



SIERA BEACON



Carson Valley, NV

May 2020

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

NOTHING CANCELS AMATEUR RADIO

This month's Beacon is basically a rundown of events that have been cancelled, postponed, or left to the individual's creativity because of COVID-19 restrictions, which apparently will be extended for another month. That hasn't stopped SIERA hams from getting on the air. Last month, Jim Sanders AG7IF and Ed Terlau KG7ZOP hosted our April meeting on the NV7CV repeater accompanied by Ed's ZOOM presentation. A little more activity has hit the repeaters with campers and others testing their signals. As the HF frequencies improve with this slowly emerging sunspot cycle, more hams are reaching others at longer distances. And there's been more activity on nets and the Watering Hole. Nothing stops a ham from pushing that ole PTT. As George Clooney told Sandra Bullock in the film, *Gravity*, "there's always somebody listening."

MOTA: Our April meeting-on-the-air was such a success, we will hold another one, May 2nd on the NV7CV repeater 147.330mH. Board meeting at Noon; General meeting at 1 p.m. We'll be discussing Field Day plans. It's only two months away and there are a lot of new challenges.

SIERA General Meeting – April 4, 2020

Due to the COVID-19 Virus outbreak, exercising an abundance of caution, and following recommendations from the CDC and the State of Nevada, the SIERA General meeting was held utilizing the NV7CV, SIERA 2 meter repeater.

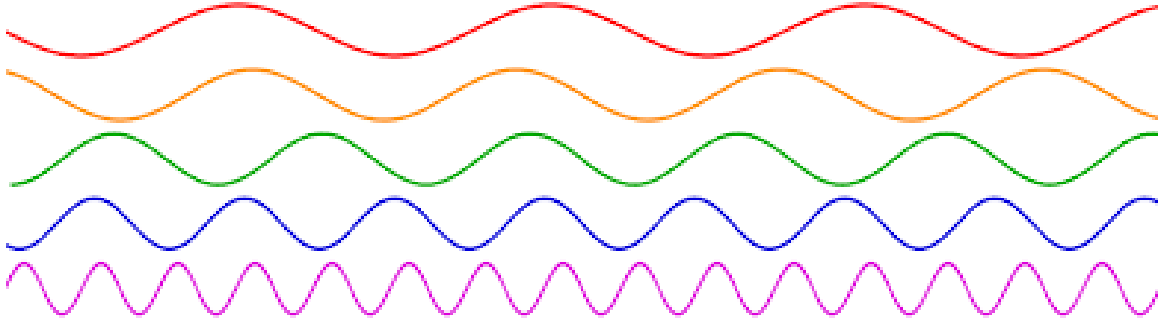
Call to Order 1:00PM

Membership: Twenty-one members and two guests checked in using the repeater, Zoom attendees were not tracked, but Jim Sanders AG7IF reported 15 or 16 participants, some of whom were also checked in on the repeater.

Presentation: Simultaneously shared via the ZOOM app
Generators and power sources by Ed Terlau KG7ZOP

Generators for home and camping can be powered by gasoline (with a stabilizer), propane and natural gas. Prices can vary from \$100 to \$1000 depending on output capacity and quality of waveform.

Waveforms generated can vary from the ideal sine wave. A true RMS meter and Oscilloscope is the best way to measure. Most electronics do not care if there is a pure sine wave because modern devices use switching power supplies that switch on and off based on the power required. However, they do NOT LIKE high voltage or spikes.



Microwave ovens will not heat as well if the voltage peak is lower than a pure sine wave. Most microwave ovens have half wave rectifier power supplies. Newer microwave ovens use “inverter” technology and are less affected by peak voltages. Toasters, coffee pots, heaters will work fine with almost any waveform.

Your UPS (Uninterrupted Power Supply) is likely generating a modified sine wave. The estimated cost per KWH for popular models varies from a low of \$0.72 to \$1.41 depending. Inverter generators are, usually, more efficient than conventional fixed speed generators at lower loads.

Costs associated with the installation of a permanently mounted generator varied from about \$4,500 to \$16,000. Best to hire a professional.

Inverters change DC to AC. Prices vary from \$20 - \$1000. Inverters can generate a pure sine wave or modified sine wave. Pure sine wave is, of course, preferred, but the cost associated with generating a pure sine wave is about twice what it costs for a modified sine wave supplying the same wattage. Sine wave inverters may be electrically noisier because of the high switching rates. The last 2KW sine wave inverter Ed bought was \$224.

Typically, for an inverter you need a large battery capacity and big wire, or an idling car. Automobile alternators are typically 100-200 amps at 1500rpm engine speed. Given the correct size, battery, and wire size, they run most everything. For example: refrigerator, freezer, lights, small compressor, coffee pot, microwave, electric chain saw, power miter saw, TVs, modems, routers, security equipment, audio, ham radio PS, and more.

Ed shared pictures of his various RV inverter hookups.

When shopping for an inverter, let the buyer beware. Read the specs carefully. In conclusion: Review what you want. Determine what you need. Figure how much you can afford. Document a procedure to connect and disconnect. Test and practice. Then, do something.

Discussion and Q/A session followed.

The meeting adjourned at 2:26PM.

Cancellations, Postponements, and Do-It-The-Best-You-Can Events

Safety Day, usually held in May at Lampe Park to showcase all the emergency response resources in Douglas County, **has been cancelled.**



The Pony Express Re-Ride has been **postponed until August 26**, which means that The Pony won't enter Nevada at Woodfords until August 27th. Looks like our usual June event crush won't be happening. Don McRoberts W3DRM has posted the handbook for participants on <http://www.cvhams.com>. Tom Tabacco KE7NCJ will keep everyone informed of any changes with his regular announcements on various SIERA radio nets and programs.

Field Day 2020: Learn and Adapt!

So far, **Field Day has NOT been cancelled**, but hams are encouraged to be creative in doing individual at-home or remote Field Day activities without involving the usual public outreach programs. The main thing to remember about Field Day is that it is NOT A CONTEST. The points are not garnered just by how many contacts you make but how you set up and operate an emergency station during disasters. While hams can't use repeaters during Field Day, Simplex is encouraged. In fact, what a great time to learn just how far the simplex 147.330mH can reach. And of course, there's always 146.520mH. For complete ARRL information, check the ARRL website here: <http://www.arrl.org/field-day>. ARRL Field Day is always held on the fourth full weekend in June -- 27-28, 2020.



The Death Ride has been cancelled.

Alta Alpina Challenge Bicycle Race on June 27.

From Michael of the Alta Alpine organization: "**We're still moving ahead.** We're anticipating, based on current modeling, that California and Nevada will be in the next phase of this process by the end of June. We don't expect that things will be back to normal by then so we have shifted our event budget around and made new operational plans to adapt this year's event for new virus-safe protocols. The nature of the Alta Alpina Challenge makes it much more adaptable to virus-safety than other events. However, if we're still under stay-at-home or other orders at the end of June that prohibit our ride then we'll have to reschedule or cancel."



Teachers Institute Cancellation Notice

As K-12 school systems and universities have been forced to move entirely to remote learning, teachers and students have had to make dramatic adjustments. After considering these educational challenges, along with travel restrictions and restraints on the ability to gather in groups, **ARRL leadership feels it is appropriate to cancel the 2020 Teachers Institute.** We look forward to bringing back this important program in 2021, so that we can continue promoting amateur radio in

the classroom through our [Education & Technology Program](#) (ETP). If you have additional questions, please email EAD@ARRL.org.

ARRL Licensing Exams:

While the May 16th exam has been cancelled, Greg may be able to arrange a private exam for you. Just send him an email: Kg7d@arrl.net.

Before COVID-19, VE exams were held at 9 a.m. on the third Saturday of odd months, at Fire Station 51, 777 S. Stewart Street, Carson City. When things reopen, bring your photo ID, \$15.00 cash or personal check (*we can't take cards*), and a copy of your current license if you are upgrading (*a reference copy from the FCC web site is acceptable. It doesn't have to be the Official copy*). Greg Moore KG7D also suggests you bring an extra \$15.00 if you want to take another test. There's also an informative Q & A session afterwards. Bring your new radios if you need help programming them.)

While SIERA doesn't endorse products or books, here's yet another book to help people prepare for the Ham Exams. It's every available on Kindle for \$2.99. **Ham Radio Exam Prep**

<https://www.amazon.com/Ham-Radio-Exam-Prep-Technician-ebook/dp/B07HVMGHB7>



How to Build Your Own Crystal Radio Set from Household Junk

This is a fun video to watch on building a crystal radio. You old timers may get a huge kick out of it. Did any of you actually build one? And new Hams may enjoy watching just how little you need to listen to an AM station.

<https://www.youtube.com/watch?v=VqdcU9ULA1A>



RimstarOrg: Step-by-step instructions for making a tunable crystal radio. This is a radio that gets its power from the radio waves. I made it almost entirely from junk except for the diode (1N34 germanium diode) and the earpiece (though you can use a speaker from a phone instead.) I originally got this circuit from the book "Radio Receiver Projects You Can Build" by Homer L. Davidson.

Baufeng Afficianados! Hamradioprep.com has a program to help you learn how to use that inexpensive and complex first handie-talkie.

The Watering Hole -- NOT CANCELLED ... WOOHOO!

For many years, Brad Smith WT6B has held **The Watering Hole** every Wednesday, 7:30 p.m., on 147.33mH. Lots of hams check in, ask intriguing questions, and pool SIERA's vast amateur radio experience to help hams, both new and old, solve problems with their stations. It's a fun and informative half-hour even if you just want to listen to the chat.

Talk Around the Watering Hole:

In response to recent **Watering Hole** discussions, Jim Sanders AG7IF posted this to the SIERA Facebook page:

"Greetings all, with all the talk about pacemakers lately on our Tuesday and Wednesday net, I thought I would share a picture that a good ham friend W5GIE just sent me. His old one nicely framed and in the shack now. Still working as checked by his voltmeter...haha A bit of planning went into his receiving this, decontamination/pathology costs..etc.."



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, ragchew and pre-check-in at 7:30 p.m.

DCART Net, Mondays at 6:30 p.m. on 147.330.

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 3982kHz.

Plumas County Net, Tuesdays at 7:30 p.m., on 145.470.

CARS Fusion Net, Wednesdays at 7 p.m. The local FUSION repeater is at 442.300.

Brad Smith's (WT6B) Watering Hole, Wednesdays at 7:30 p.m. on 147.330,
"questions and answers pertaining to amateur radio."

SKYWARN at 7 p.m. Wednesdays.

NV ARES Net Thursdays at 7 p.m. Echolink conf server NV-GATE 152566 IRLP Western Reflector Ch8:9258

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 Assn., Fridays at 8 p.m. on 147.180 pl 123

ARES HF Net, Saturdays at 7 a.m. on 3965kHz (+or - QRM).

RARA, Rural Amateur Radio Association, Saturdays 7:30 a.m. on 3965kHz

New Hams Net, Sundays at 1 p.m. 146.760 pl 123

National Traffic Service Net, Sundays at 6:15 p.m. on 3945kHz



THE TAILDRAGGER AND JETHRO'S ARE OFFERING TO-GO FOOD ONLY. IF YOU'RE HAVING WITHDRAWAL, GIVE THEM A CALL.

Tail Dragger Café at the Minden-Tahoe Airport. 775-782-9500

Jethro's on Kimmerling in Gardenerville. 775-265-221

Hopefully, we can return to our regular in-person gatherings soon.

DCART/TBA

On April 20th, which would usually be the regular meeting of DCART, Scott Ramirez KM6SSK performed net control duties for the first monthly net of Tahoe Basic ARES. He did a great job. After listening to him handle the net, it's clear to see why his 12-year-old son, Emerson KN6BNW, did such a professional job of during last's year's crazy Death Ride. As you may recall, two riders flew off the edge of Hwy 4 near Emerson's post. It was an exciting day for everyone concerned, but Emerson reported all the information given to him calmly despite Net Control's demand for more.



During this shutdown, Sheila Clement KA7AJQ urges all DCART members to sharpen their skills on Winlink, Winmoor, Packet, and to complete the ICS classes.

Sheila's Official Comment: 2020 March DCART/Alpine ARES

Douglas County Amateur Radio Team (DCART) members continue to work from home with nets, on line training and other radio projects. We are working with Tahoe Basin ARES to combine our nets in order to work together for training. The July Death Ride is canceled. The June Pony Express ReRun has been rescheduled for August 26. The Alta Alpina Challenge ride is still scheduled for the end of June.

Sheila Clement, KA7AJQ
ARES Emergency Coordinator
Alpine and Douglas Counties

Remember, send your photos and news for the Beacon AND the SIERA Facebook page to: scauhape2002@yahoo.com

