://www.arrl.org/digital-modes>
8. Raspberry Pi, Radio stuff on pi, Pi programming
9. Radio Controlled Software: Commander, Ham Radio Deluxe, FTBCAT, TRX-Manager, RadioControl, RadioComm
 - ◇ See dxzone.com/catalog/software/radio_control
11. Scanners, need scanner proficient speakers



Desert Storm Rally

April 1-2, 2016
(Blythe, CA)

We like to get you to help out on the event with communications and start and finish controls and need captains in each area. Plus need Car 00, 000. and Sweep teams. Plus we need people to help out at volunteer registration, technical inspections and assist in competitor registration...

Lodging: Capital Suites is doing again the Desert Storm Rally which is the code when you call in...

There are other hotels/motels nearby if it gets filled up and we will have that on the Desert Storm Rally website.

But we do need quite a few volunteers to make this event successful and being a championship event we want to make it exciting for you and for the competitors.

So get signed up and if anyone wants to be captain do put that on your registration sign-up...

We will be updating all of the 2016 documents on rallydata and on event website within a few weeks. So more to come...

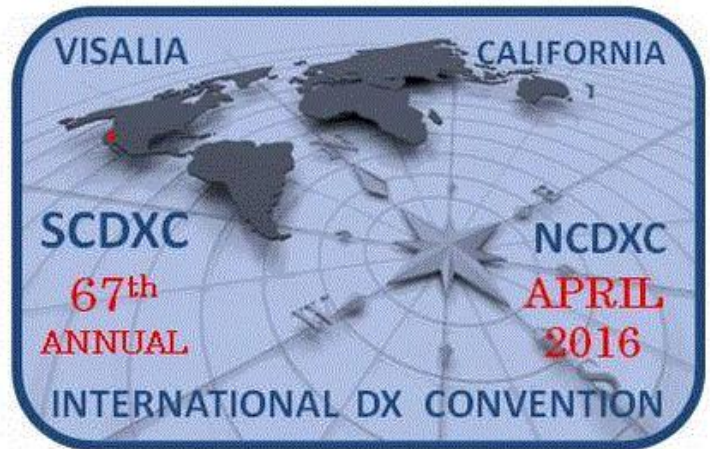
Any questions do not hesitate to contact - Barry Colston at 310-720-7906 for communications.

Denise McMahon
Organizer
562-547-4892
denise@southwestrally-cupseries.com

International DX Convention (Visalia)

The 67th Annual International DX Convention sponsored by the Southern California DX Club. Will be held at the [Visalia Convention Center](#) April 15-17, 2016.

The International DX Convention is the world's foremost DX convention. If you are a DXer or interested in any aspect of ham radio you need to be at Visalia. Top DX operators from around the world will be there. Meet the big guns from the US, Asia, Europe, Africa and Oceania. Meet the people on the other side of the mic or key. Shake hands with the person you have had that sked with for the past 10 years. Renew friendships.



Top DXpeditioners from every continent tell you how they did it. Learn the secrets for big signals on the top band, how to have fun and adventures chasing IOTA, contest forum, DX forum, seminars for everyone from the seasoned pro to the beginning DXer. Bring your latest QSL card arrivals for checking. Don't forget the raffle prizes which top even the famed Dayton Hamvention!

More information & registration at: <http://dxconvention.org/>

(Continued from page 3) - Membership Report

Membership News from last Board meeting

Adopted February 1, 2016, by the SOARA Board of Directors at the regular monthly Board meeting. I will update the SOARA membership application soon.

1. The initiation fee may be waived for members joining during the actual field day activity only.
2. New members to pay full membership fee at the current rate. Second year renewal will be prorated.
3. October 1 is the member dues renewal date.
4. Past members who left in good standing, that want to rejoin, we will waive the initiation fee indefinitely for those that previously have paid the fee. If a past member did not pay the initiation fee, (Example: joining at field day), the limit would be 2 years or less from their last payment record. After the two year membership lapse passes, members rejoining are required to pay the current initiation fee amount, in addition to their annual dues amount.

I hope to hear you on the radio and see you at the SOARA events! Go the club calendar at www.soara.org for more information on events.

73,
Ed Barnes, KK6PUB
Membership Director
membership@soara.org

CLAREMONT AMATEUR RADIO SOCIETY

Presents:

An AMATEUR RADIO SWAPMEET
DATE: 3rd. SATURDAY OF THE MONTH
START DATE: JANUARY 16, 2016

TIME: 6 AM – 11 AM

NO ENTRY BEFORE 6 AM



LOCATION: GRANITE CREEK COMMUNITY CHURCH
ADDRESS: 1580 N. CLAREMONT BLVD. CLAREMONT, CA 91711

THE SWAP MEET WILL BE HELD IN THE PARKING LOT
ADJACENT TO THE CHURCH. Granite Creek Community Church is not
involved in this event beyond the use of the parking lot. Claremont Amateur
Radio Society is the sole sponsor of the event.
(Please see contact information below)

ENTRY IS FREE TO VISIT

ALL PARTICIPANTS MUST HAVE VACATED THE AREA NO LATER THAN
11:00 AM
NO EXCEPTIONS.

SELLERS \$10.00 PER SPACE
SELLERS ARE RESPONSIBLE FOR CLEANING THEIR IMMEDIATE AREA BEFORE LEAVING.

PLEASE BE RESPECTFUL OF YOUR SURROUNDINGS BECAUSE THIS SWAPMEET IS IN A
RESIDENTIAL LOCATION.

THIS IS CONSIDERED AN ELECTRONIC RELATED EVENT, SO PLEASE CONSIDER WHEN
BRINGING ITEMS FOR SALE. ONLY BRING ITEMS RELATED TO AMATEUR RADIO,
ELECTRONICS, COMMUNICATIONS, PARTS AND MATERIALS THAT ARE OR CAN BE USED
FOR THESE ACTIVITIES.

All interaction is private between attendees and C.A.R.S. takes no
responsibility for transactions conducted during this event.

IF ADDITIONAL INFO IS NEEDED PLEASE CONTACT:
KG6ABF @ YAHOO.COM
C.A.R.S. Chairperson/Event Coordinator

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	TBD	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 Int'l 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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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, KK6PUB 949-468-7706
kk6pub@soara.org

Raffle: Hal Silverman, WB6WXO 714-897-5002
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Website: Sean Reigle, AJ6B 714-261-1717
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Ambassador: Spencer Ammermon, NG6K [\[In England\] Blog](#)
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