



The

September 2022

Propagator

The Monthly Newsletter of the South Orange County Amateur Radio Association

In This Issue

Presidents Message.....	1
Satellites.....	1
Elmer Saturday	2
Membership ...	3
Soara Picnic....	3
Unusual NDB...5	
ICOM Hearing Aids.....	7
Club Sale.....	9
Propagation. .	10
Financial Report	13
Nets/Repeaters.	13
Swap Meets are Back!.....	14
Soara Library	15
Sale Mail List.	15

General Meeting

NPM Center
September 19,
2022 7:00 PM
Norman P. Murray
Center
23492 Veterans
Way, Mission Viejo,
CA 92692

President's Message - September 2022

Greetings to all SOARA members,

First, I hope as many of you who can, will attend the SOARA Picnic, next Saturday, September 24, at shelterb#3, near the main entrance, Laguna Niguel Regional Park, For those not familiar, the park is located at 28241 La Paz Road, Laguna Niguel. This is just south of the Aliso Village (Whole FOODS Shopping Center, which is at Aliso Creek Rd and La Paz Rd.

Next, just a reminder, SOARA annual dues are due October 1, which is coming right up, In spite of inflation, we are able to hold the annual dues the same as they have been for the past few years. You will be receiving a reminder letter from Membership, very soon. Remitting your dues as soon as you can, will really help us out. We are planning to make several improvements to our repeater system this coming fiscal year. Payment on time helps us make these things happen.

That's about it, and we hope you can make Monday's meeting with Clint Bradford, either in person at Murray Center, or virtually. See our website for details.

**73 all,
Ray, AE6H**

General Membership Meeting Monday, September 19th @ 6:30 pm. Norman P. Murray Center

We will be meeting at the Norman P. Murray Center in Mission Viejo where our guest speaker, Clint Bradford K6LCS, will be presenting to us via Zoom. You can watch the presentation with the SOARA members at the Murray Center or from the comfort of your own home if you prefer. The login for the Zoom meeting is listed below. Snacks and coffee will be provided.

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

NOTE: Clint's Zoom meeting will begin at 6:30 pm. with the intent of getting underway by 7pm. If you plan on attending at the Murray Center, please arrive earlier than normal so we can get started on time.

Clint K6LCS has been a ham since 1994, and found his niche in the hobby: working amateur satellites with minimal equipment and telling ALL about it! He has served a liaison between NASA, the ARISS team, and schools coordinating amateur radio contacts between the International Space Station and students (and also orchestrated a wildly successful ARISS contact). Audiences have never found his presentation slides "wordy" nor dull. Trivia questions are included throughout the session - audiences are never bored.

For reference materials, Clint has created a support Web site at work-sat.com. The Web site has become a one-stop source for ALL the citations and equipment recommendations and software suggestions made in the presentation.

Professionally, Clint was sales manager for ADI / Premier Communications / Pryme, worked for a Motorola commercial two-way dealer a couple of years, and for Ham Radio Outlet a couple more. He resides in Jurupa Valley, California, with his wife, Karen, and their rescued lab, Freja (FRAY-ya). K6LCS Clint is inviting you to a scheduled Zoom meeting.

Topic: SOARA Satellite Session

Time: Sep 19, 2022 06:30 PM Pacific Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/85148183788?pwd=ZHBXWDdJUzhLMENwUzVVTWEzTjdNQOT09>

Meeting ID: 851 4818 3788

Passcode: SOARA

One tap mobile

+16694449171,,85148183788#,,,,*770536# US

Erik Wresch
W6INE

[SOARA Elmer Saturday, 09/24/22, Murray Center](#)

I updated the SOARA Saturday page on www.soara.org. Go there and see the schedule. The next SOARA Saturday will be at the Murray Center, September 24, 9am to noon, coffee and donuts will be provided. We will be talking about Antenna analyzers, spectrum analyzers, test antennas, attenuators and other cool stuff. Bring your ideas and questions! Or, just chat about radio.

Here's the SES link: <https://www.soara.org/activities/soara-saturdays/>

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The SOARA Saturday tech net log is under the above link too

**73,
Ed, WA6ED**

SOARA Membership Report

Welcome to our newest member!
AJ6VT, Phil

It's that time of year again - your SOARA dues are due on October 1. You'll be receiving an email shortly reminding you of this fact and letting you know how much you owe. For most of you, that's \$50. However, folks who joined in the past year (and a few others who didn't pay attention last year) will have a partial credit, so your dues owed will be less.

We're currently at 227 active members, down four from this time last year. That's not a lot, but we'd prefer to see the number going up, so please consider asking your friends to join us.

If you need a new badge or a copy of the SOARA Repeater User's Guide & Membership Manual, send me an email at membership@soara.org. The manual is available as a PDF file that I'll email to you. Badges must be picked up from me in person at one of our events.

**73,
Greg, N6PM
SOARA Membership Director**

SOARA Picnic - September 24 - Laguna Niguel Regional Park

I am very happy to announce that the annual SOARA picnic will be held this year on Saturday, September 24th from 11am - 3pm at Laguna Niguel Regional Park, Shelter #3 (see map, circled in red). Come join us for some fun and food!

The club will provide hamburgers, hot dogs, all the fixings, and bottled water. There will be a limited number of plant-based burgers and sandwiches as well. Side dishes, salads and deserts are pot-luck. Bring your favorite dish and enough to share with others!

It wouldn't be an amateur radio picnic without some radio fun so feel free to bring your "park rig" or any other radios and get on the air. I will set up a short walking T-hunt as well so bring your t-hunting gear!

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Please RSVP to me, joe@perrigoue.com with the number in your party that will be attending. We are expecting a big crowd this year, I need you to please make an extra effort send an RSVP so we can get an accurate count. The picnic is open to all members and immediate family as well as prospective members.

Looking forward to seeing you all!

Laguna Niguel Regional Park
28241 La Paz Rd, Laguna Niguel, CA 92677
Shelter #3 (see map, circled in red)
11am-3pm Parking is \$5, free to OC Parks members

**Thanks,
Joe K7KCE**



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Unusual NDB in North Carolina

I just got back from a short trip to North Carolina to visit my sister and do some sightseeing in Asheville in the Appalachians. Not much in the way of radio interest, but on the the way to Asheville at town of Hickory I found an ILS approach beacon that was a real oddball.

Occasionally over the years, I've run into a beacon antenna that is non-standard, non manufactured, sort of home concocted. This one consisted of a tall wood pole, with the lead from the transmitter shed going straight up to the top, then the wire went around a pulley and back down again to the bottom, so the wire could be hoisted up and down. Attached to the lead at the top were 8 top load radials, each going down to each own insulated ends at a post. There was no security fencing of any kind--nothing to prevent you from touching the live wires except the warning signs. Definitely a bit of North Carolina NDB folklore.

Asheville Airport still has two on the air beacons--each 5 miles off the end of the runway either direction. The stronger one of the two, BRA 379 kHz, I got a shot of on a prior trip years ago--it looks like a old 4 course radio range tower. The other one north of the airport IM 357 kHz, falls within the Biltmore Estate property, which is 11,000 acres. Since I was going to tour the Biltmore Estate, with the fancy Vanderbilt mansion, I decided to try to get to it. Unfortunately, that half of the property is mainly vineyards and is off limits to visitors, so no go there.

I actually talked with an American Airlines pilot at Raleigh Airport on the trip about what they actually navigate with these days with the airlines. He said it's all GPS waypoints put into the flight computer as assigned by air traffic control. The backup is inertial guidance system, which has the same waypoints in it. They don't use VORs or NDBs anymore. Occasionally--they may use the ILS localizer and glide slope if the conditions are really bad, since they are a little more accurate than GPS approaches.

So, I figure photographing these beacons are a quest to get them before they go away.

Hickory Airport
LOM NDB--very
odd home-built
antenna
construction





The lead is pulled up, with 8 top load radials hanging on it



From the transmitter shed, the lead goes up to the top of the pole, and then down again to the bottom to adjust tension



One radial from top to bottom

**Kriss
KR6ISS**

ICOM and hearing aids

The instructions below will allow the interoperability with ICOM 2730A/E-UT133A using newer BT Hearing Aids from Oticon, Philips, Signia and Sonic. This includes remote BT Mic, supporting both VOX and PTT capabilities. We will then be integrating the ID-5100-UT133A and then the ID52A. This is all made possible due to the use of BT HSP and HFP protocols along with a proprietary HA protocol called "Twinlink".

It is important to note that I have only been able to validate using Oticon devices as these are what I wear. However, the specs on the other devices appear to all have the same functionality so I have high confidence they will all work.

- a) Oticon "ConnectClip", Philips "AudioClip", Sonic "SoundClip" and Siemens Signia "Steamline MIC".
- b) Hearing Aids (Oticon firmware revision 5.0 or greater or manufacturer's equivalent)
 1. Oticon Zircon,
 2. Oticon More
 3. Oticon Ruby
 4. Oticon Xceed
 5. Oticon Opn S
 6. Oticon Siya
 7. Oticon Opn (my Hearing Aids that I wear)
 8. Philips HearLink miniRITE (now sold by Costco)
 9. Philips HearLink miniRITE T (now sold by Costco)
 10. Philips miniRITE TR (now sold by Costco)
 11. Philips miniRITE BTE PP (now sold by Costco)
 12. Sonic Enchant
 13. Sonic Trek
 14. Sonic Radiant
 15. Signia AX
 16. Signia Xperience
 17. Signia NX

Test setup consisted of

1. Pair of Oticon hearing aids, ex. OPN S miniRITER
<https://www.oticon.com/solutions/rechargeable-hearing-aids>
2. Oticon ConnectClip <https://www.oticon.com/solutions/accessories/connectclip>
3. ICOM2730A with UT-133A Bluetooth installed

Basically, the ConnectClip and the UT133A module use Bluetooth HFP and HSP protocols which enable full audio and Mic interoperability.

OPTION 1; full VOX capability

1. Make sure your ConnectClip and your hearing aids are turned off
2. Turn on hearing aids. This automatically sets them in pairing mode

3. Turn on ConnectClip (hold large side button down for 3 seconds, power status light will turn green and stay green)
4. ConnectClip connection status led will blink yellow during pairing, then turn to solid yellow after pairing
 1. You have 3 minutes to accomplish this, or you need to power everything off and try again
5. Put ConnectClip into pairing mode for ICOM 2730A-UT133A (hold large side button and top small side volume button for 6 seconds)
 1. Status indicator will blink blue until paired with ICOM UT133A, then it will turn solid blue
6. Put ICOM 2730A-UT133A into pairing mode (page 73 of manual https://www.icomjapan.com/api/download.php?post_id=1553&fl=/uploads/support/manual/IC-2730_ENG_IM_5.pdf)
 1. MENU-EXMENU > EXMENU-BT SET > BTSET-BT, rotate dial to set to ON, push ↵enter
7. Rotate dial to select PAIR
 1. MENU-EXMENU > EXMEN-BT SET > BTSET-PAIR, push ↵enter
 2. CONNECTING will blink on screen, then CONNECTED when paired
8. Rotate dial to select VOX
 1. MENU-EXMENU > EXMEN-BT SET > BTSET-HS SET > HSSET-VOX > VOX-VOX , rotate dial to ON, push ↵enter

Notes;

1. ConnectClip will have both status lights green indicating power good and HFP/HSP communication status
 1. Every time you power on ConnectClip, the status lights will go through a sequence and should end up both being green (provided you are within 20 feet of a powered up ICOM 2730A-UT133A)
2. You may need to adjust the gain a bit via option MIC gain (MIC G) in EXMENU. I found I did not need to alter the default setting per say but I felt that changing to just above mid level made a slight difference.
3. You may need to adjust the VOX Level (VOX LV) to your liking (page 74 of manual). This adjusts how far away from your mouth is the ConnectClip as well as picking up other audio from passenger, stereo, etc.
4. I found adding a VOX delay (VOX DLY) of 1 second worked best (page 75 of manual states 0.5s)
5. VOX Total or VOX timeout is default autoset to 3 min. (page 75 of manual)

OPTION 2; PTT capability while using MIC in ConnectClip.

1. Use instructions a) through g) in above VOX OPTION
 1. Make sure VOX it turned OFF in settings h) above
 2. You should not have VOX and PTT at the same time
2. Put ICOM unit into mode for PTT button while using BT Mic from ConnectClip
 1. MENU-EXMENU > EXMENU-BT SET > BTSET-HS SET > HSSET-HSFUNC (Page 18 of EXMENU manual addendum for Bluetooth settings https://www.icomjapan.com/api/download.php?post_id=1555&fl=/uploads/support/manual/download/IC-2730_Web_ENG_0.pdf)

2. Change the setting from "NORMAL" to "MIC"

Notes;

1. ConnectClip will have both status lights green indicating power good and HFP/HSP communication status
 1. Every time you power on ConnectClip, the status lights will go through a sequence and should end up both being green
2. the above PTT change to MIC setting allows either the PTT button on a RJ45 MIC/Handset (ex; HM-207) to be used, and/or a separate push to talk button by momentarily shorting out pin 7 and pin 4 of the MIC RJ45 connector.
 1. I wired a separate PTT button into the base transceiver RJ45 port and attached to gear shift on my Toyota Tacoma truck
 2. My HM-207 handset is still connected via the remote display control unit.
3. The MIC setting in HSFUNC allows the steering logic of the ICOM 2730A to use any button connected to the RJ45(s) as the PTT button.
 1. IMPORTANT, this setting however disables your MIC in the HM-207 handset (not keypad functions, just the MIC)
 1. If you want to use the MIC in the HM-207 you need to switch back to "NORMAL" mode in HSFUNC thereby disabling the BT audio

Larry Dalphy
KBOJ

Club Sale of amateur radio equipment

From the estate of Hal Silverman and his family courtesy of Mark Silverman his son.

Here are the rules for this auction.

1. I will set the minimum bid prices according to what I think is fair, not top dollar but no give aways either.
2. Anyone can bid as often as they like and all bids will be confidential.
3. I will not bid on any items at all, but those items where no one matches the minimum bid I will purchase those items at the minimum bid price, for sale at a later date.
4. The bidding will open at 9am on Sept.9 and close at 9am on Sept 23. This will permit dissemination at the next meeting and distribution from the 24th on.
5. If you have any questions call or e-mail me.

Please respond with your bids to <kd6sbi@gmail.com> (my original Call)

Please note that I have changed some of the prices at the request of others. These are my proposed minimum bids. Auction to start Sept. 9 2022 at 9am Pacific daylight time and close at 9am on Sept 23.

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- 1/ Kenwood TS-480 HX HF plus 6m radio with manuals, no hand mike \$ 650 Good
- 2/ Kenwood TM-G707 2m/440 mobile radio with microphone approx. \$300 Good
- 3/ Kenwood TM-742A Tri-band radio with triplexer not fully functional \$400 Fair
- 4/ Kenwood MC-60 mike w. 8 pin round connector \$75
- 5/ Kenwood PC-1A phone patch controller \$25
- 6/ MFJ 945 manual tuner \$125
- 7/ Heathkit SB-201 power amplifier 80m thru 10m \$ 600, waiting for test results
- 8/ Yaesu FT-8800 2m/440 mobile radio w/ mike and power cord \$200 Good
- 9/ ITC Instruments Model SA 1800A Spectrum analyzer \$ 350 awaiting result but appears good with cables
- 10/ Siglent SDS 1152 CML + dual trace Oscilloscope \$ 200 awaiting test results but appears good with cables
- 11/ H.P. 6215A variable power supply \$25 unknown
- 12/ High sierra antenna parts, not complete
- 13 Heil Foot switch \$25
- 14/ 50ft 2" wide copper roll \$30
- 15/ 3" x 6" dummy load no name \$25
- 16/ Variac SC 10m variable power supply \$40
- 17 various electric cable, coax and antenna pieces as well as miscellaneous stuff. \$40

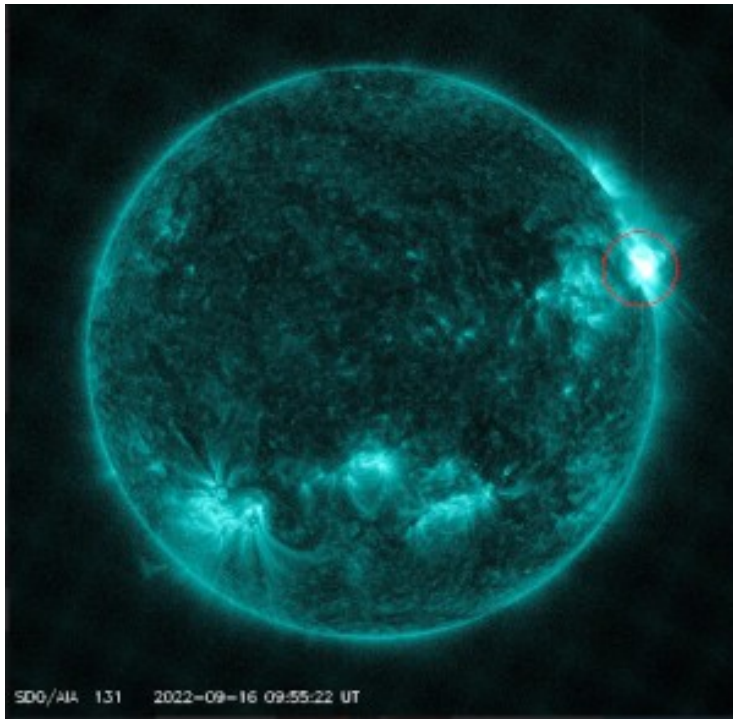
**Heiko
AD6OI**

[Propagation Changes Observed in Real Time](#)

Last Friday, September 16, 2022 I was able to directly observe the effects of an M-Class solar flare during the California Rescue Communications 40M Net. At about 1545 UTC (0845 PDT), the observed signal level of stations participating in the net, including Net Controls KG6FCT in Roseville, CA and KI6DGU in Dan Diego, CA dropped at least 30 dBm. Signals into the Northern Utah SDR, which are usually strong from every location in California, dropped to being nearly unreadable. What I found most interesting was the timing of the effects on sky waves vs. ground waves. When the M6.7 flare hit, sky wave communications degraded very quickly. In fact the first words of a transmission were S9+10 (-63dBm) dropping to S5 (-97dBm) a few words later. As one might expect, the SDR and direct RF reception for non-local transmissions degraded simultaneously. However, ground wave transmissions from local stations were degraded less initially. Ultimately all stations became nearly unreadable in about 90 seconds. Reception was very poor for a few minutes, then came back quickly as the flare's strength diminished.

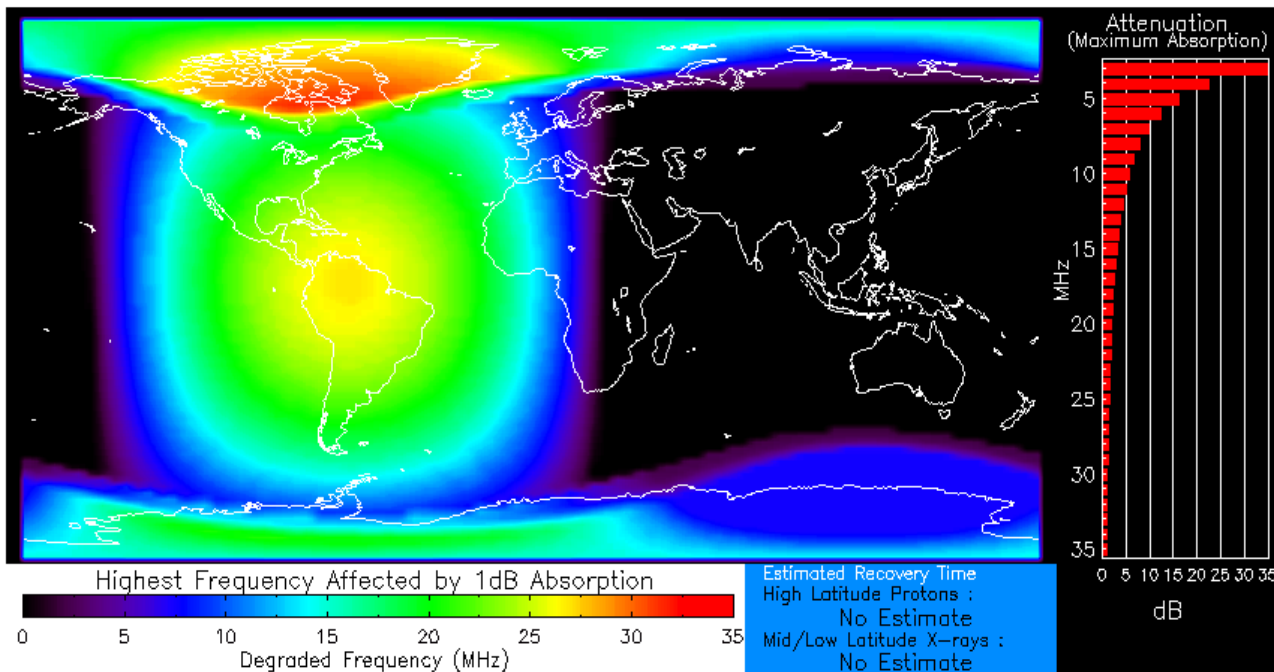
This may be 'old news' to more experienced hams, but it was a very interesting experience for me and prompted me to go to <https://www.spaceweatherlive.com/> to observe the effects being measure and correlate that to what I was hearing. Some screenshots from that site while the event was occurring are shown below. Note that the flux is down to 2.05 in the last image and at that point propagation was only about 12dBm down from normal levels.

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Bright spot at about 2 o'clock with red circle around it was the source of this flare.

Radio Blackout



Minor X-ray flux
 Product Valid At : 2022-09-16 16:19 UTC

Normal Proton Background
 NOAA/SWPC Boulder, CO USA

Degradation map and frequency correlated effects. This chart as taken after the event had diminished substantially, but the heat map and .frequency attenuation graph are interesting. This was captured shortly before the chart below, but the data is from 1619 UTC.

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The plot on this page shows us the most recent 24-hour solar X-ray data from the primary GOES satellite. You can zoom in on this plot by selecting a time period that you wish to view and even export the graph as a JPG, PDF, SVG or PNG file. Beneath that we have a collection of live imagery which can be used to pinpoint the location of a solar flare and see if there was a coronal mass ejection. Last but not least we have a list detailing all solar flares that took place today. All times listed are in UTC.



Screenshot of Real time strength of flare strength, taken at 1629 UTC

Dale Tyler
W6EDT

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SOARA Statement of Income and Expenses October 1, 2021 - August 31, 2022

Ten Months Ending:	August 31 2022	August 31 2021	Increase (Decrease)
Cash Income:			
Memberships	7,968	11,344	(3,376)
Other	2,133	1,413	720
Total Cash Income	10,101	12,757	(2,656)
Cash Expenses:			
Repeaters including site rental, utilities & insurance	6,837	8,280	(1,443)
Member Activities	3,506	237	3,269
Other expenses	959	680	279
Total Cash Expenses	11,302	9,197	2,105
Cash Net Income	(1,202)	3,560	(4,762)
Beginning Cash - October 1	27,506	22,722	4,784
Ending Cash - August 31	26,305	26,282	22

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

Ron Mosher - KOPGE
SOARA Treasurer

SOARA Nets and Repeaters

As many of you already know, SOARA has nets two nights a week and both Saturday and Sunday. There are also many other nets on our repeaters as well.

We have about seven or eight different net controls for over two dozen available positions every month, depending on whether the month has four or five turns available. We are always looking for more Net Control operators so please apply if you want to join our select group.

In general our nets are friendly and easy going but there are some rules that we should follow, not many thank goodness.

- The FCC requires you to identify with you call sign within ten minutes of getting on the air and every ten minutes thereafter including when you finish the conversation.
- We (SOARA) as well as almost all organizations with repeaters ask you to identify yourself with your FCC issued I.D. when you first get on the air and then follow the FCC guidelines, including when signing off.
- Other than that we try to avoid controversial subjects that might displease or anger others.

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Now to the fun part.

- First of all, all SOARA nets are directed nets and the Net Control is in charge.
- In a conversation with a friend recently we came up with some thoughts and ideas on how to run an amateur radio net and also how to respond to it.
- As Net Control you should try to let your guests do the talking. Guests please feel free to express yourselves.
- Prime them with a good general topic that they can expound on. Guests, if you have topical suggestions for the Net please address the Net Control operator with your thoughts.
- Net Controls, prepare yourself with some good leading questions ahead of time to ask when you need to get a response.
- If it is a small group let them do a round robin, being sure to remind them who is before and who follows. This will make it easier for you.
- Round robin is from Net Control to the first operator A, then to operator B, then to operator C, and so on until everyone has had a chance to express themselves.
- If one operator has a question for another operator, let the operators go directly one to another as necessary, this will save you time and effort.
- In general make sure that they are enjoying themselves.
- Never put anyone in a position where they might feel uncomfortable.
- As a special note for my Emergency Communications friends, this is for our casual SOARA nets, Emcom lives by a different set of rules.

Nota bene: been there and done that.

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.

The Yuma Hamfest and Swap meet was held February 18-19 in Yuma, AZ. There were a number of good presentations and a swap meet. As usual, I found some bargains, including 2 BK8514 1200W Programmable DC loads (need repair) for \$40, a Bird 79-2 coax switch (DPDT - rare) and a big variable capacitor and tapped inductor. Plus assorted coax connectors and switches. They also had new equipment for sale in the Exhibit Hall. \$10 for all weekend - a great deal. I highly recommend attending next year.

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 April 30, which does not conflict

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with SOARA Saturday, then May 28 and June 25. 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 30 vendor booths in February. My find last month was a 3 pack of 433 MHz remote controlled outlets for \$20.

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 10 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 May 21, 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. 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 4th 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.

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

Dale - W6EDT

[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>

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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 Repeater	-	-	-	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	20 Gilleran Park	24 Murray Center	22 Murray Center	26 Murray Center	-
SOARA T-Hunt 1:00 pm	updates	updates	Updates	Updates	Updates	Updates	Updates	Updates	Updates	Updates	Updates	updates
Board Meeting	31	Mar 7	28	25	23	FD	25	22	26	24	28	-
Special Events	Quartz-fest 17-23	Palm Springs Yuma		Visalia DX Canceled	Dayton Ham-vention	ARRL Field Day 25-27			SOARA Picnic 24	JOTA 16-18		SOARA Holiday Party TBA
Major HF Contests		ARRL DX-CW 20-21	ARRL DX-SSB 6-7 CQWPX SSB 27-28		CQWPX CW 29-30	ARRL Field Day 25-27			CQWW RTTY	CQWW SSB	CQWW SSB	
Volunteer Events	OC Chili Run	Paws Fur Pink OC Chili Run	OC Chili Run Baker to Vegas	Dessert Storm Rally Ride for Rwanda	HD Trails LH Marathon	ARRL Field Day 25-27	MV Fire-works 4				Vision Quest OC Marathon 7	

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 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.

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	-	(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
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SOARA DIRECTORS

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SOARA APPOINTMENTS

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

Activities Coordinator: Joe Perrigoue K7KCE
k7kce@soara.org

S. Saturdays: Ed Barnes, WA6ED 949-468-7706
wa6ed@soara.org

Raffle: Bill Colvin KM6FOY km6foyl@soara.org

Testing: Steve Kuver K6UVR k6uvr@soara.org

Website: George Robinson KN6OFF
kn6off@soara.org

Ambassador: Spencer Ammermon, NG6K
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