



PROPAGATOR

The Monthly Newsletter of the South Orange Amateur Radio Association

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Meeting

January
26th, 2015

7:00 PM
N.P.
Murray
Center
Veterans
Way
Mission Viejo

Amsterdam Island DXpedition

Our January SOARA meeting will be Monday the 26th at 7pm at the Norman P Murray Center on Veterans Way in Mission Viejo. It will be preceded by testing at 6pm.

Our guest speaker will be Arnie Shatz N6HC with a travelogue of his 2014 Amsterdam Island DXpedition (FT5ZM).



Here is a bio of Arnie, N6HC:

I was first licensed as KN3ANU at the age of 13 in Philadelphia, Pennsylvania and quickly upgraded to a General Class ticket. I received an Official Relay Station (ORS) appointment from the ARRL and enjoyed handling CW traffic and participating in CD contests. Amateur radio was put on hold while I attended Temple University and earned a B.S. in Biology and a M.D. degree. Post medical school training followed at the University of California, San Francisco and service in the United States Public Health Service (Department of the Navy- Lieutenant Commander), Indian Health Service on the Navajo and Hopi reservations.

I moved to Southern California in 1976 and started a solo private urology practice. In 1977 I upgraded to Extra Class as N6HC. I retired from full time urology practice in 2001 and continue to work as a part-time locum tenens physician and volunteer at the Orange Free clinic. I am a Fellow of the American College of Surgeons and a long time member of the California and Orange County

Medical Associations, a diplomate of the American Board of Urology and a member of the American Urological Association, Western Section of the AUA and the California Urological Association. I was a member of the clinical faculty of Loma Linda University School of Medicine.

I have been an ARRL member for more than 50 years and I am a member of the league's Legacy Circle and Maxim Society. I serve as a Volunteer Examiner and a field QSL card checker for both ARRL and CQ awards. I am a member of the Southern California DX club (Vice-President-2009), Northern California DX Foundation, Southern California Contest Club and Orange County Amateur Radio Club. I am also a member of the Chiltern DX Association (UK) and the Medical Amateur Radio Council, Ltd. (MARCO). I was elected to membership in the A-1 operators club and I have earned many operating awards including WAS (6 bands, SSB, CW, RTTY), DXCC Honor Roll, DXCC (8 bands, SSB, CW, RTTY), WAZ (CW & SSB), WAC, WPX (SSB & CW), and VUCC. I am an active contester and have earned numerous awards for participation in both domestic and DX competitions. I have operated from many places around the continental United States as well as Hawaii, Alaska, Mexico, Samoa and Prince Edward Island. I was named the DXer of the Year (2012) by the Southern California DX Club.

I have been a team member of nine major DXpeditions: K7C-Kure atoll (2005), 3B7C-St. Brandon Island (2007), TX5C- Clipperton Island (2008), K4M-Midway Island (2009), T31A- Kanton atoll, Central Kiribati (2011), T32C- Christmas Island, Eastern Kiribati (2011), NH8S-Swains Island (2012), T33A-Banaba (2013) and FT5ZM-Amsterdam Island (2014).



SOARA
Saturday
January 31

Yuma
Hamfest
Feb 20-21

Palm
Springs
Hamfest
Mar 14

Gordon West at
SOARA
March 16

VEC License Exams

6pm—before
the General
Meeting

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

Walk-ins ok.

Extra | General |
Technician
Exams

[SOARA](#)
[Website](#)

Notes from the V.P.

Starting a new year, we are fortunate to have our speakers in line for the first three months. In January we have Arnie Shatz (N6HC) and his travelogue on last year's Amsterdam Island Expedition. In February we have Glenn Morrison (WB6RLC), of the Desert Rats Ham Club, with a talk on old time radios, commercial and amateur. In March we welcome back Gordon West (WB6NOA) club member, author and instructor extraordinaire, who will fill some of the gaps in our amateur radio knowledge (glowing pickles, smoking amps etc.).

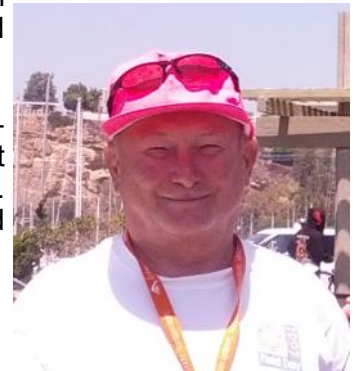
With this as a beginning we also have communications support for the "Winter Trail Run Series" and the "Paws fur Pink run".

We will also need to start planning for the Directors' elections in April, and for Field Day in June. It would be really nice if we can find someone to take control of and coordinate Field Day this year. This entails planning and delegating the different aspects of Field Day, such as antennas, radios, safety, logging, computer support, food and drink, etc. For more information on all this please look at our website (soara.org).

As some of you know SOARA also has a Facebook site (South Orange Amateur Radio Association) and I am the main contributor. I would really like it if some of you would add your views to this site and even possibly become fellow administrators of it. Those of you who are interested in other social media feel free to suggest other ways that we might spread the word about amateur radio.

As a last note let's remember that we have many repeaters available to us and use them whenever possible. Just be sure to make sure you aren't transmitting accidentally. We have had some reports of the repeaters being engaged with only background noise. Check your mics! Thanks.

Heiko, AD6OI



SOARA Raffle Update:

Hal Silverman

For January, we will conclude the \$5 raffle of an MFJ 867 (Giant) SWR/Power meter for 144MHz, 220MHz, and 440MHz. We will need to sell 12 more tickets to break even. We will also have the usual assortment of \$1 raffle items. Thank you for your support.

73.....Hal WB6WXO

If there are any comments or suggestions for either the \$1 prizes or a future \$5 prize, please contact me at WB6WXO@SOARA.org





From Membership

SOARA gives a big welcome to our new member:

**Ronald Mosher
K0PGE**

Laguna Niguel

We look forward to seeing you at meetings, club events and hearing you on the radio and the nets.

Horst Zitzmann,
KD7JHR

Membership
Director

[Online
Application](#)



How to Improve Transmit Audio of a Yaesu FT-7900R Transceiver—[W6SI](#)

Have anyone told you that your transmission audio is low, even though the signal is full-quieting? Maybe there is a reason for it...

Recently, my 10+ year old mobile dual-bander started to crumble, so I looked around for a replacement. Basically, I don't do too many advanced things while driving, so I opted for a basic machine. No need for dual receive. No cross band repeat. No digital mode. But I do need a detachable control head. And it should come in budget. I ultimately chose Yaesu FT-7900R, as it satisfies the minimum requirement, came with the front panel separation kit, and was on manufacturer's rebate sale.



A perfect fit, right? Well... I had a problem. My transmission audio was said to be too low. How could that be? Come to think of it, a few SOARA folks do have that same problem. Let's explore...

I normally use my old faithful Heil Sound Traveler headset for mobile operation. The reaction from the normal on-air buddies were less than favorable. My transmit audio was faint, and intermittent. Wow, really? Then I used the stock microphone. It's still low. Wait, it's a brand new rig! How can it be broken? After a little soul searching, I came to a pair of conclusions.

1. The microphone input of the transceiver is not quite compatible with the Heil headset.
2. The Yaesu microphone has a built-in audio restrictor.

First, the Traveler headset comes with a dynamic element of 600 ohm output. It puts out -57dB to that load. According to Yaesu spec, FT-7900 has 2Kohm input for the microphone. The stock MH48 microphone has [electret](#) element and has -40dB output into 2Kohm. A simple estimate that 600ohm microphone might have 1/3 of output feeding into 2Kohm, that's over 20dB difference from the stock microphone. No wonder my audio level was low. All this time, I have taken for granted that most, if not all, mobile rigs come with a 600 ohm input. What a shocker.

As it turned out, there isn't much in line of head set for amateur radio that has 2Kohm mic element. Not Heil, not most anyone else (that's worthy). You can get a gamer's headset for a PC, which generally comes with an electret element. They are either extremely expensive, or extremely cheap. I have one such head set (in cheap category) to use for on-line meetings, but unlike my Traveler, it is pretty uncomfortable wearing to say the least. I am right now trying to solve this problem one way or another. Either replacing a microphone element, or add a preamplifier in my mobile system. More on this at a later entry.

Now, so if I am using the stock microphone that came with the transceiver, how come my audio is still weak? Then I remembered what I heard from way back about the US market: compared to Japanese language, US English is spoken rather loud, which resulted in too much audio level for their early models of VHF/UHF rigs. HF rigs level can be adjusted since they typically have mic gain on the front panel, but most VHF/UHF

Continued on page 4...

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rigs do not. Not wanting another “factory adjustment”, they “plugged” the inlet path to the microphone to lower the net gain. I recall, back in late 90’s I actually drilled a hole in my mic / speaker unit for my HT to overcome a similar problem. So I searched on the net to find there are several people with the same problems out there. Let’s fix that microphone!

Time to open up the microphone shell to remedy the problem. It’s pretty simple. The procedure requires small screw drivers (plus and minus), no soldering required.

To fix the MH48 microphone:



1. Lift off the back shell, by removing three screws in the back.
2. Lift off PTT lever on the left side. Lift off UP/DOWN buttons from the top, LOCK, LAMP sliders from the right side.
3. With the shell front down, the green PC board assembly is visible. Remove three screws, one in the upper left, two in lower half.
4. Remove a thin screw fastening the PTT micro switch through the board to the shell.
5. Gently lift the board away. Care should be taken not to stress the wires to the mic element.
6. Gently work a small screw driver around the mic element rubber boot and slowly work it out from the round mic housing.
7. Remove the thin plastic sheet (yes, a plastic sheet!) plugged in at the bottom of the mic housing. Now you can see through two hole openings.
8. Use 1.5mm (or 1/16” if you prefer) drill bit to widen the openings.
9. Carefully remove the black rubber boot from the mic element, and use an Xact knife or something to enlarge the opening a bit more. Then put it back on the mic element.
10. Wad up a tiny bit of cotton (use a Q-Tip) and place it inside the mic housing where the plastic baffle was. Use just a tiny bit to serve as a wind screen for the mic.
11. Carefully guide the mic element with the rubber boot back into the mic housing mold. Make sure it seated all the way down.
12. Mount the circuit board inside the microphone shell, tighten down the screws you removed.
13. Place the PTT and buttons carefully, make sure they are oriented right and moves correctly.
14. Screw down the bottom shell piece.

That’s it. Basically remove the plastic baffle and enlarge the holes to the mic element. Just doing that improved my signal report markedly. So, it solved the problem for the stock hand mic. But I like to use head set while driving, so I still aim to fix the Traveler.

The FT7900 is a popular mobile rig, and I don’t think I’m alone in having this problem. If you are in a similar situation, try it. Stay tuned for another episode on replacing the Traveler mic element.

PALM SPRINGS HAMFEST

SAT. MARCH 14, 2015 • 9 AM to 4:30 PM
PALM SPRINGS PAVILION • 401 S. PAVILION WAY
 NEXT TO PALM SPRINGS STADIUM • PALMSPRINGSHAMFEST.COM



GORDON WEST

10:30 a.m. • Keynote

America's leading ham radio educator, Gordon West, WB6NOA, will give our keynote address. Gordon is the author of numerous books and audio lessons on ham radio licensing and is well known for his sparking, humorous and informative presentations.



ANDRE HANSEN

11:30 a.m. • Broadband Hamnet

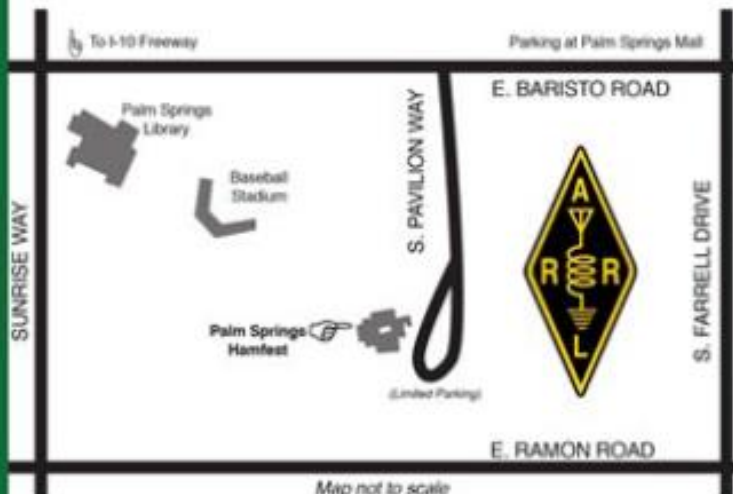
This presentation will provide an overview of the Broadband Hamnet project, featured in the July 2013 issue of QST. Andre will highlight the technology concepts, network designs and implementation of this fast-growing emergency communications technology.



DENNIS KIDDER

12:30 p.m. • Maker Faire

Dennis explains Maker Faire as: "The Maker Faire Experience is Bringing Ham Radio to a new community. Have you heard of the Maker movement? It is becoming a Renaissance of hobbyist electronics. Our hope is that we can get more hams involved and participating in Maker Faires around the world!"



VE TESTING

Technician • General • Extra
 8 to 10:30 a.m.
 ARRL VE Team

NEW! Palm Springs Hamfest will be hosting VE Testing before the Expo opens. All license classes will be available for testing. The test fee is \$15. Please bring photo I.D. and, if you are upgrading, a copy of your current license attach to your application.



RAFFLE PRIZES

Thousands worth of prizes
 Tickets: \$1 ea./25 for \$20.



FOOD & BEVERAGE

9 a.m. - Morning Snacks & Coffee.

Noon - Hamburgers, hot dogs, chips, salads, sodas and more.



VENDOR EXPO

Hamfest is the best place to "gear up." Dozens of vendors and organizations will be selling specially-priced merchandise and giving demos.



TAILGATERS/CAMPING

The fee for a Tailgater is \$25 and can include camping. Camping Friday and Saturday nights is \$25 per night. All Tailgaters must vacate their space by 12:00 noon on Sunday, March 15, 2015.



TALK-IN NET • W6Q

2 Meters
 146.940 MHz -107.2
 7 a.m. to 1 p.m.

Produced by the Desert Radio Amateur Transmitting Society in association with Makers Faire and SMaRT Education. ©2014 Desert R.A.T.S.

6 2015 SOARA Calendar THE PROPAGATOR

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
General Meeting 7:00 PM	26	23	16	20	18	15	20	17	21	19	16	—
Program	N6HC DXped.	Old Time Radios	Gordon West	TBD	Spring Auction	Field Day Prep	TBD	SOARA Fair	TBD	TBD	Fall Auction	—
VEC Testing	26	23	16	20	18	At Field Day	20	17	21	19	16	—
Educational Classes (Starts)												
SOARA Saturdays (9am)	31	28	21	25	23	20	25	22	26	24	21	—
SOARA T-Hunt	11	8	8	12	10	14	12	9	13	11	8	13
Board Meeting	Feb 2	Mar 2	23	27	Jun 1	22	27	24	28	26	23	—
Special Events	Quartzfest 18-24	Yuma Hamfest 20-21	Palm Springs Hamfest 14	Visalia Intl DX 17-19	Dayton Hamven- tion 15-17	ARRL Field Day 26-28		SOARA Picnic 2	ARRL SW Division 11-13	JOTA TBD		SOARA Holiday Party 6
Major HF Contests		ARRL DX-CW 21-22 CQWPX RTTY 14-15	ARRL DX-SSB 7-8 CQWPX SSB 28-29		CQWPX CW 30-31	ARRL Field Day 26-28			CQWW RTTY TBD	CQWW SSB 24-25	CQWW CW 28-29	
Volunteer Events	OC Chili Run 24	Paws Fur Pink 14 OC Chili Run 21	OC Chili Run 14 Baker to Vegas 28-29	Vision Quest TBD	HD Trails TBD OC Mara- -thon 3 Memorial Day 1/2 Mara- -thon 25	ARRL Field Day 26-28	4th of July Fire -works				Stache Dash TBD	

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



SOARA meets at the Mission Viejo Community Center, 26932 Veterans Way, Mission Viejo, 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. **Exams are at 6pm.** Prior registration is not required and walk-in applicants are welcome. 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, KG6GI.

	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
8:00pm

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

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

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