



SIERA BEACON



Carson Valley, NV

August 2020

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

Local hams use NV7CV repeater to report Numbers Fire experience



Larry Walsh talks to neighbors, Chuck (KI7PGI) and Mary Lou Gervie as the Numbers Fire shows itself on the horizon. Photo submitted by Chuck Gervie.

SIERA hams Ben Etchevarria N7BBE, Chuck Gervie KI7PGI, David DeAngelis K1SCN, and Bill Holmes K7DUY had "front row" seats to the Numbers fire that burned across a wide swath of the Pinenuts shortly after the Fourth of July. Ben was at work in north Carson City when he heard that his Ruhenstroth neighborhood was under an evacuation order. Rushing home to rescue his son, Hunter, Ben was held back in traffic for several hours. "He's probably playing video games with his headphones on and doesn't know what's going on," Ben reported in frustration over the NV7CV repeater.

Chuck and Mary Lou scrambled around trying to evacuate. "We had no idea what to throw in the car. It was the first time we've ever abandoned our home (in a disaster)." His nearest ham neighbor and buddy, Bill Holmes, lives near the fish hatchery and watched helicopters dip buckets into the Carson River, flying over his house. "They were only a couple hundred feet right over my house," he said. Then listeners on the frequency could hear the rushing sound of a helicopter flying overhead. "Whoa, that was a close one," he exclaimed.



David DeAngelis lives in the neighborhood just north of Dump Road where he had a perfect view to photograph the fire as it raged across the landscape. High winds whipped the fire first toward Ruhensroth, triggering the evacuation order; then shifted further eastward. He was able to shoot the above photo of the terrifying size of the fire. Bill Holmes said it looked like it was about seven miles across the Pinenut range.

Later, Sue Cauhape KI7CTT talked to firefighters in Smith's grocery store who came from as far away as Rough and Ready, and Chicago Park, CA to help in the fight. A large incident command center opened at the Fairgrounds to better serve the outlying neighborhoods along Out-R-Way and Dump Road. Helicopters, bombers and other smaller aircraft coordinated flights to quickly douse the fire with water and retardants.

After a day of intense aerial firefighting, ground crews had a better chance of containing several small fires throughout the canyons. It took nearly a week to contain the fire at about 20 percent. When the winds died down, firefighters were finally able to make progress in controlling the spread and watching for hot spots which flared up occasionally.



After he and Mary Lou returned home, Chuck joined neighbors on 4-by-4s to scout the burn areas at Sheep Camp five miles down Pinenut Road. He reported that he counted about thirty small fires across the burn site. Later in the week, smoke could still be seen, with fires on the high ridges that threatened to go into Smith Valley. By July 15th, the Record Courier reported half a dozen homes and several out buildings were lost. Rumors spread of a carload of guys throwing firecrackers out the windows as they travelled along Hwy 395. Investigators continue to work on the case, but are holding information for verification. This fire made a lot of people angry ... as if 2020 hasn't been challenging enough. For those who lost their homes, though, GoFundMe sites have sprung up to help them recover.

The General meeting 1 p.m. August 1st on the NV7CV repeater 147.330/240MHz will be a double-header. Jeff Browne K5BLS will tell us about his project to link local repeaters with Reno area EmCom. And Ben Etchevarria N7BBE will share his harrowing experience with the Numbers Fire evacuation. There's undoubtedly more than what is reported in this Beacon.



Jim (K6LR) Marshall's Latest Restoration Project

As most of you know, I always enjoy restoring old tube-type radios. My latest project is a Hallicrafters, SX-96 tube type receiver, vintage about 1954. The chassis was in very good shape, however the front panel and cabinet needed some work.



I removed the chassis from the cabinet, and separated the front panel. Then I sanded and wire brushed the panel and cabinet, and repainted it with a pretty close match to the original paint.

All the components are original, including the infamous "Black Beauty capacitors that with age, start leaking. Additionally as can be seen in one of the photos, all but two of the vacuum tubes are original from the

Hallicrafters factory. Amazingly, the receiver actually works! I tested all the tubes and had to replace one, fortunately, I had one in stock.

Next step is to check the capacitors and resistors as necessary. After that, a complete alignment and it will be finished. Don't know what I am going to do with it after it is finished. The guy I bought it from only had it for a short time. Don't know who the original owner was, but he kept it in very good shape. The original warranty card and tube placement cards were included. Amazing how an electronic piece of gear that is 66 years old is still in good shape and operational.



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This is part of my stockpile of tubes. Had these when I was 17 years old and servicing old B/W television sets back in the 60's. I will never use them but just can't bring myself to get rid of them. Besides, you never know when you will need one!

Jim Marshall, K6LR

The Watering Hole

Brad Smith WT6B holds ***The Watering Hole*** every Wednesday, 7:30 p.m., on 147.33/.24mH. Lots of hams, both new and old, check in, asking intriguing questions, and pooling SIERA's vast amateur radio experience to solve problems with their stations. It's a fun, and sometimes chaotic, half-hour even if you just want to listen to the chat. Did you know there's over 1000 years of combined radio knowledge among SIERA members? Tune in and take advantage of all that information.

Repeater Links

How does the magic happen to link repeaters? It was a lengthy discussion on ***The Watering Hole*** a couple of weeks ago. And of course, the repeater wizard (Paul WA6EWV) didn't give up his deepest secrets to this magic. He did explain that the 147.330 and 147.240 repeaters are both stand-alone instruments UNTIL codes are entered into the .24 repeater to link it with .33. "A lot of extra electronics and politics goes into arranging the link-ups between repeaters," Paul said. Ed K3VO added that, "in the old days, there were repeater wars over who could use the repeaters."

SIERA and TARA have agreed to link their repeaters during weekly nets and outdoor events that the two clubs join forces to support, such as the Alta Alpina and the Death Ride. The Bishop hams of BARC have performed electronic and political miracles to link repeaters along the eastern Sierra Nevada corridor from Carson City to Olancho, CA.

It makes for some tricky mic work sometimes because you need to wait a few seconds after pushing the PTT before transmitting. This allows the repeaters to link up, so your transmission won't be cut off at the beginning, which happens often when using a string of repeaters, such as the one that connects Reno with Santa Cruz, CA.

Currently, Jeff Brown K5BLS is working with his CARS repeaters to link .33, .24, and .27 to repeaters in Reno and beyond for greater range during large-scale disasters. He will be talking about this project during our August general meeting on NV7CV. Come listen and learn about how Nevada hams are building a robust system of repeaters for emergency uses.

Some thoughts regarding Net operations using the Linking capability between the 147.24 and 147.33 repeaters.

Submitted by Paul Gulbro WA6EWV

Personally, from a "technical operation standpoint," I'm very pleased with the early results of the "Dual" group Nets; however, after the net on Monday the 23rd, I feel some technical operational details should be "explained" to help insure the efficient station interaction between the linked repeaters.

Of course the first item is to be aware of the link itself. Regardless of which repeater you are using, if the link is active, you will hear additional courtesy tones. Operators should be familiar with the "Normal" courtesy tone from the repeater they access on a regular basis. This "familiarization" will immediately help inform you if the repeaters are in a linked mode of operation from the additional tones generated when operator transmissions are exchanged. If you are the NCS, realizing the link is active, you should change your transmission actions to allow for the delay between repeaters.

Now that the NCS is aware of the link, the next point is understanding the "Unique" characteristics involved with the linking. IF the NCS IS OPERATING THROUGH THE 147.33 REPEATER, there will be an ADDITIONAL ONE SECOND DELAY before a station using the 147.24 repeater can respond. IF NCS IS USING THE 147.24 REPEATER during a linked operation with 147.33, there is NO ADDITIONAL DELAY involved, and so a more normal station interaction can be used between all stations regardless of the repeater they are operating through.

The best overall procedure would be to allow extra time between ALL transmissions when the roll call portion of the net occurs.

In a scenario where there is ESTABLISHED TRAFFIC BETWEEN TWO SPECIFIC STATIONS, the DELAY TIME WOULD NOT APPLY for the two stations IF THEY ARE ON THE SAME REPEATER.

I would assume as we practice the net roll calls, we will become familiar with each group's operators and which repeater they will normally use. Consequently, NCS could adjust their reply transmission to help eliminate the possible "Doubling" of station transmissions through the linked repeaters.

Finally, a somewhat unique aspect to the normal net operations was added with Bryce, KI7NIK checking in through the Echolink system on the 147.24 repeater. The nature of Echolink involves an additional lag time between transmissions. Consequently, REGARDLESS of which repeater you are operating through, an additional THREE seconds will be required to carry on a contact with Echolink stations. This means, if you are using either repeater, after you stop transmitting, it will be 3 seconds (at least) before the Echolink station can respond. This does add an incredible increase in operational possibilities IF the internet stays active.

The Echolink system is located at wa6ewv's QTH and has battery backup good for 36 hours or more depending on activity. This compliments the battery backup capabilities with both repeater systems.

If there are questions or comments, I can be reached at:
wa6ewv@juno.com



In these COVID days, you can study AND take your exams online at hamstudy.org. OR Greg Moore KG7D may be able to arrange a private exam for you. Just send him an email: Kg7d@arri.net.

More COVID Casualties: Alas, for the first time in its three-decade-long history, **the Pony Express Re-Ride has been cancelled.** You can probably guess why. How does such an outdoor traveling event get cancelled because of a pandemic? Well, unlike many spectator spots along the remote Nevada route, there are large gatherings of Pony fans in St. Joseph, Sacramento, and other cities along the way. Also, because of school openings, Pony organizers didn't want to conflict with children's schedules. This would also cut the rider pool. Support staffs would be endangered as well. All in all, there were just too many factors impacted by COVID restrictions. So, let's hope next year will be COVID-free and we can enjoy the Pony Express again.

Brad Hollander's Giant Sale: Another favorite summertime event has bit the dust because of COVID-19. Brad Hollander N7RCA postponed his Giant Yard Sale, usually the first Saturday of June, to August. Now, with the second surge of Covid positives raging through the country, he must cancel altogether. 2020 has become the year we cancelled summer

Alta Alpina Snuck One In: Bill Holmes K7DUY and Tom Tabacco KE7NCJ joined Alta Alpina hams to support thirty-five bicyclists who climbed Kingsbury, Luther, Carson, Ebbetts, and Monitor passes July 25th in a much smaller version of their annual bike tour of the Sierra Nevada. At least one part of summer wasn't cancelled.

You Can Still Buy a Bunch of Solar Panels!

Bill Holmes K7DUY still has lots and lots of ARCO M-52 solar panels to sell for \$10 each. They're 6 amps, 30 watts, 1'X 4', 12 lbs., and though they are 20 years old, Bill claims they can be connected serial or parallel to put out a lot of power. Perfect for your ham shack, RV, or chicken coop. If you're interested, call him at 775-265-0732 or email at hinterland001@gmail.com.



And Other Goodies for Sale:

From the estate of Vaughn Peak N7ODT

- Kenwood TS-930s Transceiver
- SB-200 Heathkit Power Amplifier
- Kenwood MC-60 Microphone
- Drake Model 2-B Transceiver
- Realistic HTX-100, 10 meter low power Transceiver
- LDG AT-100 pro Autotuner
- Antenna Tuner MT3000B
- Tripline 7 amp Regulated Power Supply

Other equipment includes:

- HP 1715A 2000 mHz Oscilloscope
- HP 100 mHz Spectrum Analyzer
- Wavetek Model 1001A Signal Generator
- HP VTVM Model 400H

Contact: Mel Hogan <twanger89423@gmail.com>

DCART NEWS:

The DCART-Tahoe Basin net Monday July 27th tested the range of passed signals on 147.270mH. Some hams hadn't yet tuned in the new PL, but Paul Gulbro linking of his 147.240 mH repeater worked well to bring in hams from Carson Valley, Tahoe Basin, and Carson/Dayton areas. The DCART nets will return to 147.33mH until further notice.

Jeff Brown K5BLS has done extensive work on antennas and radios in the CARS system, some at his personal expense. For DCART, the 147.270+ repeater is up for testing now. Remember to check and reprogram your radios for the new pl 156.7. Much revamping is coming with our original DCART system. Consider the 441.250 (originally linked) gone as changes are coming. The 443.750 can still be linked full-time or as needed. Extraordinary linkage and other revamping is coming so see the latest CARS newsletter for full technical elements. CARS now has a portable 15W UHF repeater that can be powered via AC or DC voltage. Program 441.125+ pl 156.7 in your radios.

ARES Connect

National is trying to lay the groundwork to have ARES members properly trained and qualified so we can credibly respond to today's emergencies. And eventually, your time reporting will enable me to just pull your time stats. Please support ARES Connect by signing up for any of the activities listed, even though they are sponsored by another

county. The person/county listing the event gets the hours and that's OK. ARES Connect has marketed a "Task Book" where you complete the training courses. If you wish, I can connect you with the Book and you can download it. **(Ben N7BBE, you certainly have completed that. Congratulations.)**

DCART has always asked its members to complete at least ICS 100, 200, 700, & 800 that can be done on line at your leisure. Please do this for us.

Did You Feel It?

In honor of the one-year anniversary of the M7.1 Ridgecrest Earthquake, Winlink is proud to present the "Did You Feel It?" form on Winlink Express. Amateur radio operators can now report the effects of an earthquake, their experience and the extent of the damage via radio. This information is transmitted directly to the United States Geological Survey's (USGS) "Did You Feel It?" system which creates community earthquake intensity maps. The form allows amateur radio operators to become citizen scientists who contribute to earthquake research and support earthquake education and preparedness in their area.

The image shows a screenshot of the USGS "Did You Feel It?" (DYFI) online questionnaire form. The form is titled "USGS Earthquake Report: Did You Feel It?". It contains several sections with radio button options and text input fields:

- Did you feel it?** with radio buttons for "Yes" and "No".
- Time of earthquake** (Local time (UTC/GMT +00:00), or Approximate Time) with a text input field showing "04/20/20 15:15 PM" and a note "(This may manually change)".
- Your location when the earthquake occurred:** with a text input field for "Address, postal address, or geographic coordinates *", and two text input fields for "LAT: Lat" and "LON: Lon". A note below says "Enter manually or use your GPS connected device. Express recommends real GPS position."
- What was your situation during the earthquake?** with radio buttons for "Not specified", "Inside a building", "Outside a building", "In a stopped vehicle", and "In a moving vehicle". There is also a text input field for "Other Description: Please describe".
- Were you asleep?** with radio buttons for "Not specified", "No", "Slept through it", and "Woke up".
- Did others nearby feel it?** with radio buttons for "Not specified", "No others felt it", "Some felt it, most did not", "Most felt it", and "Everyone/almost everyone felt it".

The USGS Did You Feel It? (DYFI) system collects macro-seismic observations from the public in the minutes and hours after an earthquake. As an online questionnaire, it is potentially vulnerable to interruptions in power and internet connectivity after a damaging event, particularly in areas of very strong shaking. Using amateur radio transmission bands, Winlink DYFI can mitigate communication blackouts and fill in information gaps for the USGS in the hardest hit areas early on.

The Winlink DYFI form is modeled after the USGS DYFI online questionnaire and delivers data in the same format to the same USGS database. Working closely with USGS, the Winlink Development Team (WDT) and ARES LAX (Los Angeles County) developed a Winlink form that delivers a JSON file which can be ingested by the USGS database.

To test the new Winlink DYFI form, ARES LAX reached out to amateur radio groups in earthquake prone areas to engage beta testers and to develop training for users. Many groups from California (San Diego ARES, Ventura County ARES, Kern County ARES, San Joaquin Valley ARES, Sacramento Valley ARES), Washington (AAECT, MIRO, NBAT, PSEARES), Arizona (Yavapai County ARES/RACES), Hawaii (Hawaii ARES) and Mexico (CREBC) assisted and set up their own Winlink-based exercises and provided critical

user-based feedback, which improved the robustness of the Winlink form and quality of the collected data.

The cooperation between the USGS, the WDT and the amateur radio emergency groups mentioned above culminated in a recent exercise dubbed “the Gordo SuperEvent,” a fictional large earthquake that affected the entire west coast of the U.S. Seventy-five amateur radio stations from the contributing groups sent in DYFI reports via the 70cm, 2m, 20m, 40m and 80m bands during the exercise. Hawaiian stations even used the Winlink form to report a real event: around the time of the exercise an [M4.3 earthquake occurred near Fern Forest, HI](#).

Special thanks to **Greg KG6SJT (WDT)** and **Vince Quitoriano (USGS)** who successfully built the Winlink DYFI form and integrated it with the USGS database and workflow. We are thrilled to announce that the Winlink DYFI form is now available to all 28,000+ active Winlink users in the standard forms package. To learn how to use the Winlink DYFI form, please visit <https://youtu.be/OutjBBfVf8>

This Winlink-DYFI integration project is the first use case for the USGS’s DYFI Questionnaire API (Application Programming Interface). The USGS created the API to facilitate the expansion of data gathering to third party platforms. The DYFI on Winlink project demonstrates the successful interoperability between amateur radio operators and a USGS system. It also underscores how Winlink and amateur radio can offer additional flexibility and redundancy to data driven organizations in the event of communication blackouts.

American Red Cross Needs Hams

Because disasters, such as wildfire, floods, earthquakes, etc., are likely to happen, the American Red Cross will be opening shelters for evacuees. They will need amateur radio operators to set up stations in these shelters to help with communications. Here are the guidelines from the Red Cross for those of you willing and able to respond to this need.

Volunteering at Red Cross Location

During large disaster responses the Red Cross May need to open shelters, the operations Center, distribution centers and assist in a new location called a **Temporary Evacuation Point** (TEP). The California Gold Country Region will be asking for Amateur Radio support in many of these locations.

Before you *volunteer* please be comfortable working in areas with other people. Regardless of our best efforts, the Red Cross cannot guarantee everyone will follow masking and social distancing policies.

Everyone entering any Red Cross Location will be screened.

1. You will be asked,
 - a) Do you or anyone in your household currently have a fever, cough or any difficulty breathing?
 - b) Have you or anyone in your household been in close contact with a person having a Confirmed case of COVID-19?
 - c) Are you or anyone in your household a Health Care worker caring for a person with a Confirmed Case of COVID-19?
2. You will be checked for a temperature above **99.5**



If you answer yes to any of the above questions, please do not volunteer

Shelters will be smaller.

1. Red Cross Staffs will be smaller
2. More shelters may be needed **which means more radio operators** may be needed.

Radio Operators will need:

1. A power supply that will last for as long as you are in operation. (locations such as TEP's May not have electricity)
2. A mobile radio and power supply is recommended.
3. A computer with Winlink and FLDGI/FLMSG is strongly recommended but **not required**.
4. If all you have is an HT, please have an adequate power supply and an antenna that reaches out longer distances.
5. The current Red Cross ICS 205, Radio Channel Plan. (located on Sacramento Valley ARES Web Page)
6. Drinks and snacks are highly recommended and since we are in the warm time of year you will need ice to keep everything cool.

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



Breakfast and Lunch with SIERA

Tail Dragger Café at the Minden-Tahoe Airport. 775-782-9500 (four at a table several feet apart.)

Jethro's on Kimmerling in Gardnerville. 775-265-2215
(no more than eight at a table.)

SIERA General Meeting Minutes:

July 4, 2020

Due to the COVID-19 Virus outbreak, and exercising an abundance of caution, and following recommendations from the CDC and the State of Nevada, and because the meeting date falls on a holiday, the General meeting was canceled. However, an informal gathering was held on the NV7CV (147.93/.33MHz) repeater to give members and guests an opportunity to share their Field Day experiences.

Attendance for the record: AG6IF, K7DUY, KI6EWK, KE7YBA, WT6B, K7GUU, N7BBE, KI6UGO, K1SCN, K7VOC, and KI7NIP listening.

Treasurer's Report

Submitted to the board via email and approved via email.

Checking Account

Starting Balance	2245.73
Deposit	
New membership	133.00
Withdrawals	
Club trailer equipment	<188.00>
Ending Balance	2190.73

Saving Account

Starting Balance	4073.39
Dividends	.17
Ending Balance	4073.56
Grand Total	6264.29

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



David Nelson to [Reflections on the History of Syracuse, NR and Onondaga County:](#)

"Norris Soper at his Attwater-Kent radio. His Franklin automobile, from the 1910s and manufactured in Syracuse, is behind him."

Circa 1920s.
Hammond, NY.