SIERA BEACON

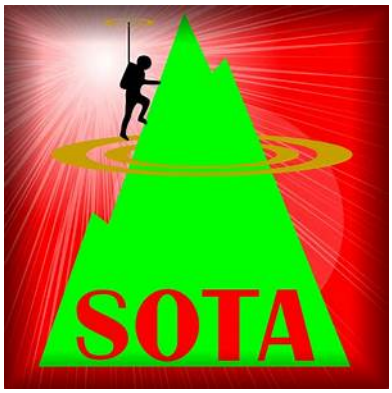
Carson Valley, NV November 2018

"HAM radio is not a hobby. It's a way of life." - Carlos Beltran, XE1MW

Jamie Dahl and Summits on the Air (SOTA)

By Cathy Carney KI7NIR

Since amateur radio's earliest days, hams have supported the tradition of operating in off-road locations, using minimal equipment, ultra-portable antennas, and low-power CW. That tradition was formalized in 2002 by the creation of the SOTA (Summits on the Air) awards scheme in the UK. SOTA combines hiking and mountain climbing with amateur radio. Since 2002, it has spread to almost a hundred countries.



SIERA members received a thorough and exciting overview of this awards scheme at the October 6 meeting through Jamie Dahl's, N6JFD, carefully organized presentation, using Powerpoint slides and his personal equipment and experiences.

We learned that an "activator" is someone who transmits using portable power from the top of a mountain. A registered summit is defined as a prominence at least 492 feet high. There are currently more than 126,000 summits registered in over 147 associations. Each country has its own association. A "chaser" is someone who makes contact with the activator. Activators earn "Mountain Goat" awards, and chasers earn "Shack Sloth" awards.

Jamie shared the colorful SOTA banner that he carries to plant temporarily on the summit he activates. He also shared his miniscule backpack in which he carries all of his equipment: 25 feet of RG174 lead line, a small transceiver, and batteries. He is currently putting together a QRP 5 watt 20 CW transceiver. He talked about the importance of batteries - small but long-lasting - with LiFe (Lithium Ferrite) being the least likely to generate radio noise. Sometimes he also carries a fiberglass (NOT carbon fiber) fishing rod for use as an antenna mast.

His map identifying registered summits locally made it clear that there are plenty of challenges to keep a ham/hiker/mountain-climber busy. Because of Jamie's experience in the field of Search and Rescue (SAR), including the use of satellite phone, he was able to say with confidence that CW ham radio is still the most reliable vehicle for communicating from the most hidden parts of the earth.

Jamie stressed that no dues or membership requirements are required to participate in SOTA - either as a chaser or an activator. Extensive information is available at www.sota.org.uk. Local SOTA action can be found by selecting Nevada after finding the North America SOTA association at www.na-sota.org.

Basic Ham Radio 101 class

Jim Marshall, K6LR, will teach a Basic Ham Radio 101 class at Station 12 at 10:30 a.m. Saturday, November 3rd. It will offer lots of opportunities to ask any questions people have about amateur radio and give plenty of time for discussion. If there is enough interest, Jim will continue holding these classes before our regular meetings.

The November General Meeting will be held Saturday, November 3rd, at 1 p.m., at Fire Station #12, 3620 North Sunridge Drive, Carson City, NV. Chuck Gervie, KI7PGI, will tell us about his years with the NSA, between 1965-2004. Guenther Noder, KU8B, and his daughter, Linda, will bring the cookies.

Chuck Gervie KI7PGI and his NSA Mission

Though separated from the NSA for 15 years, Chuck Gervie KI7PGI worked there between 1965 - 2004. He then followed that career with about ten more years at Lockheed Martin.

What he calls "just a knot-hole view of a small part of the mission" includes clearance processes, early digital computer development at NSA, even supercomputer, and the evolution of analog to digital encryption techniques.

"I was an engineer, not an agent, case officer or mole. I never worked in deep cover or in the Clandestine Service. Most SIGINT is carried out at collection sites in foreign countries, and at NSA HQ. It's funny because folks think intel collection is done with binoculars hiding behind trees, but the guy mowing your lawn could be a recruited worker."

Chuck is going to tell us all about his NSA career as our November presentation. Thank you, Chuck, for stepping up to do this with such short notice.

As Soon as It's Broken, It's Fixed

You may remember the thunderstorm that damaged the NV7CV repeater also brought down the 146.655 repeater. Mono County hams sent it to be repaired about a month ago. Well, that was a quick turn-around. The repeater is now installed and the full linking system, on which BARC (Bishop Area Radio Club) has worked so diligently, is now operational. John Shepherd, AD6NR, will send links and control codes to anyone who emails him at: johnshepherd@earthlink.net. Here's another link for more information: http://n6ov.com/repeater.html

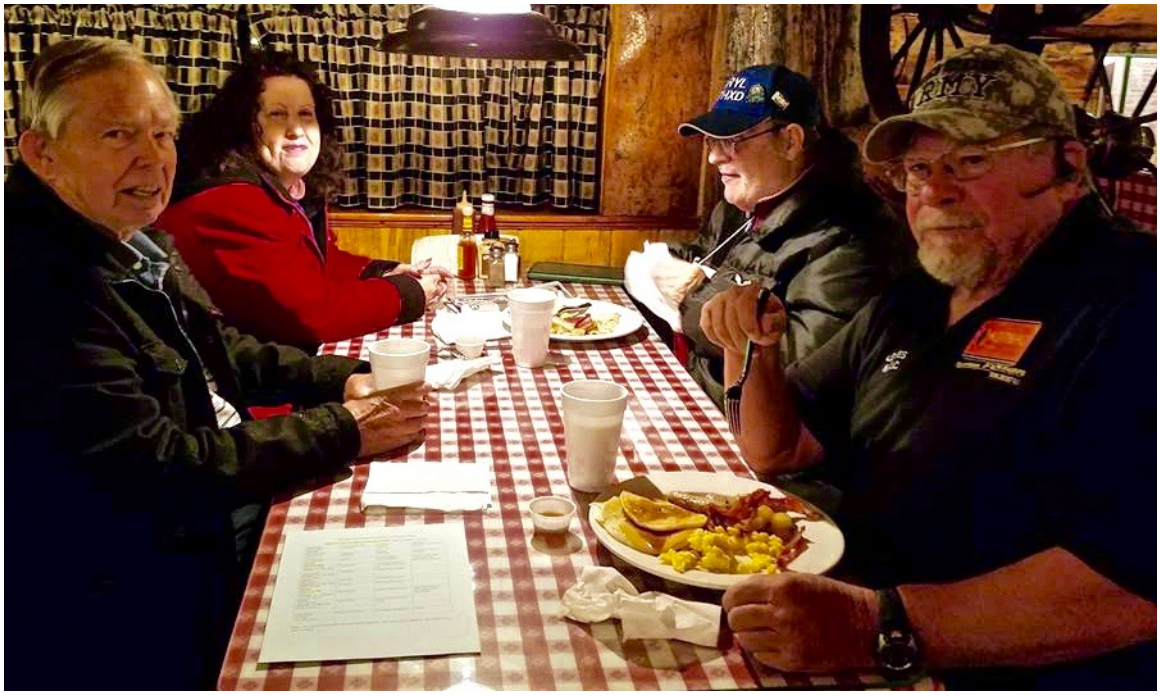
A few SIERA hams have already tried it out. Brad Smith, WT6B, announced on his "Watering Hole" that it is working beautifully and we can talk to people clear down to Lone Pine. Also, Sheila Clement KA7AJQ and Sue Cauhape KI7CTT joined in the BARC nightly net last Monday after the DCART net. It was a blast and its on EVERY NIGHT at 8 p.m. Bob Williams K7VOC has been talking to the BARC hams for a long time, giving signal reports and just plain rag-chewing with them. It's a fun group down there.

Thank you, BARC, for putting Humpty Dumpty back together again so quickly.

Nevada Day Parade

SIERA once again supported the Nevada Day Parade with radio communications. It was a long day, starting with breakfast at Red's Old 365 Grill in Carson City. The final station secured around 2:30 p.m. There were also very few problems with "no show" entries finally showing up, or mysterious drink coolers abandoned and making people nervous. The most major concern was the Public Works Dept. not providing drinking water as promised at the announcers' booths. While boisterous with holiday good cheer, the crowds were well-behaved and everyone had a good time. And the weather was perfect. Can't ask for anything more.

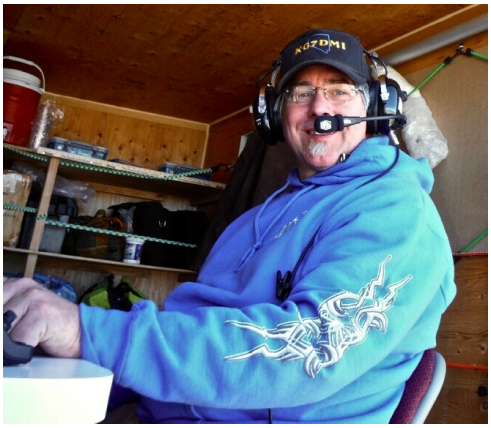
Thanks to John Abrodt KD7NHC, Daryl Haines KE7HXD, Karen Haines, Paul Strople KG7DQG, Susan Strople KG7MIL, Tom Tabacco KE7NCJ, Ed Goldberg KE7EAA, Ben Echavarria N7BBE, Jeff Cauhape K7BCV, Sue Cauhae KI7CTT, Mel Hogan WA6EYD, and Subrina Vinton KI7OAL. A special thanks goes to Greg Moore KG7DMI for a stellar job as Net Control.



SIERA Spin-Off

A large pond between Heritage Park and Chichester in Gardnerville has been dug. Ed Eggert K3VO invites anyone interested to contact him at edeggert01@gmail.com to start a club for radio-controlled model boat racing. For a peek into this other world of radio hobbies, check out this website:
https://www.cabq.gov/culturalservices/biopark/events/model-boat-regatta

NVQSO Stories



Greg Moore, KG7DMI at the mic

Greg Moore KG7DMI: Our group consisted of SNARS members Wes - KG7QXE and Erik - K6CZH, Jeff - K7BCV, Subrina - KI7OAL, and myself, Greg - KG7DMI. Wes, Erik and I met at Burnt Cabin Summit just before noon on Friday. Jeff and Subrina drove out together after they got off work on Friday evening.

Jeff wanted to try something different for this event. He had an HF radio setup in the jeep and planned to work Rover. In the back of his jeep were a separate battery in an ammo can, his Yaesu FT-450D, an antenna tuner mounted in a rack that neatly fit into another ammo can, and a folding chair. A dipole with two ham sticks, ten feet of PVC slipped into a mast attachment point on the back of the jeep. Jeff could be on the air within ten minutes. From Burnt Cabin Summit to Hwy 361, north to highway 50, then eastward put five counties within easy reach.

Wes and Erik each had complete stations and planned to work two-county expeditions from right in camp. With both of them using their portable setups only once before, they were testing and working on improving their station setups. *Does portable station testing and improvement every really end?* Wes had a very nice buddy pole as a vertical, but when he tried to set up his second buddy pole in a horizontal dipole configuration, he found he was missing a component. So that one became a vertical too. Erik's antenna was a home-brew vertical that went up quickly and easily.

I focused more on camping and the BBQ rather than working the radio for every last point. I only set up one radio, my IC-7100, in the club trailer. The internal sound card would make it a single mouse click to switch from Phone to Digital modes. Using a single OCF Dipole on the club military mast made the setup complete.

Friday night was cold enough for Wes's water jug to freeze! Being the first cold night of camping all year really took us by surprise. The next day was warm and sunny. A great day to be outside, not that any of us were overly eager to get up and get going. Jeff headed off a bit later than planned. Like lizards on a rock, once the sun got us warmed up, we started moving. Propagation let stations far and near fade in and out. We all made a few contacts here and there. Turns out not only were there four QSO Parties going on but also a DX contest. I was the only one to even hear another Nevada station, but I think we all heard France, Slovenia, and several other DX stations. Don't know about road warrior Jeff, but between the great day and the lack of sleep, I think all of us spent more time enjoying our surroundings than working radios.

As always in the desert this time of year, when the sun dropped, so did the temperatures. After a round of Mai-Tia's, it was time to fire up the BBQ. Subrina and I got the evening feast for the group underway. With Jeff still on the road, the remaining four of us packed around the small dining table in my camper. No room to stretch out, but it was warm and kept the breeze from instantly chilling our food. A good hot meal of burgers, brats and plenty of sides were enjoyed by all. Jeff showed up just in time to have some food and a glass of wine. I don't think any of us returned to the radios after dinner. With approximately a pint of 92 octane on the firewood, it only took one match to land in the pit, invoking a mushroom cloud of flame and smoke that lit up all of camp. No kindling, no paper, just instant camp fire.

Again the next morning, no one was eager to jump up and get any radio's fired up. So we gathered around the fire and enjoyed our coffee before eventually wandering off to our own stations. It wasn't the most productive weekend contact and point wise, *but it was great fun.* Subrina and I ended up with 143 contacts and I don't know how many multipliers, totaling 3948 points. We will see how NV7CV fairs against other County line expedition/Low power. I don't know the numbers from the other stations in the group, but systems where refined, lessons were learned and we all had loads of fun.

Jim Marshall, K6LR from his home base: "I made 140 contacts, 41 multipliers, with a total score of 11,398. I will be curious to see how I did overall in the State. I worked radios for about seven hours, a few on 40 meters, but mostly 20, 3 on VHF, and 1 on VHF Fusion.


Jeff Cauhape K7BCV ready to roll

Jeff Cauhape K7BCV: "I took part in the ham radio Nevada QSO Party and decided to do it as a 'rover'. I think I drove around 450 miles in total, with about 100 miles of that off-pavement in the desert.

I built a set up where, after I park in a good location, I can setup the antenna on a pole mounted to the back bumper of the Jeep. The back seat is removed, and that's where I put my radio gear. Now, with the antenna relatively close to the ground, I should have had a range of 250 to 400 miles. However, that's not the way it worked at all! My first contact was in British Columbia. I also worked Colorado, Washington State, and Arizona. How is this possible? Cool to know that I can do that from the Jeep, but it's a bit weird. By the way, I sent QSL cards to my contacts and today I got one from Jay Rosenblum, K9VIT, in St. George, UT."

Into the Future

TARA Christmas Party: Paul Gulbro WA6EWV has invited SIERA to join TARA for their Christmas Party and meeting at the Carson Valley Inn on December 2nd at 5:30 p.m. The $20 tickets include a luscious buffet. For more information, check out the TARA website: **http://tahoeamateurradio.com/**

Technician's Class: Jeff Cauhape K7BCV will offer his Technician's Class again at Western Nevada College starting in January 2019. It will be one night a week, possibly Monday, from 6 to 8-ish p.m. Firmer details will appear in the Beacon at a later date. To sign up: http://www.wnc.edu. Jeff has updated his website for this class. Check it out for news, articles, and the class syllabus: http://www.k7bcv-radio.tech.

Pony Express: Tom Tabacco KE7NCJ is giving us all a long heads-up to get ready for the Pony Express Re-Ride, scheduled to be in Nevada from June 17-19. So mark your calendars and check you gear. More information will be forthcoming in future Beacons.

Special Notice of our Contributions: Petra Keller, of the NPEA, has put a HAM page on the Pony Express website: https://nationalponyexpress.org/annual-re-ride/ham/. Thank you, Petra, for giving us a good write-up.

A Quick Primer of Morse Code Syntax

By David DeAngelis, K1SCN

In conversations with Brad, WT6B, it seems there is much information about this hobby that has been passed along orally and not always readily available from print or on-line sources. I believe that one of the reasons he started “The Watering Hole”. (147.93/33MHz Wednesdays at 7:30PM local) was to keep that tradition going.

Few hams licensed after 2006 have had the experience of operating in the CW mode. And, fewer still are aware that the operating procedures for this mode form the basis of operating procedures for all the other modes, comprising what is understood to be “standard practice." Before there were other modes there was only CW, so it stands to reason that CW would be the historical precedence for operating procedures. Q-signals and what have become standard abbreviations trace their origins to their use in the CW mode.

A typical contact in the CW mode would go something like this:

(1) CQ CQ CQ de K1SCN K1SCN K1SCN AR
(2) K1SCN K1SCN K1SCN de WT6B WT6B WT6B KN
(3) WT6B de K1SCN R TNX FER call UR RST 599 599 5NN
Name Dave Dave Dave QTH Gardnerville NV Gardnerville NV Gardnerville NV
HW CPY? WT6B de K1SCN AR KN
(4) K1SCN de WT6B R (Brad sends a signal report, name and QTH as above)
HW CPY? K1SCN de WT6B AR KN
(5) WT6B de K1SCN R TNX FER QSO GL ES GUD DX CUL 73 AR WT6B de K1SCN SK
(6) K1SCN de WT6B R HPE to C U AGN 73 AR K1SCN de WT6B SK

Exchange (1) begins with a CQ call. The origins of the use of CQ are shrouded in folklore. To the modern ear, CQ does sound like “seek you”, but there is no factual written information to support that theory. What is known is that by 1904 many land line telegraphers (railroad and post office) had been employed by shipping companies to man their new wireless equipment. In the landline service, CQ was used as a general call - -"calling all stations." As a result the call CQD was adopted as the universal distress call. SOS came into use later. Excessive repetition is considered to be in bad taste, but some repetition is necessary to achieve two way contact, so exchange (1) is usually repeated two or three times and ending by sending AR. The over-line indicates that the Morse characters are run together and sent as a single character (**.-.-.**).

Now, the ARRL publication *Ethics and Operating Procedures for the Radio Amateur* states: “Do not end your CQ with 'AR K ': it means "end of message, over to you." There is nobody to turn it over to yet. End your CQ with "AR." For the record, that is not the way I learned it, but it does make sense. The “de” is understood as the French word for “from” and is in keeping with the international nature of CW work. Send the call sign of the station you are working then *de (from)* your call sign.

In the next exchange (2), Brad calls me and ends with a KN. As a procedural signal KN means "go ahead only" and is recommended as a standard ending during a QSO (Q-signals will be explained later).

In exchange (3) contact has been established. If copy is difficult, by all means repeat the call signs several times. The procedural call "R" stands for "Roger" or "received" and indicates that the previous exchange was copied. If you need a fill, don't send an "R." PSE RPT ___, please repeat your... (whatever you are missing) can be sent after you send the signal report. A report of 4_9 or 3_9 or less, for example, would indicate that copy is difficult. If copy is less than perfect, but you have copied the previous exchange, feel free to send "R R R." TNX or TKS = thanks; FER or FR = for; UR = your; RST = Readability, Strength, Tone; NN = nine nine; QTH= my location is. When sent with a "?" changes the Q-signal to a question - QTH? = what is your location?; HW = How; CPY = copy (sometimes shortened to just HW?).

Exchange (4) would be the same as (3) only with call signs reversed.

In exchange (5) QSO in strict translation means: "I can communicate with (call sign)" but in this usage would translate as “this contact”; GL = Good Luck; GUD = good; DX = distance or foreign country contacts; CUL = see you later; 73 = best regards.

In exchange (6) HPE = hope; C can mean correct, but here it would be "see;" U = you; AGN = again. If you are leaving the air you can add "CL" = closing, right after your call sign on your last transmission.

These abbreviations and procedural signals have no legal standing. FCC regulations say little about our internal procedures. The only legal requirements deal with station identification. Each amateur station, except a space station or telecommand station, must transmit its assigned call sign on its transmitting channel at the end of each communication, and at least every 10 minutes during a communication. Usually all that is needed for a valid contact is the exchange of call signs and signal reports – so as the saying goes "Put it in the book." (That would be your logbook.) This example would serve as a valid contact.

In actual practice, after you have exchanged the basics, you might want to exchange more information like weather conditions (WX = weather), or station details, job, other hobbies. Being informal, friendly and conversational is what contributes to making our hobby enjoyable.

What helps to make CW operations truly international is/are the use of Q-signals. Much can be communicated with the use of these three letter abbreviations. Q-signals were initially developed for commercial radio-telegraph communication and later adopted by other radio services. The aeronautical service and the maritime mobile services have their own Q-signals. Amateur service Q-signals are based on the International Telecommunications Union civil series Q-Signals and the ARRL National Traffic System QN series of Q signals for use on NTS Nets. As I mentioned above, adding a "?" after the Q-signal changes it to a question.

For an extensive list of Q-signals you can consult:
www.arrl.org/files/file/Get on the Air/Comm w Other Hams-Q Signals.pdf .

In addition to QTH, a few Q-signals you might hear are:
QRL? = is the frequency in use?
QRM = Your transmission is being interfered with.
QRN = I am troubled by static.
QRS = Send more slowly.

QRT = Stop sending
QRZ? = Who is calling me?
QSB = Your signals are fading.
QSL = I am acknowledging receipt.
QSY = Change transmission to another frequency.

A good operator will not abbreviate unnecessarily when working a station operator of unknown experience or language preference. But, these are pretty much universally recognized:

AGN = Again
CUL = See you later
DX = Distance, foreign countries
ES = And
FB = Fine business, excellent
GE = Good evening
GM = Good morning
GN = Good night
GUD = Good
HI = telegraphic laugh (pre-dates LOL)
LID = A poor operator
PSE = Please
RX = receiver
SRI = Sorry
TNX/TKS = Thanks
TU = Thank you
TX = Transmitter
UR/URS = Your, yours
XCVR = Transceiver
73 = (no 's) Best regards
88 = Love and kisses

Since modern transceivers have reduced the effort (read: skills) for properly tuning in a CW signal, the only consideration here is the quality of your audio filtering. (No discussion here of trying to zero-beat the received signal with your outboard VFO. Or better yet, operating split frequencies due to the transmitter being crystal controlled.) Most mid-range and up transceivers have digital filtering arrangements that require some experimentation to get used to. If you plan on doing a lot of CW, you might consider a rig that allows the installation of an audio crystal filter. Before making a final decision on getting a rig that performs well in the CW mode, by all means ask the members who operate that mode. Everyone has a personal preference. (Lots of room for discussion there.)

73 es 88

ARRL Licensing Exam: SIERA offers these exams on the third Saturday every other month at 9 a.m. in the Shepherd of the Sierra Lutheran Church behind the Best Buy on Hwy 395. Bring a photo ID, a copy of your license if you're upgrading, and $15. Contact: Greg Moore at KG7DMI@frontier.com for more information.
The next Licensing exam: November 17th.

Breakfast and Lunch Gatherings

11:15 a.m., every Wednesday at Jethro's on Kimmerling in the Ranchos.
8 a.m., every fourth Saturday at the Tail Dragger Café at the Minden-Tahoe Airport.

Nets Available in Carson Valley and Beyond:

The SNARS Noon Net daily on 147.150.
Daily Carson & Eagle Valley net, 6 p.m. on 28.435 MHz USB
BARC Nightly Net, 8 pm on 146.655 pl 131.8
(website: http://www.n6ov.com/newsletter.html)
DCART Net, Mondays at 6:30 p.m. on 147.270.
TARA Net, Mondays at 7:30 p.m. on 147.240.
SIERA VHF Net, Tuesdays at 7:30 p.m. on 147.330.
SIERA HF Net, Tuesdays at 8 p.m. on 3982kH.
Plumas County Net, Tuesdays at 7:30 p.m., on 145.470.
Brad Smith's (WT6B) *Watering Hole,* Wednesdays at 7:30 p.m. on 147.330,
"*discussing questions and issues pertaining to amateur radio.*"
SKYWARN at 7 p.m. Wednesdays and the **NV ARES** is 7 p.m. Thursdays. Both operate on the EchoLink conference server NV-GATE: 152566 EchoLink and can go onto your smart phones, tablets and computers.
SNARS Hospital Net, Fridays at 10:00 a.m. on 147.030 or 147.150
(SNARS Linked Repeaters: https://snars.org)
RARA Rural Amateur Radio Asso., Fridays at 8 p.m. on 147.180 pl 123
ARES HF Net, Saturdays at 7 a.m. on 3965kH.
RARA, Rural Amateur Radio Association, Saturdays 7:30 a.m. on 3965kH
New Hams Net, Sundays at 1 p.m. 146.760 pl 123
National Traffic Service Net, Sundays at 6:15 p.m. on 3945kH.

Happy Birthday to:

Cathy Carney KI7NIR

There are no meeting minutes for October

If you have photos and/or can write a short description of whatever you're doing, send it to the Beacon at scauhape2002@yahoo.com. We'd all like to hear about your adventures and discoveries with amateur radio.