

CRACKLIN' STATIC



SIERRA NEVADA Amateur Radio Society

Serving the Amateur Radio Community since April 16, 1968

<http://www.snars.org>

RENO, NEVADA

October, 2013

PRESIDENT'S VOICE

Nominations for club members to sit on the Board of Directors opened Sept. 1, 2013. The process of putting the ballots together and mailing them out to the membership in October will take place, followed by voting in November and then counting of the votes at the December corporate club meeting to determine those elected to the Board for 2014.

We are continuing to make good progress on the repairs and upgrades to the repeater system. Damaged antennas have been replaced; non-functioning repeater radios have been replaced; microwave domes installed on the towers, and cable will be pulled and hooked up.

We have a verbal agreement from Elko to hook into their repeater system. We are working on getting a site on Winnemucca Mtn., to make the jump from Toulon to Elko.

The Board of Directors has approved a request by the Section Manager (Joe Giraudo-N7JEH) to put on a Nevada Section Conference in May, 2014. (This is the previously called EMCOMM conference). The BOD voted to have the club move ahead with conducting the conference in May, 2014. Planning will start immediately and club members will be needed to participate in the planning and the operations of the conference.

Pacificon is Oct. 11 thru Oct. 13. There will be a number of SNARS members attending. We will have an information table there to make people aware of the planning for the 2014 Nevada Section Conference.

Don't forget the Fall Swap meet --- October 19 at the Tamarack Junction casino.
[Http://renohamswap.com](http://renohamswap.com)

SNARS meeting October 5



Jack's Restaurant, 7671 South Virginia Street starting at 0730. Breakfast will be available.

We will be discussing the upcoming NV Section Conference in May 2014 hosted by SNARS.



CRACKLIN' STATIC PUBLICATION

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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 2013

SIERA: Silver State Charter High School, 788 Fairview Dr.....George Uebele, WW7E ww7e@arrl.net

SNARS, Third Saturday of February, April, June, August, October and December. Testing will be at the REOC located at 5195 Spectrum Blvd., Reno

SNARS HAMFEST Tamarack Junction, VE testing starting 9 AM Saturday Oct 19 Bill Nichols... NN7K

Elko Area: Third Saturday of January, April, July, October. 11:00AM, Northeast Nevada Regional HospitalJoe Giraudo, N7JEH n7jeh@arrl.net

SNARS Repeater System Frequencies

Linked System --- Reno, Carson Area

146.610 (-) PL 123.0

443.075 (+) PL 123.0

Lovelock & Black Rock area

146.925 (-) PL 123.0

Mt Rose Linked System

147.030 (+) PL 123.0 Virginia Peak
147.150 (+) PL 123.0 Mt Rose
147.210 (+) PL 100.0 Peavine Peak
444.925 (+) PL 100.0 Peavine Peak
444.875 (+) PL 100.0 Lobdelle Peak

GSR Linked System

147.300 (+) PL 123.0 Grand Sierra Resort
444.825 (+) PL 123.0 Mt Davidson
IRLP: 7873, Echolink:WA7DG/R (581256)
Rag Chew 147.390 (+) PL 100.0 (no link)
52.580 (-) PL 114.8 (no link or features)

Packet 145.050

APRS 144.390

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

Membership: \$25 Individual, \$40 Family

OFFICERS 2013

Chairperson.....Mike Katz.....N7MSK
Co-Chairman.....Jim Rosima.....KD7DPW
Vice Chair.....Steve WoodsK7SJW
Co-Vice Chair.....Don Siebert.....N2MOO
Trea\$urer.....Tony Marcin.....N7ACM
Secretary.....Peter DeBayKE7VSR
Co-Secretary.....Becky Harvey.....KE7CKY
Director.....Don Seibert.....N2MOO
Director.....Paul Tueller.....K7PTT
Director.....Ed Sloane.....KB7ZBN
Director.....Scott Brink.....KC7STV
Director.....Richard Nehrbass.....N7TGB
Director.....Dave Miles.....KF7EGU
Director.....Richard Foreman.....KK7SL
Director.....Pat Sheehan.....W7DED

STAFF 2013

By Laws Review Committee.....KE7HLR
Call Sign Badges.....KB7GNA
Club Public Information Officer.....KF7IAW
Control Operators.....K7JN
Cracklin' Static Editor.....WB2AWQ
Digital SYSOP.....K7JN
Elmer Coordinator.....KE7HLQ
Meeting Greeters.....AE7OX
History Archivist.....KF7KTC
SK Estate Advisors.....KB7IWT
Station Licensee for KR7ENO.....WB2AWQ
Control Operators FOR KR7ENO.....WB2AWQ
Station Licensee for W7TA.....K7JN
Control Operators for W7TA.....K7JN
Tech Committee Chairs.....W6US & W7DED
Chief VE Examiner.....NN7K
Membership Chairman.....N2MOO
Awards Chairman.....KB7ZBN
Program Chairman.....KC7STV & KE7CKY
Web MasterN7ACM & K2DMC
FaceBook page administrator.....KC7STV & N7ACM

The Name of the Game

By Jim Shepherd, W6US

Wire Antennas

For those of you who were at last month's meeting, you had the opportunity to see the ultimate tower based beam antenna farm. Most of us do not have the land, legal resources, and money to duplicate that sort of effort. Fortunately, there is another way to get a good signal out there—wire antennas!

The most common antenna is a half wave dipole. Composed of two $\frac{1}{4}$ wave pieces of wire and fed at the middle, it is a very effective antenna. The best signal is usually broadside to the antenna at the resonant frequency. The overall length of the antenna is easily calculated by this formula, $L=468/F$ where L is the length in Feet, and F is the frequency in megahertz. (I usually cut them a little longer as it is easier to shorten them to get resonance.) It needs to be mounted at least as high as it is long, i.e., $\frac{1}{2}$ wavelength, and they definitely improve with higher mounting.

For the 10 meter band, that makes mounting above a flat, level, obstruction free area possible for most hams at even a wavelength (about 33' in the air) provided that you have two strong end supports so that you can keep it straight without having to have a center support.

Unfortunately, doing this for 75 meters requires three supports at about 110 feet tall, not to mention that the end supports need to be at least 120 feet apart. Lowering the antenna will increase the takeoff angle until you end up with most of the signal going straight up, at which point you will have a "Near Vertical Incident Skywave" (NVIS) or 'cloud warmer' antenna which is only good for contacts within a couple of hundred miles when the ionosphere provides good reflection. You need a low takeoff angle for good DX operation.

This common dipole also has an impedance of about 73 ohms. One nice thing about this is you can feed it directly with 75 ohm coax. Most modern radios will accept a SWR of 1.5:1 without a problem. If you are trying to totally match it to your transmitter, a so-called 'antenna tuner' can be used so the transmitter sees 50 ohms. (The antenna tuner does not tune the antenna, it just corrects impedance matching at the expense of some signal loss). A 1:1 balun may be used to provide a transition from the unbalanced coax to the balanced antenna to prevent the coax from radiating and controlling stray RF in the shack. If you are using window line to feed the antenna, you will need a tuner with a balanced output and this may allow you to use the antenna on multiple bands.

Suppose you only have one support on your property that is 60' or taller... There are a couple of other antennas that will provide some good signals. The inverted 'V' and sloper antennas are dipoles that may be useful. The inverted 'V' is basically a half wave dipole where the ends are lower than the center but still at least 15' above the ground. The included angle between the legs should be greater than 90 degrees. The sloper is a dipole with one end high. The feedline must leave the center of the dipole at a 90 degree angle from the wires, and the antenna is directional away from the support.

For those who live in housing developments that have restrictive CC&Rs, very small diameter wire end fed antennas can sometimes be deployed with great stealth... Don't overlook stringing a dipole along the edge of your roof in all those hooks you installed for the Christmas lights, however you may have to go silent during the holidays! There is always the vertical wire antenna attached to a balloon on a calm day.

There are lots of other wire antenna designs, and since they are inexpensive to build, you might try a few to improve your signal. The ARRL Antenna Handbook has lots of good designs. They are great to take camping in areas with taller trees and for use for emergencies.





For the last three years, WADG, now part of SNARS, has provided communications to the Tahoe Rim Trail Endurance Run, a grueling 50KM, 50 mile or 100 mile run from Spooner Summit past Marlette Lake, to near My Rose, and back. Using GMRS repeaters, Ham Radio operators provide the vital communications skills needed for this event. In appreciation, Tahoe Rim Trail Endurance Run 2013 has presented this plaque, and a \$1000 donation to SNARS/WADG. Making all this possible, under the leadership of Jim Rosima, KD7DPW, the following hams tirelessly and efficiently did the job: Jeff K7BCV, Darrell KE7HXD, Ray KB7GNA, Bob AC7FM, Mike NZ7G, Natalie N7JKM, Steve KS6A, Bill WB7IDF, Scott KC7STV, and Tom WA9ETO. A hearty thanks for a job well done! For more info on this event, visit: <http://www.tahoemtnmilers.org/trter/TRTindex.html>

THE NEW HAMS & INFORMATION NET

The New Hams Q&A Net on 146.610. The net is held weekly at 1300, every Sunday afternoon.

The purpose of this net is a Q&A and information net for newly licensed hams and all hams wishing to ask questions 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 more experience. The net will be open to any interested ham. Questions will be answered and discussed by the more experienced hams listening on the Net.

For those in the North Valleys who may be out of the range of the 146.610 try using the 443.075 (+/123). It works from Lemmon Valley.

SNARS BOARD OF DIRECTORS NEEDS SOME HELP.....

If you are a Control Operator, either for SNARS or (were) for WADG, we are asking that you contact Richard Nehrbass, N7TGB who is the person appointed to be the Control Operator Coordinator.

Most of you are aware that we have a number of people that have a hard time complying with the Clubs policy for the use and operation of the repeater system, as well as FCC Part 97 rules.

We all want our system to be user friendly and non-offensive.

We are going to provide training to all Control Operators in the areas of policy enforcement, FCC rules and good operating procedures.

Please contact Richard at N7TGB@gbis.com

Provide your name, call, email address and a phone number.

Richard will be in contact with you shortly.

Thanks, Mike - N7MSK

Weekly nets on the WADG/SNARS repeater systems

Western Nevada Noon net (daily, 12:00 PM)

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

SNARS New Ham Net (Sunday afternoons at 1:00 PM)

146.610 - 123.0, 443.075 + 123.0, 146.925 – 123.0



NAME THAT RIG

(See pg 7 for the answer)



SNARS CLUB NEWS

When you need to know the latest, go to the web site and more importantly, to the SNARS Face Book page where you will have access to daily info about club events, meetings, etc. www.facebook.com/snars.w7ta

New club name badges: The new logo name badges are ready for distribution. They will be made available at each membership club meeting. If you have had a call sign change recently (last two months) let Ray Foster know so he can create a badge with the correct info.

Ray Foster, KB7GNA Ray.foster@arrl.net

Lots of opportunities for Amateur Radio education in SNARS-land: Tech class, General class, Ham Crams, New Ham Workshops, VOIP Workshop, IRLP/Echolink class, and Repeater Usage and Etiquette class! Full details on the SNARS webpage, <http://snars.org/classes/>

PACIFICON 2013

October 11, 12, 13 Santa Clara Marriot!
Highlights of some of the events:

Antenna Seminar

Every year Paul Howes (WA6GYY) puts together an outstanding lineup of speakers who provide informative and state-of-the-art presentations on the science of antennas. The Antenna Seminar will take place on Friday, October 11th. Topics range from the basics to more complex antenna concepts. This seminar sells out each year so get your ticket early if you don't want to miss this outstanding ham radio event. Antenna Seminar tickets must be purchased in advance. There is a \$15 charge for this all-day Seminar, and a printed book can be pre-ordered for an additional \$10. Cost of the

Antenna Seminar includes a USB memory stick with all course material in electronic format. You must purchase a Pacificon General Admission ticket to attend the Antenna Seminar.

Coffee with Gordon West

Seating for this personal gathering with famed author and speaker Gordon West (WB6NOA) is limited. Coffee will be provided free, food items will be available for purchase separately.

One-Day Amateur Radio License Class

Interested in obtaining your amateur radio license, but not sure how to get started? Why not attend Pacificon's One-Day License Class? The class covers the material needed to pass the Technician Class test in just a few hours! The class concludes with a license exam - and most people pass the test on their first try!

On-site License Examinations

For those of you who have been studying and are looking to take the Technician, General, or Extra Class examinations - VEs will be on-site at Pacificon administering licensing tests.

Youth Activities

Kids love radios! Get your young folks started in our Youth Activities area.

Legal Seminar

Bart Lee (K6VK), an ARRL Volunteer Counsel and ARRL San Francisco Section Government Liaison, will once again host the ARRL Legal Seminar on Saturday October 12th. Topics will include antenna regulations, interference issues, etc. Attorneys wishing to attend and receive 3 hours of Mandatory Continuing Legal Education (MCLE) credit should contact Bart Lee via email.

Wouff Hong Initiation

Attend the Midnight Meeting of the Royal Order of the Wouff Hong on Saturday night 12:00 am in the Sedona Ballroom. To attend you must be an ARRL Member, and you must be able to provide proof of your Amateur Radio Service call sign.

Saturday Night Banquet

An annual tradition, this year's Saturday Night Banquet will start with cocktails at 6:30pm in the Grand Ballroom Foyer, follow by dinner in the Grand Ballroom at 7:00pm. Seating is limited. Meal choice (Beef, Chicken, or Vegetarian) can be made during registration.

For more info go to the PACIFICON home page:

<http://www.pacificon.org/2013/#home>

NAS FALLON TO BE ON THE AIR

Amateur Radio of Churchill County is getting ready to take to the airwaves with a great Special Event Station to celebrate Navy Day.



A.R.C.C. will be QRV from Naval Air Station Fallon October 26th and 27th, when they activate the amateur radio station located in the base Fire Station.

Plans call for the station to begin operations at 9:00 AM October 26th and to continue for 32 hours, ending at 5:00 PM on October 27th.

Look for the station in the 80, 40, and 20 meter bands as they honor the United States Navy and promote amateur radio and the community of Fallon, Nevada.

the Amateur Radio of Churchill County (ARCC) has approval from Fallon Naval Air Station to activate the Amateur Radio Station located on base at the Fire Station to celebrate Navy Day and to promote amateur radio, emergency communication, and the community of Fallon.

The group will provide QSL cards and also will have certificates for hams who have QSO's with the station on all three bands.

ARES NEWS SEPTEMBER

I will begin this segment referring to FCC Part 97 Subpart E.

=== E. Emergency Communications ===

Subpart E contains four sections, numbered 97.401-407.

Subpart E supports the service of amateur radio operators in times of disaster by establishing basic standard operating procedures to use in case an emergency should occur. Primarily, it authorizes "any" use of radio technology for the "immediate safety of human life and immediate protection of property," regardless of all other FCC regulations, when no alternative is available. It also establishes the [[Radio Amateur Civil Emergency Service]] (RACES), a civil

defense communications service intended for activation in times of war or threat to national security. Because of the restrictions imposed by FCC on RACES operators, the ARRL formed Amateur Radio Emergency Service. Are you ready? Can you respond to a communications emergency deployment for 72 hours? Do you have a radio go kit? Can you successfully/accurately send a radiogram?

If not, join us at the Regional Emergency Operations Center the first Saturday of each month 5135 Spectrum Blvd, Reno 89512. Everyone is welcome. For more information go to www.wcares.us

73
Bob Miller WA6MTY Washoe County Emergency Coordinator

The SNARS Ladies

We had a nice turnout for September. There were 7 of us at the luncheon held at Eldorado and we had a great time.

For October, we will be meeting on Oct 9th, 11:30am, at the Los Compadres Restaurant located at the corner of South Meadows Pkwy and South Virginia. Our guest speaker for this month will be Gary Grant and he will be talking about how to use the applications on our HT's. The ladies will be bringing their individual HT's so that they can practice what Gary will be teaching us.

Yvonne Maxwell W7YMM

FALL HAMS SWAP MEET

The SNARS swap meet will be held October 19, 2013 in the South parking lot of the Tamarack Junction Restaurant & Casino (same place as the May Swap meet) on South Virginia St., Just south of the Wal-Mart shopping center.

STARTING at 0700 – ending around 11:30

THE TAMARACK RESTAURANT is open at 0600 where you can get a full breakfast if you desire --- Coffee and donuts can be had in the parking lot.

* * * * *

SNARS OCTOBER CLUB CALENDAR

2 October @ 1800 Fall Technician License Class

For information about the class [click here](#)

5 October @ 0730 SNARS Breakfast Meeting

The monthly SNARS Breakfast Meeting will be held at **Jack's Restaurant - So Virginia and Longley Lane in South Reno**. All SNARS members and guests are welcome!

TABLES will be \$10.00 each with all proceeds going to offset the cost of the swap meet, with any balance going into the SNARS Repeater Fund.

INFORMATION visit: <http://renohamswap.com/>

VE TESTING: Starting at 9:00 AM Contact: Bill Nichols NN7K

ARRL VE E-Mail: aa7wb@sbcglobal.net

Mark your calendars!!

73 -- Mike, N7MSK

SNARS SHACK OF THE MONTH

You guys didn't send me any shack photos this month, so you're stuck with mine.....



WB2AWQ Reno NV shack, a motley collection of 1930s to 1980s radios: Drake, Swan, Johnson, Collins, Hallicrafters, National, Heath, Gonset, and military. No computers, TNCs, or data devices of any type, and only one "modern" solid state radio, a Kenwood TS-440SAT from 1984.

Name That Rig – Hallicrafters SX-16 Super Sky rider, vintage 1937-38. It is an 11 tube superhet receiver covering .55 to 60 Mhz in 6 bands, with bandwidth and a host of other controls. It also has fairly high fidelity output from a push-pull power tube amplifier. This receiver, in a slightly modified form found favor in J Edgar Hoover's fledgling FBI. The FBI model was the SX-17, and had one additional RF stage.

17 October @ 1830 SNARS Board of Directors Meeting

The monthly Board of Directors meeting will be held at **Washoe Regional Emergency Operations Center 5195 Spectrum Blvd, Reno**. The meeting is open to all SNARS members.

19 October @ 0700 Fall Reno Ham Swap & VE Testing Annual Ham Swap held at the **Tamarack Junction in South Reno**. See above.

BOARD OF DIRECTORS MEETING
REOC, Thursday, September 19, 2013

A. Call to Order (N7MSK)

Time: 1828L

1. Board Members Present:

SNARS: N7MSK, K7SJV, KE7VSR, N7ACM, N2MOO, K7PTT, KB7ZBN

2. Guests Present: KD7DPW, KF7EGU, KC7STV, W6US & KD7ZEV

B. Adoption of Agenda

1. Additions or Deletions. none
2. Vote to adopt: By: K7SJV Second: KF7EGU Motion Carried

C. Reports

1. Chair: (N7MSK) – directed to other reports.
2. Vice Chair: (K7SJV) – none.
3. Secretary: (KE7VSR):
 - a. Current membership – 184 + 1 new sign up just handed in
 - b. Other business – none
4. Treasurer: (N7ACM):
 - a. Bank Balances:
 1. Total \$12,668.86
 - b. Other Business: N7MSK announced he approved the \$402.00 expense for connectors. They needed to be ordered in order to arrive in time to coincide with the antenna installation.
Motion, by N7MSK, "That an expenditure limit of \$500.00 be imposed on the President and Vice-President without previous board approval and a notice of such be sent to all the board members. This expense is limited to incidental time sensitive activity per a single item." Can not be used consecutively to on a single item.
Second: K7SJV Carried: unanimous
 - c. Tahoe Rim Trail donation was acknowledged; N7ACM would like to ear mark the funds to buy a club Popup with name & logo, and safety vests with club name & logo. These would be club property loaned out to event supporters and returned at the end of the event. Generally agreed but no formal vote.

D. Committee Reports

1. Haberdashery: K7PTT reported that the supplier needed a good digital copy of the logo and it would cost approximately \$30.00 for the new plate; final cost was not determined.
2. W7TA, K7JN: no report
3. Events: KD7DPW reported he has a skeleton crew for the Sierra Grand Fondo, and he would like more volunteers.
4. Tech Committee, W6US: The new replacement antenna is ordered and is planned to be installed 28 Sep 2013 on Virginia peak. Toulon is back up and operating properly (no kerchunking). A second climber is needed for the Ophir trip. Basically we are caught up and the D-Star installation is planned for 1 Nov 2013.

Website, N7ACM: Is current with some minor changes to the navigation menu(s).

5. Facebook page, : Newsletter link should be in .PDF format.
6. Awards Committee, KB7ZBN: no report

E. Old Business:

Gary Grant received an email recommending that the repeater system be unlinked. This recommendation was denied.

F. New Business:

1. KF7EGU suggested a form letter be created to address those operators who ragchew beyond the policy for the repeaters.
2. N7MSK suggested that a standard and training for the control operators needs to be done again and that a current list of control operators must be maintained. Persons who do not attend the training can not be control operators.
3. NV Section Conference (EMCOMMWEST) May 2014:

Joe Girando announced at the September breakfast meeting the demise of EMCOMMWEST and the desire for SNARS to take it over with a suggestion that the funds in the EMCOMMWEST would transferred over given an acceptable written plan.

Motion: To accept the May 2014 convention.

Moved: K7SJW seconded: K7PTT carried: unanimous

What followed was a varied discussion, suggestions and name for the event with no decisions. Three names were suggested for personnel who are SNARS members, ARES members and have been involved with or on the BOD of EMCOMMWEST as persons to start the process of getting the conference started. The president will contact those individuals and solicit their participation.

Motion: That ARES be involved in/part of the new conference.

Moved: KC7STV seconded: K7SJW carried: unanimous

Additional discussion followed with the conclusion that a follow up meeting for this one specific topic be held in 2 or 3 weeks time (after the breakfast meeting).

4. Elections: To date only 3 names have been nominated. Reminder that nominees should be told of the commitment needed for the upcoming term.
5. Swap Meet 19 Oct: Will be held at the Tamarack Junction and there will be VE testing. A reminder that there is no outside food (donuts), the casino has restaurants and is willing to provide some food service if desired. This needs to be conveyed to all. Arlan will be asked to provide the DJ service.

G. Motion to Adjourn: By: KD7DPW Second: K7PTT Motion Carried:

Meeting adjourned. Time: 2008L