

CRACKLIN' STATIC



Serving the Amateur Radio Community since April 16, 1968

<http://www.snars.org>

RENO, NEVADA

DECEMBER 2016

PRESIDENT'S VOICE

Merry Christmas and Happy Holidays to everyone!

I would like to thank all the members this year for a great year and support of SNARS. Your support and contributions help to keep this great organization working.

Thank you to all the committees and teams for your hard work and dedication! Thank you to the Technical Team for the installation and maintenance of the repeater systems, the new HF Team for providing HF related educational topics, the SNARS Noon Net for providing a daily noon time net for people to check their stations, provide amateur radio related information and a spot for people to check-in and to say hi to each other and to the Education team for providing courses for those getting their licenses and upgrading.

Special thank you to Steve Kometz, N7KP this year for his continual support to the club by building our latest Master III series repeaters for Mt Rose and the soon Peavine UHF system. He has also been busy rebuilding duplexers which has saved the club thousands of dollars by not having to purchase new duplexers. Thank you Steve!

Special thank you to Dave Metts, K7UI for installing our newest DMR Repeater at Virginia Peak. He had the antenna, and repeater equipment installed at his site along with hosting our equipment and providing Internet access to our DMR repeater. Thank you Dave!

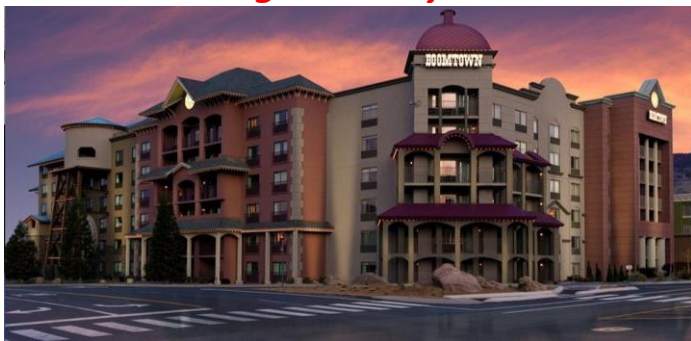
Thank you to both John Byerly, N7ROJ and Pat Sheehan, W7DED for their continual support by climbing the hill tops and fixing and replacing the repeater systems! And of course thank you to the rest of the Technical Team such as Paul Belton, W7VY (formerly W7PEB) and our Vice-President Jim Shepherd W6US.

Again thank you everyone for those who have served and volunteered for the numerous activities and wish I could list everyone but my space in the newsletter is limited but know I am very grateful for what all who have served the club this year.

Hope to see everyone at the Christmas Party on Saturday as we will have some great door prizes for those who are current members and of course a great breakfast provided by Boomtown of which I have to give a big thank you to Sharon Slater who has provided us with the greatest of service and hospitality for our group each month. Please say thank you when you see her Saturday and please thank the staff who are there really early to serve us at our monthly meetings.

Thank you All!, 73
Tony, W7XM

SNARS meeting Saturday December 3



7:30 AM Boomtown Casino Hotel, I-80 exit 4, Verdi NV, in the Banquet/Conference Center.

This month: Christmas bkfst, elections, radio raffle



SNARS, P.O. Box 7727, Reno, NV 89510

Membership: \$40 Individual, \$50 Family

OFFICERS 2015

President.....Tony Marcin.....W7XM
 Vice President..... Jim Shepherd.....W6US
 Treasurer.....Bill Jones.....AE7OX
 Secretary.....Rob Dunbar.....NB6C
 Director.....Steve Johnson.....KS6A
 Director.....John Byerly.....N7ROJ
 Director.....Barry Bettman.....K6ST

STAFF 2016

By Laws Review Committee.....vacant
 Club Public Information Officer.....vacant
 Control Operators Manager.....W7DED
 Cracklin' Static Editor.....WB2AWQ
 Meeting Greeters.....AE7OX
 History Archivist.....KF7KTC
 Station Licensee for KR7ENO.....WB2AWQ
 Control Operators FOR KR7ENO.....WB2AWQ
 Station Licensee for W7TA.....KE7VSR
 Tech Committee Chair.....N7ROJ
 Chief VE Examiner.....NN7K
 Membership Chairman.....N2MOO
 Program Chairman.....vacant
 Web MasterW7XM
 Facebook Page Administrator.....W7XM
 Events (ARES) Coordinator.....WA6MTY
 Education Team Chair.....W7XM
 Reno Ham Swap.....NB6C
 Field Day Co-chair.....KS6A
 Field Day Co-chair.....W6US
 Audit.....vacant
 Noon Net.....KG7QXE

CRACKLIN' STATIC PUBLICATION

E-mail..... holden7471@msn.com

Cracklin' Static is the Newsletter of, and sponsored by the Sierra Nevada Amateur Radio Society. Opinions expressed herein are those of the editors and contributors and should not be considered as official expressions of the Club Officers, Staff or Club Members, or as endorsements by same.

Material for publication may be edited to enhance readability or to save space. We reserve the right to use whatever font size or line spacing may be required in order to publish this Newsletter.

Deadline for input to the newsletter is 1500 hours on the Sunday prior to the 1st Saturday of each month.

Cracklin' Static is e-published in Adobe PDF Format. It may be enjoyed at the SNARS web site.

Amateur Radio License Testing 2016

SNARS, Third Saturday of February, April, June, August, October and December. Testing will be at the REOC located at 5195 Spectrum Blvd., be there at 9 AM sharp! Bill Nichols... NN7K
SIERA CLUB: Silver State Charter High School, 788 Fairview Dr, Carson City..... 3rd Saturday of January, March, May, July, September, and November

.....Dale Anderson, kv7s@charter.net

Elko Area: Third Saturday of January, April, July, October.

11:00AM, Northeast Nevada Regional Hospital, 2001 Errecart Boulevard, Elko, NV w7gk_1@yahoo.com

SNARS Repeater System Frequencies

I-80-Mt Rose Linked System (W7TA)

Reno, Sparks, Carson City (Ophir Peak) 443.075 + 123.0 Normal Operation
 Lovelock, Black Rock Desert (Toulon Peak) 146.925 - 123.0 Normal Operation
 Winnemucca 146.670 - 123.0 Normal Operation
 Reno, Sparks (Virginia Peak) 147.030 + 123.0 Normal Operation
 Carson City, Tahoe, Truckee (Mt Rose Knob) 147.150 + 123.0 Normal Op
 Reno, Sparks, North Valleys (Peavine Peak) 147.210 + 100.0 Normal Operation
 Yerington, Wellington (Lobdelle Peak) 444.875 + 100.0 Normal Operation

IRLP/EchoLink System (W7TA)

Reno, Sparks (GSR) 147.300 + 123.0 Connected to/Status:

Standalone Systems, Ragchew Repeaters (W7TA)

Reno, Sparks 52.580 - 114.8 Normal Operation
 Reno, Sparks, Carson City, Dayton (Ophir Peak) 147.390 + 100.0 Normal Op
 Reno, Sparks 927.1125 - 114.8 Normal Operation
 Reno, Sparks, Carson City (Ophir Peak) 146.610 - 123.0 Not Linked, off air

Digital/APRS Systems (W7TA)

Reno, Sparks, Carson City (Ophir Peak) 145.050 - RNO Normal Operation
 Carson City, Tahoe, Truckee (Mt Rose Knob) 145.050 - ROSE Normal Op
 Lovelock, Black Rock Desert (Lobdelle peak) 144.390 - TOULON Normal Op

Portable Repeaters (KR7ENO)

Portable System 147.000 - 123.0 Special events only

DMR Digital Mobile Radio

Reno-Sparks 444.925 + CC1 DMR System
 Reno, Carson, Dayton 444.825 + CC1
 Lake Tahoe, Truckee 443.925 + CC1

C4FM Digital Repeater – YAESU OFF THE AIR

D-Star (N7NDS) NARRI

Reno-Sparks-Carson (Mt Davidson) 444.625 + (Module B)
 Reno-Sparks-Carson (Mt Davidson) 145.175 - (Module C)

THE NAME OF THE GAME

Jim Shepherd, W6US nvjims@gmail.com

Interference

You finally get some time to get on the radio and look for some contacts... You turn the radio on, and there is this loud roar and your S meter is pegged. Tuning up and down the band, it is the same story, S-20+ and only the strongest local stations are readable through the noise. Or perhaps there is a pulsing noise that is activating your AGC, or static crashes, or other broadband signals. Welcome to the world of interference.

Interference comes in two forms, natural (QRN) and man made (QRM). The natural stuff comes from terrestrial storms like lightning, snow, rain, or wind static, and from bombardment from solar events like flares and coronal mass ejections (CME's). Most of these are fairly constant across the band, and about the only thing to do is to wait for them to pass.

QRM is another matter, and you will want to find the source and try to eliminate it. It may be coming from right there in the shack to distant locations. It is easier to look for things within arms reach, so we will start with possible problems at your station.

Most ham shacks have one or more computers, and since the room is full of electronics, the home network equipment may be co-located there also. Computers have improved in their RF shielding over the years, but some are still very noisy. Plugging and un-plugging this equipment may decrease your noise. If you do find some noisy gear and if it can't be left off or banished to the far end of the estate, it may be helped with the addition of shielded cables, ferrite cores, and re-routing of the cables.

The shack lighting may be one of the culprits. Some florescent and LED lights give off noise along with dimmers. Turning the lights on and off can quickly locate this source. While you can probably use the radio by the glow of the dial lights and the final tubes, the rest of the family may not be interested in reading by candlelight while you are on the air. Replacing lamps with different bulbs may help cure the problem, as not all CFLs and LEDs are noisy.

If you have the ability to run your radio off of battery power, you can also turn off your main breaker at the

power entrance. This will let you know if there is some other item in the house that is causing interference. You can then activate the individual breakers to find the circuit that contains the offender. Refrigerator butter warmers, fish pumps, twinkling lights, variable speed motors and other common household appliances can produce interference.

Once you have cleared your house, things get a little more difficult. At this point you need to start a log of the occurrences. Does it happen only at certain times? What frequencies are affected? Does it seem to be coming from a certain direction? A couple of times a week in the summer, I hear some bad noise on HF and, I also hear the neighbor's lawnmower. When the mower stops, so does the noise. Instead of fighting the problem, I do something else or even mow my lawn for the short period of time this is happening. Sometimes it is best to just ignore minor intermittent problems.

If the noise is continuous, then you will need to do something. Depending on the frequency range of the noise, you can use an AM portable radio set to an empty channel in the broadcast band, your VHF handheld on an empty channel with the squelch open or some other radio receiver that is portable. Your initial survey will involve listening to the noise getting louder or weaker as you move. You should be moving in a constant direction with the radio held in the same orientation. Once you find the loudest point, make a 90 degree turn and start again. After a couple of these cross patterns, you will be very near the point of interference. Hopefully this is right in front of a local power substation, as the power company will usually be very helpful in solving the problem as they have done this before and have equipment and the expertise to quickly solve the problem. If you have located the problem to the power company property, you need to turn it over to them -- do NOT pound on power poles, guy lines, conduits, or climb on any structures as this could cause that cracked insulator to finish breaking releasing that hot arcing power line to where it could contact you or others.

Most likely, it will be someone's home and you do not know them... With great tact, explain that you have found some radio interference that may be coming from their property. If they are willing to help, great! You can work with them to try and find the source. If they are not

interested in helping, thank them for their time, and leave. If this is the case, please contact the ARRL for further help.

You may not be able to find the problem locally. Most of the problem items that are discussed here have RF power in the sub-microwatt to milliwatt range. Some problems caused by mixing (intermodulation) may have power similar to most transmitters and can be hundreds of miles away. These definitely need radio triangulation techniques from widely located receivers to locate the source. Local AM broadcast stations can cause problems

on the harmonics even though their filtering is up to engineering standards due to the sheer power they are running.

There are a number of hams in the area that can help with locating interference and have some specialized equipment. If you would like to learn more about this, there is some excellent reference information on the ARRL website at <http://www.arrl.org/radio-frequency-interference-rfi> that covers interference to your station and the flip side of what to do if your station is causing interference with other services.

MIKE'S MISSIVES CHAPTER TWENTY

Part 97 – Emission Standards

In keeping with the principle of good amateur practice, it is important that the signals transmitted by an amateur station be “clean.” But it is far more than on-the-air aesthetics – good signal quality reduces interference and problems on the bands, which in turn makes our operating time more enjoyable and easier.

The rules are clear about signal quality. No station should occupy more bandwidth than is necessary for the type of communication being conducted [97.307(a)]. Your modulated signal must not exceed the band segments authorized for your license [97.307(b)]. Spurious emissions must be reduced as much as possible and corrected if they are causing harmful interference [97.307(c)]. The remaining paragraphs of 97.307 deal with specifications for various modes.

UPCOMING Monthly Meeting Topics - 2016.

December **Christmas Breakfast, Elections, Radio Raffle**

Monthly Breakfast Meetings Sponsored by



BOOMTOWN
CASINO ★ HOTEL
RENO, NV

THE SNARS NOON NET

The Noon Net is on 147.030 + and 147.150+, PL 123.0, and 147.210 + and 444.875+, PL 100.0 . The net is held weekly at 1200, Sunday afternoon. This is a Q&A and information net for newly licensed hams and all hams wishing to ask question about different aspects of Ham Radio. It will give new hams in particular a venue for getting on the air in a controlled net moderated by a ham with experience. The net is open to all hams. Questions will be answered and discussed by the more experienced hams on the Net.

Weekly nets on the SNARS repeater systems

SNARS Noon net (daily, 12:00 PM, see below)

147.150 + 123.0, 147.210 + 100.0, 147.030 + 123.0, 444.875 + 100.0

The Morning Net (Monday – Friday at 10:00 AM)

147.300 + 123.0

Bishops Storehouse Net (Monday nights at 9:15 PM)

147.150 + 123.0, 147.210 + 100.0, 147.030 + 123.0, 444.875 + 100.0

North Western Nevada ARES Net (Tuesday nights at 7:00 PM)

147.150 + 123.0, 147.210 + 100.0, 147.030 + 123.0, 444.875 + 100.0

State SATERN Net (Tuesday nights at 8:00 PM)

147.300 + 123.0

State SKYWARN Net (Wednesday nights at 7:00 PM)

147.150 + 123.0, 147.210 + 100.0, 147.030 + 123.0, 444.875 + 100.0

Northern Nevada Preppers Group Net (Wednesday nights at 8:00 PM)

147.150 + 123.0, 147.210 + 100.0, 147.030 + 123.0, 444.875 + 100.0

State ARES Net (Thursday nights at 7:00 PM)

147.300 + 123.0

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SKYWARN[®] Recognition Day



SKYWARN[®] Recognition Day was developed in 1999 by the NWS and ARRL. It celebrates the contributions that volunteer Skywarn[®] radio operators make to our nation's severe weather warning system. During the day Skywarn[®] operators may visit NWS offices and contact other radio operators across the country.

SKYWARN

Fri. Dec 2 - 4:00 PM thru Sat. Dec 3 - 4:00 PM 2016

Operate on HF Radio!

This is your opportunity to help contact as many NWS and Amateur Radio stations on HF Radio. If you have not operated or have limited access this is your chance to work HF stations! We will teach you everything to be successful while operating HF Radio.

Earn a Certificate by Operating!

All operators will earn a special certificate displaying number of stations you made contact with. A great item to put on your wall to show your accomplishment of operating during Skywarn Recognition Day! Certificates are provided electronically after the event.

Skywarn Recognition Special Net

We will be taking VHF/UHF Check-ins on **Friday Night** from **9:00 PM to 10:00 PM** on SNARS Linked System (147.210, 147.150, 147.030, 146.925, 146.670 and 444.875).

Operate on VoIP Radio Systems!

We will also have Voice Over IP systems available including IRLP, EchoLink and DStar and Digital Mobile Radio (DMR) to make contacts with other NWS and Amateur Radio Stations.

Sign Up to Today to operate during SKYWARN Recognition 2016!

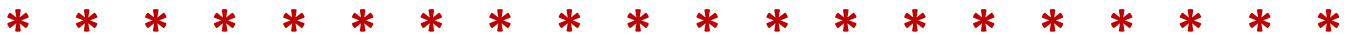
We are looking for volunteers to operate any of the stations in 2 hour shifts. Refreshments will be provided.

Operators will receive a special SKYWARN Recognition 2016 keepsake.

<http://snars.org/skywarn>

The National Weather Forecast Office Reno
Forecast Office is located at
2350 Raggio Parkway, Reno, NV 89512

*Sponsored by the Sierra Nevada Amateur Radio Society, Inc
and Washoe Amateur Radio Emergency Services*



NAME THAT RIG



(Answer on page 8)

18 Dec 1800 to 18 Dec 2359 3.5-50 ARRL Rookie Roundup, CW www.arrl.org/rookie-roundup

For a full list of contests, see:

[http://www.arrl.org/files/file/Contest%20Corral/2016/December 2016 CORRAL.pdf](http://www.arrl.org/files/file/Contest%20Corral/2016/December%202016%20CORRAL.pdf)

If you're not into contests, there's always DX to chase! Some of the better DX operations coming up in December:

Dec 08 to Dec 12 Palestine E44QX

Dec 19 to Dec 26 Norfolk I VK9NM

Dec 24 to Dec 31 PE & Marion Is ZS8Z

Dec 25 to Dec 29 Palau T88GA

Visit <http://www.ng3k.com/Misc/adxo.html> for current info and full lists!

SNARS CALENDAR

SNARS monthly meeting (Xmas, breakfast!)

Saturday, December 3rd, 8:00 AM

Boomtown Casino Hotel, I-80 exit 4, Verdi NV

Technical Committee Meeting - SNARS

Wednesday, Dec 14th, 2016 6:00 PM - 7:00 PM PDT

Washoe County Regional Emergency Operations Center, 5195 Spectrum Blvd Reno, Nevada 89512

VE EXAMS SNARS

Saturday, Dec 17th, 2016 9:00 AM SHARP!

Washoe County Regional Emergency Operations Center, 5195 Spectrum Blvd Reno, Nevada 89512

Board of Director's Meeting - SNARS

Wednesday, Dec 21st, 2016 6:00 PM - 7:00 PM

Washoe County Regional Emergency Operations Center, 5195 Spectrum Blvd Reno, Nevada 89512

WELCOME NEW SNARS MEMBERS

NEW MEMBERS FOR NOVEMBER 2016

Justin	Ireland	KI7HVE
Michael	Swift	W6NGF
Gary	Muhonen	W7GMM
Sher	Muhonen	W7SHR
Jeffrey	Satterfield	KD7ADI

Current Members: 320

FUN STUFF FOR DECEMBER

Looking for some excitement on the bands during the fall? There's something for everyone on the air!

2 Dec 2200 to 4 Dec 1600 1.8 ARRL 160-Meter Contest CW www.arrl.org/160-meter

10 Dec 0000 to 11 Dec 2359 28 ARRL 10-Meter Contest CW Ph www.arrl.org/10-meter

10 Dec 2300 to 18 Dec 2300 1.8-7 AWA Bruce Kelley 1929 QSO Party CW www.antiquewireless.org

SNARS TAKES TOP SPOT IN NEVADA FOR FIELD DAY

The SNARS Field Day operation last June down at Washoe Lake State Park scored almost twice what the nearest other club did here in Nevada. Nationwide, we were 5th in the 7A class. There were 16 entries from Nevada, and our 722 QSOs was over three times what the nearest other Nevada club put in the log. With 35 participants, we were also the best attended event.

We are planning on doing it again out at Washoe Lake State Park on June 23-25, 2017. Mark your calendars and plan on joining us out there this coming year!

Jim Shepherd, W6US nvjims@gmail.com

(NOT JUST) BLACK FRIDAY EQUIPMENT SALE

The Comstock Memorial Station is still attempting to pay off a very expensive 13 day maintenance session in June. Tax deductible donations always welcome. In the meantime:

ELECRAFT K3 HF 100W Transceiver

- S/N 4391
- KIO3, KPA3, KRX3
- 500Hz filters in Main, Sub RX, 1800Hz filter in Main
- Minor cosmetic flaws on the case
- \$2,400 – Current Model New = \$3,800

ROHN HDBX 32' Self-Supporting Tower

- Holds 18 Square Feet of Antenna
- With top plate, thrust bearing and rotor plate
- Dismantle (on the ground) and haul
- \$700.00

M2 2M9 2 Meter Yagi

- 9 elements
- SSB or FM
- \$90 – Current New Price \$269

M2 440-18 440 Yagi

- 18 elements
- SSB or FM
- \$60 – Current New Price \$199

PAYPAL OK if you pay their fees.

All equipment in good working condition when last used.

Offered to [SNARS](#) before it all goes on QTH and EHam at higher prices

Tom Taormina, K5RC

Comstock Memorial Station, W7RN

Storey County ARES, KS7AA

www.w7rn.com

[775-847-7929](tel:775-847-7929)

Editor's note: This is first quality stuff, and helps a worthy organization which has long been a big part of Northern NV Amateur Radio culture.

NEWS FROM SNARS.....

DMR RADIO PROGRAMMING NIGHT

The next DMR Programming night will be held on December 1, 2016 at 6:00PM at the Washoe Regional Emergency Operations Center on 5195 Spectrum Blvd, Reno. The Programming night will help those with programming their MD380 and CS750 only radios with the latest version of the Code plugs that have been posted in the members only section. The new updates include the newly added DMR Repeaters in the area, the changing of the SNARS Talkgroup and the realignment of the Talk Group Lineup for the area. We will schedule another night for other types of radios if requested.

To register please go to <http://snars.org/dmr-programming-night/>. You can also find this information on our Classes page by clicking on "Classes" on the top navigation on the homepage.

SNARS DMR REPEATER AND TALK GROUP CODE CHANGES

There are a number of changes scheduled for December 1st for the SNARS DMR Repeaters and talk groups. The first is the changing of the SNARS Talk groups to 31328 for SNARS, and 31329 for SNARS 2. By aligning our talk groups to the standard set by DMR-MARC, we will be making it easier to program the same talk group for use

on any network including CBridge and Brandmeister hosted systems. 3132 is our State of Nevada ID and we are simply appending a 8 for SNARS = 31328 and 9 for SNARS 2 = 31329.

Second the Talk Group Line up will now be changing in terms of which slot they will be available on. You can see the changes by going to <http://snars.org/dmr>. You will notice SNARS is now on Timeslot 2 and the rest are on Timeslot 1. This aligns us with the rest of the world as Time slot 1 is meant for outside traffic/channels and Time slot 2 is reserved for local communications such as our SNARS 31328 talk group.

We are making the transition as smoothly as possibly by offering new code plugs to members along with a Programming Night on December 1st. Note the Article in this newsletter titled "DMR Radio Programming Night" for more information.

Again thank you all for your patience and tolerance of our changes to better align us with the rest of the world.

DMR CODE PLUGS NOW AVAILABLE FOR DECEMBER 1ST TRANSITION

We have published a new set of code plugs for the popular radios in the Reno/Tahoe area. The code plugs can be used starting December 1st and will include all the changes announced along with updated Contact lists which include SNARS Members along with some minor additions/changes. Members my visit <http://snars.org/members> and select DMR, then select Code Plugs link. You will see a list of codeplugs for your radio. If there is a radio you use and it is not listed please contact Tony, W7XM@SNARS.org and we'll see if we can get one built for the radio.

NEW MEMBER FEATURE – HAM SWAP ONLINE

We have created another member only feature by dedicating a page on our website to those wishing to sell Ham Radio related gear. To post please submit your information at <http://snars.org/hamswap> and please allow upwards of 48 hours to post. We hope to streamline this process but for now we wanted to see how much activity we will receive by offering this new feature. Posting will be listed for 30 days unless otherwise specified. To remove an item send an email to hamswap@snars.org with the posting ID to remove.

Visit <http://snars.org/hamswap> to view current posting and to post items. You will find a link on the top

navigation labeled "Ham Swap" as another way to access this page.

You can find more information about NNARS at <http://nnars.com>

WINNEMUCCA REPEATER GIVEN TO NORTHERN NEVADA AMATEUR RADIO SERVICES

The board voted during the November board meeting to donate the repeater located in Winnemucca to the Northern Nevada Amateur Radio Services (NNARS) of which is an affiliate organization of SNARS we help to established a year or so ago. They will take over the care and maintenance of the system of which they have multiple capable users to do this. Further this should help the organization to grow their identity by owning a repeater and hope this will drum up more support and activity for this organization. SNARS will of course be keeping the space we have established and will be allowing NNARS to operate the repeater in it. This allows SNARS in the future if we choose to to put in another system (none planned at this time). The repeater is the 146.670 which covers a majority of the Winnemucca area off of I-80. The system is still going to be linked to the SNARS Linked system. We hope this will help kickstart the organization and looking forward to our continued partnership with this great organization in Winnemucca.

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ARRL VEC HONOR ROLL

As listed in the December QST, our own Bill Nichols NN7K has been recognized by the ARRL on the ARRL VEC Honor Roll, being tied for second place among VECs in the Pacific Division. Bob has racked up some 248 VE sessions. Congrats Bill!

NAME THAT RIG (from pg 7)

First released by Radio Shack in 1988, the Realistic HTX-100 was a 10-Meter only SSB and CW transceiver that sold for \$250, sometimes just \$200 on sale, and held its own against many bigger and better known brands. While it had only 25 watts output, that was more than sufficient for world-wide contacts on 10 meters when the band is open. Receive-wise, the -100 was no slouch either. Small for its time, it lent itself well to mobile operations, and your editor had one for quite a few years on 10M mobile CW. It was very reliable, and enjoys somewhat of a cult following even today, commanding usually over \$100 well used. Now if only Realistic had upgraded it into a multiband HF radio.....

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ARES NEWS

During the November 9th, 14th through the 17th Southern Nevada and Southern California held a joint earthquake exercise with the National Guard and civilian agencies called Vigilant Guard. On the 9th we handled simulated emergency messages between our Emergency Manager Aaron Kenneston and the Department of Emergency Management (DEM) in Carson City.

On November 5th and 12th we deployed teams to each fire station in Reno (14) and Sparks (5) to run radio checks to determine just which repeaters can be effectively reached to provide communications to the Regional Emergency Operations Center should there be a major interruption in communications for 911 dispatch. Thanks to: AF6MN, AF7RM, AG6GI, AG7RV, AI6DJ, K7HMR, K7VWB, KA7FOO, KA7ZAU, KB7GNA, KE6GIW, KF7BNX, KF7KEM, N7HMR, N7JDM, WA6MTY, WA6TVD, for helping this Simulated Emergency Test.

REMINDER SKYWARN RECOGNITION DAY is December 2nd 4:00 to December 3rd 4:00SKYWARN volunteers typically set up radio operations at their local NWS Forecast Office and hams around the world are encouraged to try and contact as many of these stations as possible. Come on out get a tour of the National Weather Service and spend a couple days helping make contacts. Even if you are a new Ham we will let you make contacts on HF.

1. Modes of operation: HF- VHF- 2 meters and simplex -IRLP -EchoLink-DMR-D-Star
2. Radios and equipment will be provided. Only authorized radios will be eligible to operate
3. Antennas to be erected week of November 28th TBA let us know if you can help.
4. Operators will be asked to commit to four hours shifts. Sign up sheets will be on the Internet
5. SNARS will graciously donate refreshments for the radio operators.

Bob Miller WA6MTY
Amateur Radio Emergency Service Emergency Coordinator
775 843-5952 www.wcares.us

HAM RADIO: ENDOWING THE HERITAGE

Tom Taormina, K5RC

Ham Radio is more than 100 years old. Hams have pioneered the evolution of communications and electronics. Although there is no authoritative data on how the word “ham” evolved, there is rich history in how our unique fellowship evolved.

First, our license is a “grant” to conduct two-way communications for non-commercial use. That is, we earned a privilege for utilizing our frequency spectrum. Second, by signing our license, we agree to be available for emergency communications if the need arises. The “non-commercial” aspect has evolved to include a tradition of not discussing subjects as religion or politics on the air. This “tradition” makes us stand out as model citizens of the airwaves. The second tenet of our license is to be “available” for emergency communication. Over the years, this has become the operating protocol we observe so that any ham can effectively communicate, using standardized operational procedures.

I have been a ham for 57 years and have been part of the incredibly rich heritage of our hobby as it has evolved. My Elmer’s were crusty old farts who called me “kid” and held me to high standards in building my station and in operating. At age 14, I was Deputy Town Radio Officer for RACES and a member of AREC (now ARES). I participated in CW and FM traffic nets every week. I learned proficient use of airtime and how to effectively communicate messages and traffic. I also learned how to pass on my knowledge and respect for our heritage to every new ham I met.

I am thrilled at the massive increase of new hams. Some of the attraction is no code requirements. Another is that there is an almost endless number of unique activities within the hobby. I was very encouraged when 14 SNARS members showed up for our first demonstration of contesting at W7RN.

My only disappointment is that we are not endowing the new hams with the traditions and conventions of being an on-the-air ham radio operator. We have allowed CB jargon to become part of the vocabulary, especially on VHF FM. We have deviated from long-standing net protocols that teach efficient operation, even if it is an informal net like the SNARS Noon Net. We are using terminology that will not prepare us to be effective emergency communicators. We are also not passing on operating traditions that we will need to effectively communicate worldwide on the HF Bands.

I encourage all SNARS members to take time to learn the traditions and heritage of our hobby and perpetuate it like tribal knowledge. I encourage our nets to adopt conventional protocols to help invoke disciplined

operating techniques. I also suggest we standardize our on-the air jargon.

In ham radio, we do not have base stations, 10-4, come back, got a copy, ears, numbers, fer-sure, good buddy, I’m gone, keying the mike, make a trip, modulating, on the side, personal, stepped on, thin signals, twenty, we’re listening or we’re clear. Some traditional ham radio jargon includes:

Box or Machine – A repeater

Break – I would like to join a conversation

Break Break – An emergency need to use the frequency

Double – Two stations transmitting at the same time on the same frequency

Clear – I am leaving the conversation or frequency, opposed to gone, out, on the side.

Deviation – The width of an FM signal. How loud your audio is.

Fine Business – Acknowledging a good situation

Full Quieting – On FM, where there is zero background noise on a received signal

Gain – The amount of forward gain an antenna has compared to a zero-gain reference

Kerchunking – Activating your microphone without identifying to get a response from a repeater.

Name – Your first name. Also called Handle, but mostly used on HF.

Over or Go – Ending a transmission and turning it over to the next station

Q-Signals – A set of shorthand starting with the letter Q, invented for CW. Common Q signals such as QRT, QSO and QSY are among those used on voice modes.

Rig – Any type of ham radio transmitter, receiver or transceiver

Roger – Affirmation or confirmation of received information

Simplex – VHF Communication without a repeater (all HF communication is “simplex”)

Ticket – Your FCC license

White Noise – Background hiss when a signal is weak, as opposed to crackling, static, etc.

(Your Call) – On repeaters meaning “I am interested in having a conversation with anyone” – The shorthand for CQ used on HF.

Zed – A convention for the letter Z so it is not confused with the letter C

I have also found a handy guidance document for net operating at:

[http://www.w9tca.com/w9tca/Files/Doc/NET%201-4%20\(Net%20Formats\).pdf](http://www.w9tca.com/w9tca/Files/Doc/NET%201-4%20(Net%20Formats).pdf). Please give it a read and consider forming a more structured Noon Net format. Also, I encourage everyone to listen or participate in the ARES net run by KA7FOO and the Preppers Net. They both model exemplary net protocol.

Several people have asked why I do not participate in the Noon Net as frequently as before. The answer is simple and may affect quite a few "old timers." I know the NCO's have the very best of intentions, but asking questions like "what are you up to", "what are you doing this weekend" and "do you have any new radios" are inappropriate, IMHO. The only query that they should use is "Do you have anything for the net?" That allows the participants to share with the net only that which they feel is appropriate. I hope everyone takes my comments as constructive and in the best interest of ham radio.

73,
The Old Man (TOM)

* * * * *

Editor's note:

Tom also submitted the following to CQ WW after W7RN's "Introduction to Contesting" class last month:

CQ Worldwide DX Contest, SSB

Call: W7RN
Operator(s): K5RC K6ST W1RK N7SAX KI7FNR W7CDN K7HMR AG7BY K7ASE KA7EKU AE7JW KG7PG KF7EGU KI7GVU
Station: W7RN

Class: M/M HP
QTH: NV
Operating Time (hrs): 12

Summary:
Band QSOs Zones Countries

160:			
80:	34	12	14
40:	183	25	41
20:	92	25	52
15:	249	23	54
10:	36	10	15

Total: 594 95 176 Total Score = 440,375

Club: Northern California Contest Club

FEATURED PRODUCT

This package is an unbeatable deal! Here are some features:

- Vertical antenna (80-2 meters)
- 150 watt PEP capacity
- 25' counterpoise w/ winder
- Jaw-mount bracket (for horizontal or vertical mounting)
- PL-259 connector

SNARS PRICE: \$89.95
REGULAR PRICE: ~~\$99.95~~

ABOUT US...

We carry a variety of new products such as antennas, mag mounts, switches, coax cable, connectors, and more.

We also have a wide selection of both vintage and modern ham gear, which you are more than welcome to peruse at your leisure. From Collins to Elecraft, you never know what we'll have on our racks!

If you're looking for anything particular, give us a call and we'll add you to our "wanted" list. The next time we find that specific piece, we'll give you a call before it's listed for sale anywhere else!



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We are always buying used equipment whether it's ham gear, high fidelity audio, tubes, or test equipment. Whether it's vintage tube equipment or the latest product on the market, working or not, near or far, we would love to hear from you. Give us a call for more information!

HAM & HIFI OPEN HOUSE

155 Glendale Ave (suite 12), Sparks, NV 89431

January 14th @ 8:00am to noon.

As always, we have a lot of stuff to liquidate: parts, project units, odds/ends, and random goodies! If you like to tinker, you need to check it out. Prices will be low as we want to get rid of it all!

We're also having a liquidation sale on merchandise in the front of the shop. You'll find wholesale pricing on products by:

- **Alpha Delta**
- **Workman**
- **ABR Industries**
- **Chameleon**
- **... and more!**



**Lots of
FREE
stuff!!!**



Board of Directors Meeting

November 16, 2016 - 6:00 PM

Washoe County Regional Emergency Operations Center
Board Room
5195 Spectrum Blvd, Reno

DRAFT MINUTES - To Be Approved on December 21, 2016

1. Call to order at 6:00 PM

Anthony Marcin, W7XM	Yes	Barry Bettman, K6ST	Yes	Rob Dunbar, NB6C	Yes
Bill Jones, AE7OX	Yes	John Byerly, N7ROJ	Yes	Steve Johnson, KS6A	Yes
Jim Shepherd, W6US	Yes				

Visitors

Wes KG7QXE

Casey KF7BNT

2. Approval of Minutes

- A. NB6C moved to approve the minutes from the October 19 Board of Directors meeting. The motion was seconded by N7ROJ and the motion passed.
- B. W7XM moved to approve the agenda as presented. NB6C seconded the motion and the motion passed.

3. Reports

A. President's Report -

1. Focus of the club – What do we want to do to get members more involved and where would we like to go with this.
 - a. Reno Tahoe Ham Fest.
 - b. Discussed items club could do to get members involved.
2. The national American Legion is holding its convention August 18 through 24. They have asked us to have a presence there and a special event station. This is a very large convention and will be good for the club to be a part of this

B. Secretary Report

- a. Status Report – No election this year since nominations equaled vacant seats. N7ROJ, KG7QXE and NB6C will be serving as directors for 2017 through 2018.
- b. Change of Organization Type from Chapter 81 to Chapter 82 – NB6C will look over documents prepared by W7XM.

C. Treasurer

- a. Balances as of October 31: Checking: \$10,791 Savings: \$3,243 PayPal: \$1,781 Trust Fund: \$9,991 a total of \$25,806. No expected large purchase for rest of the year.

D. Technical Committee - Report

- a. Peavine package New 147.210 repeater controller and duplexer are almost done and trying to get ready before we get snowed out.
- b. SNARS may install a VHF repeater on Lobdell Summit.
- c. Swap the current repeaters on 146.61 and 147.39.

- d. N7ROJ walked the Grand Sierra to see what is needed to install network connection to IRLP box.
- e. 147.300 on Grand Sierra has some PA issues. N7ROJ and W7DED will investigate.
- f. N7ROJ is donating an EMR IM panel for use on the 146.610.
- g. Still trying to make trip up to Mt. Rose to install repeater package.
- h. NDOT has donated a server that will be used for C-Bridge and probably installed on Peavine.

E. Control Operators / Trustee - Report

- a. We still need new control operators.
- b. Upcoming meeting for quick overview on controlling repeaters.

F. Events

- a. Reno-Tahoe Hamfest – Moving forward nothing to report.

G. Education Team

- a. Rapping up Tech class.
- b. DMR programming night.

H. Noon Net

- a. Status – No commitment from people who said they were interested.

I. HF Team

- a. Barry led a meeting CQWW contest and 15 people showed up.
- b. Barry has also volunteered to put together the intro to HF.
- c. Greg will be doing kits and Satellites.

4. New Business

- A. Holiday Party – Will be at breakfast meeting
 - a. Door prizes members only will include Yaesu FT-60, MD-380, Anderson Power Poles and more.
- B. Skywarn Recognition Day – We may not be doing anything because we don't have any volunteers.
- C. Future of Winnemucca repeater. There was some discussion of what the club should with the Winnemucca repeater. N7ROJ moved that SNARS will donate the repeater to the Winnemucca club with specific requirements written by President that includes the repeater shall be kept running or returned to SNARS. Motion seconded by KS6A. Motion was approved.
- D. Boomtown Breakfast – It has been observed that some members have not been paying for the full breakfast but have been enjoying the food. From now on there will be no \$4.00 breakfast. SNARS will pick up the coffee for members.

5. Next Meeting

- A. No December Directors Board meeting. The next meeting will be January 18, 2017 - Wednesday at 6:00PM - Washoe Regional Emergency Operations Center

6. Public Comments

- A. Casey KF7BNT has offered to teach hands on basic electronic classes for the club between now and April. SNARS will put up a signup form and if members have an interest.

7. Adjournment at 7:32 PM by W6US 2nd by N7ROJ