



THE

May 2017

# PROPAGATOR

The Monthly Newsletter of the South Orange Amateur Radio Association

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## Meeting

May 15, 2017

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 15 at the Norman P Murray Center in Mission Viejo at 7pm. For more information on the SOARA live auctions, including the rules, check the SOARA website (click [here](#)).

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 shack look a little cleaner, help your pocket-book and SOARA in the process.

If you are interested in selling, please be sure to arrive before the meeting to prepare your lots for sale, so we can start on-time. Thank you!

## From the President

SOARA was invited at our last meeting, to participate at the Fullerton Airport Day Expo, that was held this past Saturday, May 13, 2017. The invite was from Richard

Caso, MD, KK6QPV, President of ACES, the Aeromedical Community Emergency Services. SOARA participated by assisting at the ACES display booth, sharing space with ACES, Orange County Health Care Agency, a part of Orange County government, and AREDN, the Amateur Radio Emergency Data Network, also commonly known as amateur Radio mesh network.

SOARA provided some tables and chairs, but more importantly, set up and operated UHF/VHF and HF stations, provided generator electrical power, and assisted two SOARA members, Joe Ayers, AE6XE, and Don Hill, KE6BXT. They provided data and TV links between the ACES Hangar at the far south east end of Fullerton Airport via a cross field link at the OC Fire Authority hangar, on the north side of the field, then back to the ramp on the south side where the expo booths were located. SOARA also did public outreach, not only for our club, but also for OC Fire Watch.

I would like to sincerely thank the following SOARA members for making this event a success, by giving of their Saturday time to help out: Don Hill, KE6BXT, Joe Ayers, AE6XE, Jim Norman, K6JCN, Ray Bell, KF6QWY, Kris Larsen, KR6ISS, David Tiao, KK6VQC, Jeff Row, KK6CHF, Scott Holcomb, K8WHC, and, of course yours truly, Ray.AE6H.

Thanks to all for their hard work, and turning out on a beautiful Saturday, to make this a success.

73, Ray, AE6H, SOARA President



**COMING  
SOON**

**SOARA  
Saturday**  
May 20

**Laguna Hills  
Half Marathon**  
May 29

**Memorial Day**  
May 29

**Prescott  
Hamfest**  
June 9-10

**ARRL Field Day**  
Jun 23-25

## VEC License Exams

6pm—before  
the General  
Meeting

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

Walk-ins ok.

Extra | General |  
Technician

## Raffle Report & Field Day Coordinator

Frank, KK6AWB, was the winner of the April Raffle. He is pictured to the right (on the right) with SOARA President Ray, AE6H (on the left)

Frank has also agreed to be Field Day Coordinator as well. This is most welcome. Thank you, Frank!

Please give Frank your full support as SOARA looks to host another exciting and educational Field Day!

Note: *No raffle in May due to the Spring Auction.*



ARRL Field Day is next month on June 23-25th. More details to follow in the June Propagator, but please put this on your calendars' to support us on our BIGGEST event of the year. Thank you!

## Memorial Day Event

The LA/Pasadena base of the USSVI (United States Submarine Veterans Inc.) will hold its annual Memorial Day Ceremony on Monday May 29, 2017 at the Naval Weapons Support Center, Seal Beach.

It is located 800 Seal Beach Blvd, Seal Beach CA. There will be parking on Seal Beach Blvd. There is also additional parking and shuttle service at the Boeing Lot on Seal Beach Blvd.

The ceremony features the honoring of the 52 submarines lost during WW II. It also honors the two submarines, USS Thresher (SSN593) and the USS Scorpion, (SSN589) lost during the cold war.

The ceremony will feature the "Tolling of the Boats" calling out the names of the boats and where they were lost, and the final disposition of the crew.

The ceremony starts at 1100 hours. Get there early and get a good seat.

There will be a no-host luncheon at the Claim Jumper, Long Beach. It is located at 6501 Pacific Coast Highway, Long Beach CA. 73, Hal WB6WXO





### The Doctor is In!

#### New Topics:

- Optimizing Receiver Performance
- End-Fed Antennas
- Grounding

[Listen...and learn!](#)

ARRL EXPO will Anchor League's **Hamvention Presence**

At [Hamvention@2017](#) in Xenia, Ohio, on May 19, 20, and 21, ARRL EXPO will provide a spacious area focusing on ARRL activities. The ARRL Store will be the central focus of ARRL EXPO in Building 2 of the Greene County Fairgrounds and Expo Center, where visitors will be able to peruse and purchase a wide array of ARRL publications, supplies, and official League merchandise. They'll also be able to join, renew, or extend their ARRL memberships.

## 2017 Prescott Hamfest

June 9th & 10th, 2017

[From Jon, KJ7ON, who moved to AZ] We hope to see some of you guys out this way. They even have dry camping right onsite. Tina and I really like it here. We even had snow flurries yesterday. We love mountain living. Flying may be practical for some. They have direct flights from LAX to Ernest A. Love field (which happens to be directly across the street from my work) Great Lakes is the airline. Not sure on price.

It is 6.5 hours from the Murray Center to the hamfest site.

-Jon, KJ7ON <http://www.w7yc.org/2017-prescott-hamfest-at-erau/>

## From your Communications Director:

Notes, as seen by your Communications Director: or transmitting to all zones with a vertical antenna.

Our next event is the Laguna Hills Half Marathon on May 29. If you want to improve your communications skills feel free to volunteer and help us with the event. Please contact Heiko and I will enter you into the schedule.

The communications group has already taken part in seven different events and we have more to come. Thank you everyone that participated! Our volunteers are dedicated to making sure that everyone gets back safely from their journey, whether it be in the Santa Ana Mountains or on city streets, while we are learning about good amateur radio practices. First we need to focus on our charter. Our job is communications. We will communicate the issue and let the event coordinators tell us if any action should be taken. Only in extreme cases do we actually help fix a problem.

Please note, in addition to using our tactical calls you must always finish your QSOs with your own call sign. Listen before you transmit, as to not double someone else's transmission. You typically will hear a beep (courtesy tone) after transmission stops and the repeater goes idle. Also note that some repeaters do not have a courtesy tone (146.895 and 145.420 for example). You should also pause after keying and before you talk. This allows the transmitter time to turn on. If you don't, part of your first sentence will be cut off and everybody will be wondering who is talking without a call sign.

If you're a relatively new ham and have questions about the hobby we have events like SOARA Saturday to help you. If we are not providing you with the information that you feel is important to you, please ask. You can also ask any of the folks around you who have been at this service hobby longer than you. Elmering is a concept that is almost unique to amateur radio and is important to our hobby. Most hams enjoy helping others.

Now to the rest of the story, whereas we have some of the best hams in the area, we are sorely lacking in active participation at the management level. We need technically skilled people to help with our repeater operations, we need an activities director, and our directors always like to have help with their programs and projects. Participation is the second reward in belonging to an organization. True satisfactions is when you volunteer your time and see the benefits of your efforts.

73,  
Heiko, AD6OI@soara.org  
(949) 859-3868



### The K7RA Solar Update 5/12/17

Average daily sunspot numbers this week (May 4-10) were 17.1, down from 25.1 last week. Average daily solar flux declined from 76.9 to 71.5.

There were three consecutive days with zero sunspots this week, May 9-11. Spaceweather.com noted that Thursday was the thirty-third day with zero sunspots in 2017, and through all of 2016 there were 32 days with no sunspots. Being early May, this indicates an acceleration of the decline of the current solar cycle.

Predicted solar flux is 71 on May 12-13, 70 on May 14-17, 80 on May 18-23, 77 on May 24-27, 75 on May 28 through June 1, 73 on June 2, 72 on June 3-4, 70 on June 5-8, 72 on June 9-10, 75 on June 11, and 80 on June 12-19.



[WM7D's Solar resource Page](#)

**DX Operations:**  
[www.ng3k.com](http://www.ng3k.com)

**ARRL HF Propagation Charts**

## SOARA Sunday Morning HF Nets (New, Experimental, 10m net!)

On Sundays from 8-9 am is the SOARA Sunday morning 40 meter HF net (7.200 MHz +/-). All appropriately licensed members and non-members are invited to participate.

As an experiment, following the 40 meter net, we will switch to 10 meters at 28.410 MHz +/- . This was great fun last week. We want to better understand if there is any demand for a 10 meter net. Technician license holders have 10 meter privileges to participate and gain HF operation experience. As a heads-up, we may need change the 10 meter frequency if we have interference issues. Last week Steve K6UVR was observing birdies. We will announce any frequency changes on HF and 447.180 MHz, the Santiago 70cm repeater. We should be easy to find.

*So, if you re a Technician, listen in on 40 meters next Sunday and then participate on 10 Meters. I hope to hear you there!*

The 40 meter band conditions were marginal on 7.200 MHz. We had 4 checkins last Sunday. There was lots of noise and interference. We talked about our HF rigs, antennas and configurations. Toroids came up and was a common topic.

1. N6JCN, Jim ; helped with relays and net control. Thank you Jim!
2. KJ6SON, Norm
3. N2URI, Neil
4. KG6FCT, Lou

We changed to 10 meters, 28.415 MHz at about 9:05 am. The 10 Meter net seemed to have somewhat better band conditions but were not optimal. We had 5 checkins:

1. NJ6N, Brian
2. N6JCN, Jim
3. W6ETS, Ernie ; DSTAR net control
4. K6UVR, Steve
5. K6EEE, Jim

Horst KD7JHR, came in after the net. It was a fun and challenging net. Both technicians, Frank KK6AWB, & Bob KI6COO contacted me out-of-band with antenna type issues. It was encouraging that they are trying to work HF. We need to help them get their HF rigs working better. Both live in HOA restricted areas. If you don't have a HF rig, maybe contact someone that does and see if you can go to their shack for some Sunday morning fun!

Also, the DSTAR Wednesday evening net was much more active last week. Ernie, W6ETS is net control. That was lots of fun too! Thank you Ernie!

73,  
Ed Barnes, WA6ED  
SOARA Membership Director & Backup HF Net Control

## SOARA Saturday— Come Join In!

It's easy to walk around and ask questions and see things work. So, attend, ask questions, have fun, share your experiences, and knowledge. SOARA will provide [coffee and donuts](#). Time 9am to noon. Contact: Ed Barnes, [WA6ED@soara.org](mailto:WA6ED@soara.org) suggestions are welcome for future Saturdays. Let me know if you are interested in participating on a SOARA Saturday committee to help guide future events.

### Future, SOARA Saturdays:

May 20, Murray Center, SWR Meters

I'm working with Horst KD7JHR to build a SWR meter. Similar to Dec 1987 QST page 15, [http://qsl.net/on7eq/pdf/VHF\\_SWR\\_meter.pdf](http://qsl.net/on7eq/pdf/VHF_SWR_meter.pdf) Several prototypes will be demoed. I will make a parts list available.

Jun 24, Gilleran Park, Emergency Battery Box II Build at Field Day

For Field Day, Tony W6TNY and I are planning another battery box build on Saturday morning. (Start time: 8am). Bring your battery boxes, solar panels and generators with any radio gear you want to setup and demo. You need to bring your own parts. So, plan ahead. Ask if you have questions?

Jul 22, Gilleran Park, Emergency Power

This is where we share useful ideas for emergency radio go kits, power, and setup tips. See everyone's equipment working without utility power. Battery, Solar, Generators...

Aug 26, Gilleran Park, Antenna workshop

I need volunteers to bring and demo various antennas. Any band antenna is okay. HOA stealth antennas would be interesting. Open discussion on antenna problems and how they were solved.

Sep 23, Oct 21, Gilleran Park, need suggestions

Nov 25, Murray Center, need suggestions

73, Ed, WA6ED

## Telecommunications Ministry in India Orders Halt to Online Transceiver Sales

05/10/2017—from the ARRL

The *Mumbai Mirror* in India [reports](#) that a complaint by radio amateurs has prompted the Telecommunications Ministry to order online purveyors, including eBay and Amazon, to stop selling wireless transmitting equipment. According to the newspaper, a group of hams wrote the Wireless Advisor in the Telecommunications Ministry last fall to warn that online sales of wireless equipment could pose a national security threat.

Their warning followed reports of "highly suspicious" 2-meter transmissions along the Bengal-Bangladesh border. Their letter drew the attention of the Intelligence Bureau, the prime minister's office, and the military.

The Telecommunications Ministry now has ordered e-commerce websites to stop selling transmitting gear online, effective immediately. The law in India requires that those selling such equipment have a dealer's possession license and users have a license to transmit.

Ankur Puranik, VU2AXN, spokesperson of the Mumbai Amateur Radio Society, told the newspaper, "... our concern is that the powerful equipment can fall into wrong hands and be misused. More importantly, these two-way radios can tune into any frequency including confidential frequencies used by law enforcement agencies. They can be misused to listen to confidential wireless conversations."



## Radio Shack

I heard some folks talking on Santiago last night about Radio Shack.

They said that all of the stores were closing. I think that's not true, and it might be worth pointing out that only some stores are closing, at least for now that's the case...

If people like having electronics stores close to where they live, they might consider supporting them more perhaps.

73, Brian, NJ6N

<http://www.oregister.com/2017/03/21/radioshack-to-shut-down-2-orange-county-stores-among-552-closures-overall/>

## Membership Report

We have 215 active members. Let me know if you need a new badge or a membership handbook. Pick them up at the next meeting to save SOARA postage costs. Suggestions to make SOARA better are always welcome. I suggest all members attend and participate in as many events as possible to gain maximum benefit from your membership.

### Field Day:

I need membership table helpers. If you would like to help cover the membership table for a few hours during field day, please contact me. On field days only, we traditionally waive the \$40 initiation fee. If you know someone that wants to join SOARA, have them attend field day and we will start the process!

### Welcome New Members!

1. Dick Hilde, K6JRW
2. Ron Phillips, AE6QU
3. Tony Swift, KM6HWH

### New Call Signs:

1. Mike Clearly, AI6WE
2. Jeff Chilton, WW0KRP

73, Ed, WA6ED, [membership@soara.org](mailto:membership@soara.org).

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## Grounding and Bonding for the Radio Amateur

*New ARRL Book*

Author: H. Ward Silver, N0AX

Proper Station Grounding is Important!

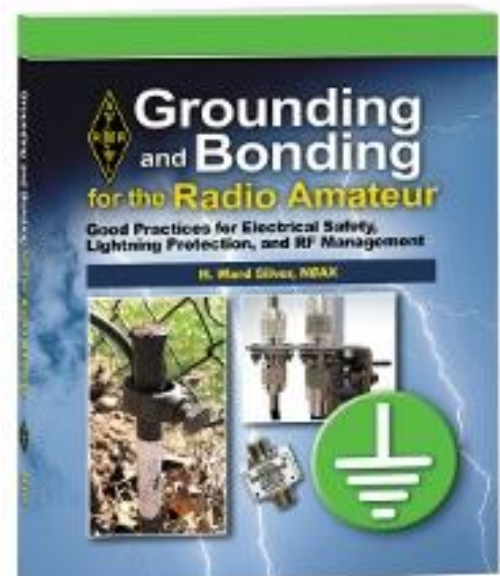
... Build your ham radio station with effective grounding and bonding techniques:

AC safety: protects against shock hazards from ac-powered equipment by providing a safe path for current when a fault in wiring or insulation occurs.

Lightning protection: keeps all equipment at the same voltage during transients from lightning and dissipate the lightning's charge in the Earth, routing it away from equipment.

RF management: prevents unwanted RF currents and voltages from disrupting the normal functions of equipment (also known as RF interference or RFI).

Grounding and Bonding for the Radio Amateur shows you how to make sure your station follows current standards for lightning protection and communication systems, not to mention the National Electrical Code. You'll learn effective grounding and bonding techniques for home stations, including condos and apartments, portable and temporary stations, as well as towers and outside antennas.





### Midway and Kure Islands Reinstated as DXCC Entities

On March 31, 2017, the DXCC desk announced the deletion of Midway Island and Kure Island from the DXCC entities list...

After further review it has been found that the deletion of these two entities is not supported by the changes that were made to the relevant administrations. Therefore, the deletions from the DXCC list should not have occurred and the two entities, Midway Island KH4 and Kure Island KH7K, will return to the DXCC list as separate entities.

## End of an Era

My Longwave radio newsletter sadly reports the continuing demise of longwave broadcasting in Europe--France just a few months ago shut theirs down on 162 kHz--2 million watts

The Germans shut all theirs down a year or two ago 4 of them--and the tower demolition is happening this year. Longwave broadcasting towers have to be tall--about 1000' because of the low frequency. So they make quite a splash coming down. Not hard to do--put a charge on the base of the guys on one side and the other guys will pull it down in the other direction. They usually put a charge on the tower base to cut it off from its foundation. Tower demos may be difficult to watch for a radio enthusiast, but its happening all over the world on longwave, medium wave and shortwave broadcast towers.

Just put 'Sprengrung Sendermast Zehlendorf' into You tube, there will be plenty of videos. 'Sprengrung' means blasting. [Ed: Here's one example: [www.youtube.com/watch?v=qd0r8AeOl6o](http://www.youtube.com/watch?v=qd0r8AeOl6o)]

End of an era. Kriss, KR6ISS

## New Bands! FCC Issues Amateur Radio Service Rules for 630 Meters and 2,200 Meters

It's been a long time coming, but the Amateur Service will get two new bands in the near future. The FCC on March 28 adopted rules that will allow secondary Amateur Radio access to 472-479 kHz (630 meters) and to 135.7-137.8 kHz (2,200 meters), with minor conditions. The FCC Report and Order (R&O) spells out the details. It allocates 472-479 kHz to the Amateur Service on a secondary basis and amends Part 97 to provide for Amateur Service use of that band as well as of the previously allocated 135.7-137.8 kHz band.

Here are the highlights:

- Amateurs operating on 472-479 kHz will be permitted a maximum equivalent isotropically radiated power (EIRP) of 5 W, except in parts of Alaska...
- Amateurs operating in the 135.7-137.8 kHz band will be permitted to run up to 1 W EIRP.
- The FCC is requiring a 1-kilometer separation distance between radio amateurs using the two new bands and electric power transmission lines with PLC systems on those bands. [Amateur Radio operators will have to notify the UTC of station location prior to commencing operations](#)

The FCC placed a 60-meter (approximately 197 feet) above-ground-level (AGL) height limit on transmitting antennas used on 630 meters and 2,200 meters.

The bands would be available to General class and higher licensees, and permissible modes would include CW, RTTY, data, phone, and image. [Automatically controlled stations would be permitted to operate in the bands. http://www.arrl.org/news/new-bands-fcc-issues-amateur-radio-service-rules-for-630-meters-and-2-200-meters](http://www.arrl.org/news/new-bands-fcc-issues-amateur-radio-service-rules-for-630-meters-and-2-200-meters)



Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
General Meeting 7:00 PM	23	27	20	17	15	19	17	21	18	16	20	-
Program	SOTA	DXp 3Y0Z 2018	EQ Tom Broz	You and SOARA	<a href="#">Spring Auction</a>	<a href="#">Field Day Prep</a>	TBD	<a href="#">SOARA Fair</a>	TBD	TBD	<a href="#">Fall Auction</a>	-
VE Testing	23	27	20	17	15	At Field Day 24	17	21	18	16	20	--
Educational Classes	21	25	18	15	13	17	15	19	16	14	18	-
SOARA Saturdays (9am)	28	Mar 4	25	22	20 Murray	24 Gilleran	22 Gilleran	26 Gilleran	23 Gilleran	21 Gilleran	25 Murray	-
SOARA T-Hunt	8	5	5	2	7	4	2	6	3	1	5	3
Board Meeting	30	Mar 6	27	24	22	26	24	28	25	23	27	-
Special Events	<a href="#">Quartzfest</a> 22-28	<a href="#">Yuma Hamfest</a> 17-18	<a href="#">Palm Springs Hamfest</a> Feb 4	<a href="#">Visalia Intl DX</a> 21-23	<a href="#">Ohio Hamven- tion</a> 19-21	<a href="#">ARRL Field Day</a> 23-25	HRO Ham Jam	<a href="#">SOARA Picnic</a> 6		<a href="#">JOTA</a>		<a href="#">SOARA Holiday Party</a> TBD
Ham-Related Swap Meets	<a href="#">TRW</a> 28 <a href="#">C.A.R.S.</a> 21	25  18	25  18	29  15	27  20	24  17	29  15	26  19	30  16	21  28	25  18	30  16
Major HF Contests		<a href="#">ARRL DX-CW</a> 18-19 <a href="#">CQWPX RTTY</a> 11-12	<a href="#">ARRL DX-SSB</a> 4-5 <a href="#">CQWPX SSB</a> 25-26		<a href="#">CQWPX CW</a> 27-28	<a href="#">ARRL Field Day</a> 24-25			<a href="#">CQWW RTTY</a>	<a href="#">CQWW SSB</a>	<a href="#">CQWW CW</a>	
Volunteer Events	<a href="#">OC Chili Run</a> 21	<a href="#">Paws Fur Pink</a> 26  <a href="#">OC Chili Run</a> 25	<a href="#">OC Chili Run</a> 25  <a href="#">Baker to Vegas</a> 25-26	<a href="#">Desert Storm Rally</a> 7-8	<a href="#">HD Trails</a> 6 <a href="#">OC Mara- thon</a> 7 <a href="#">Memorial Day 1/2 Mara- thon</a> 29	<a href="#">ARRL Field Day/ Setup/ Ops/ Clean</a> 23-25	4th of July Fire -works 4			<a href="#">Vision Quest</a>		<a href="#">Run for a Claus</a>

\*Dates subject to change.

Check the [SOARA website](#) to verify locations and times.

### April's \$5 Raffle Winner

xxx >



**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:**

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

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

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

10 meter HF (28.410 +/-)  
Sundays after the 40m net.

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



#### **SOARA OFFICERS**

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[ni6x@soara.org](mailto:ni6x@soara.org)

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**Communications:** Heiko Peschel, AD6OI 949-859-3868  
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#### **SOARA APPOINTMENTS**

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

**Activities:** *[Open]—Please contact us ([board@soara.org](mailto:board@soara.org)) if you are interested.*

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

**Raffle:** Hal Silverman, WB6WXO 714-897-5002  
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**Testing:** Sean Reigle, AJ6B 714-261-1717  
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**Website:** John Zimmer, KM6BEE TBD  
[km6bee@soara.org](mailto:km6bee@soara.org)

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