



# SIERA BEACON



Carson Valley, NV

November 2020

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

## **Women and Ham Radio**

Recently, a March 2017 article came to the attention of The Beacon that surveyed XYLs across the United States. Apparently, most of the wives who answered the survey were talking about times when wives weren't involved or even welcomed to ham clubs or other events; however, their comments defy common perceptions of what wives may think about this hobby. While many endured an adjustment period in their marriages to hams, they eventually either joined in the fun or simply realized they'd rather have their husbands relaxing at home with an interesting activity than hanging out in some bar.

Here's the link to the article:

<https://www.rfcafe.com/references/qst/what-wives-think-about-ham-radio-qst-december-1966.htm>.

After reading this article, The Beacon emailed as many wives as possible to get their opinions on this subject. Nearly half the SIERA membership is female, but it was disappointing that only three sent in comments about their participation. "We" at the Beacon can only assume that many of the wives who didn't answer the email may have their licenses, but they don't or no longer indulge in ham radio. That being said, let's take a look at what the other three had to say:

### **Cathy Carney KI7NIR**

My reasons for becoming involved with ham radio, are probably the same as those of other hams: a fascination with electronics; a wish to help out in emergency situations; a yen to communicate with people geographically distant, an option that, before the internet, was synonymous with Ham radio; and my desire to help young students become engaged with far-away people (the same goal that originated school-based "pen-pal" connections in earlier times).

Decades ago, when I first began subscribing to ARRL's QST, I wrote a "Letter to the Editor" describing my concern about a bias in ham radio: in particular, the use of YL (young lady) and XYL (married lady), without their being a corresponding set of abbreviations for young men and married men. The editors never commented or answered, nor did any change occur in the use of those labels.



This institutional bias has been balanced for me by the local, on-the-ground treatment I have experienced as a member of three different ham clubs, two in Alaska; one in Nevada. It is true that my career in K-12 STEM education has accustomed me to being the only or one of very few women in a class or meeting. However, in my ham club meetings, classes and field events, the acceptance and encouragement by the male members definitely stands out as being consistently welcoming and helpful.

One aspect that affects and sometimes depresses me, is that in my decades of ham involvement, I have never met another woman happily married whose spouse has no interest whatsoever in ham radio. (My husband and I just celebrated our 50<sup>th</sup> anniversary and have three children.) This situation has a subtle but very significant impact on my engagement in club activities. I was delighted two years ago when Subrina sponsored a "women-only" breakfast and get-together at her home. My only regret was that I was the only one who came, and that additional women-focused gatherings have not developed.



**Linda Smith, wife of Brad Smith WT6B**

Brad has been a "Ham" for over 50 years and it has brought him much pleasure. Through his involvement, we have both made many lasting friendships. Ham Radio has been a good thing for our family.

### **Sheila Clement KA7AJQ**

In the late 70's I discovered a notice for a ham radio class on the Nevada Bell bulletin board and, for whatever reason, signed up and got my license. SNARS sponsored that class. So then LeRoy KA7UIS got his license. I travelled nights to such offices as Incline and Silver Springs and so pre cellphone, we were able to keep in touch. Also I took my handheld when I went horseback riding myself. He helped me out of some serious predicaments. (Couple of barroom stories here.) We have always been happily interested in the many facets of ham radio since. And of course emergency communications was always an interest interwoven with my later job with Carson City Fire. (Sheila is the AREA Emergency Coordinator for Douglas and Alpine Counties.)

### **Sue Cauhape KI7CTT**

For years, Sue ignored the repeated admonitions of hams who asked her when she was going to get her ticket. "Never," she'd reply. Then she realized that her husband, Jeff K7BCV, who traveled often for work, was spending even more time with ham activities. She felt left out of the fun, especially when they camped on Overland Pass West for the Pony Express and she couldn't spot him on the radio when he got tired. When SIERA asked her if she'd write the newsletter for the club, that was the last straw. She finally succumbed and earned her General. Now, she edits the Beacon, actively helps communications with various events, and does net controls for SIERA and



DCART. The two-meter radio Jeff gave her for Christmas sits next to her favorite chair, allowing her to monitor the NV7CV repeater for signal reports and the occasional chat with other hams. Recently, she said to Jeff, "I seem to be more involved in radio now than you." He replied, "and you're doing so well." (The photo shows Sue doing a DCART net from the W7SR station at the 911 Dispatch Center in Minden. Ah, those were the days.)

**The General meeting 1 p.m. November 7th on NV7CV 147.330/240MHz. Board meeting at noon.**

### **Kerchunking/FCC Regulators**

On several afternoons in October, the NV7CV repeater has been plagued by someone kerchunking the frequency to the point where some of us have just turned off the radio in disgust. Then one day, a conversation between Chuck Gervie KI7PGI and Ed Eggert K3VO was interrupted by someone purposely jamming Ed's transmissions. Every time he talked, he was cancelled by someone doubling over him. Understandably, Ed got angry and signed off, threatening to use his directional antenna to foxhunt the offending operator. The Beacon responded by asking Jim Sanders AG6IF, SIERA's president, about FCC regulators and what could be done about this situation in the future. Here is his reply:

"I have heard the kerchunking, and in fact, listening on reverse, I didn't have my foxhunt antenna connected, but by watching the S meter, I would estimate that it started near Carson, and went along the 50 right past my house and faded out to the west or visa versa from Fallon to the Carson area.

I went looking for repeater guidelines on our website and could not find any, so I will propose that we post a guideline page on our website. I have a very good, well-vetted sample that we can start with. I am a "honorary repeater trustee trainee wannabe and crackpot directional finder foxhunter for troublemakers" for KPRA and I'm sure they will not mind if we use their document as a starting point.

Keller has a huge footprint, Bakersfield to San Diego, and LA to Palm Springs, and we have a lot of troublemakers in the footprint. In spite of that, these guidelines do a pretty good job of keeping things in order. I will send this out to the board as an agenda item.

Here is a sample of a couple lines appropriate to your question. From 1-15, I have copied three of them here. <from KPRA.net>

1. As a courtesy to other operators, please keep all communication free from obscenity and/or from any and all indecent conversation or comments. See [§97.113 \(a\)\(4\)](#). Please remember this is a family repeater - 24 hours-a-day.
2. Do not communicate with unlicensed or unauthorized stations. Completely ignoring the offending station has proven to be the most effective way to discourage unlicensed operation.
3. Please do not recognize (or even discuss) hecklers, jammer's or jamming activity on the air. Ignoring hecklers and jammer's, completely, has proven to be the most effective way to discourage them, even if it means leaving the air without completing your contact.

Sorry Ed had to endure the abuse ... always hate to hear that. 73 Jim AG6IF



SIERA Club elections for Board Members and Officers is coming up next month, and we have several positions open. Debbie Williams no longer wishes to be Treasurer or Membership chairperson. While Treasurer is an elected position, Membership is an appointed position. Additionally, Dave DeAngelis has had the Secretary job for a year now, and has done an outstanding job, but wishes to have someone else take it over. Bob Williams is giving up his Board membership, and needs someone to take that position over. Thank you Debbie, Bob, and David for your work in helping SIERA succeed and move forward.

These are difficult times and it is difficult to keep SIERA going. We all miss the opportunity to meet in person and have a good rag chew face-to-face, but at least we've been able to use our NV7CV repeater to continue our engagement as a club. Remember, that's where your dues go - to support the repeater. So, if anyone would like to step up and volunteer for your name, or if you would like to nominate someone to be added to the slate, let Jim know if you would like to take on any one of these positions ASAP! It is almost November! Contact him at 775-392-3734 or k6lr@arrl.net.

Jim Marshall reported a couple of weeks ago that the sunspot cycle is opening up. He's been able to talk to Italy, Portugal, and Mexico on 15 meters and Japan, Korea, Belgium, and Lithuania on 17 meters. Hope springs eternal in a young ham's heart.



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## **ARISS: Amateur Radio International Space Station**

On Wednesday October 14, Charlie Sufana AJ9N presented a video of his group's efforts to bring ARISS into the schools. He generously sent interested people the links to the video to inspire doing similar programs in their areas. ARISS is the Amateur Radio International Space Station program that lets students talk to an astronaut in the ISS as it passes over their town. Here are the links to the PowerPoint and video:

- [ARISS Presentation PowerPoint](#)
- [ARISS Presentation Video](#)

The main ARISS page is <https://www.ariss.org>

Sheila Clement KA7AJQ tried to get an ARISS program in a local school and here are her comments about that process:

"About four years ago, while our granddaughter was in Jr. High, I looked into the requirements for planning an ARISS contact. I emailed the Vice Principal several times about a presentation. One has to have a buy in with the school officials. They never really followed through.

Also, such a process would take at least two years as you approach a school and get the school and community buy in. When you apply at a certain time of year to compete to have your school chosen, you have to have all the planning and documentation in place. Also the schools plan their curriculum a year or two in advance, so one would need the teachers to plan a part of say the science class to study and prepare the students for contact. Check for yourself on the ARISS website to see the extensive instructions. To arrange a school contact with the space station really would be exciting and I hope our area can achieve this someday. And now I am sure there are COVID planning considerations. 73, Sheila, ka7ajq



## **Complete Simplex Formulas**

There is a good article in the November 2020 QST that sheds some light on the math involved on the Extra and possibly the General license test. It has to do with solving problems with AC circuits that exhibit inductive or capacitive reactance along with good old resistance.

The formulas provided contain *real* numbers (resistance) and *imaginary* numbers (reactance). The reason that numbers are considered imaginary is that inductive or capacitive reactance does not consume power. Only resistance can consume power in a circuit. Inductive or capacitive reactance actually adds power to a circuit, kind of like an AC battery.

When adding or subtracting imaginary numbers they must be added or subtracted separate from real numbers. Another way of looking at this is to consider *imaginary numbers* as apples, and *real numbers* as oranges. Adding apples to oranges doesn't give you more of either, but you have more fruit.

An equation that contains imaginary numbers is written with a *j*." As an example, *inductive reactance* is expressed as follows:  $+3j$ . *Capacitive reactance* is expressed as  $-3j$ . Capacitive reactance is (-) because it produces a negative phase angle, and Inductive reactance produces a positive phase angle when looking at voltage and current in a circuit.

I have probably put most of you asleep by now, but as a final example of combining two circuits together that contain both resistance and reactance, an equation would look as follows:  $(3 + 4j) + (6 - 7j)$  would become a circuit of 9 ohms of resistance and -3 ohms of inductive reactance. (3 and 6 are resistance, +4 is inductive reactance and -7 is capacitive reactance.) This is probably more than you ever wanted to know about figuring complex value formulas, but you could impress the socks off people at a dinner party with this information, after a few drinks! - Jim Marshall, k6lr

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Guenter Noder KU8B needs someone to help him put up his HF antenna. The Chateau where Guenter lives required him to take it down so they could paint the exterior of the building. Now, because of various handicaps, Guenter needs someone to help him put it back up again so he can get on the HF frequencies. Radio is one of the few social outlets Guenter has available to him because of the COVID restrictions he has had to endure. Every time he leaves the facility to visit his daughters or go to the doctors, he has to quarantine for two weeks. As you can imagine, it's been a very lonely time for him without his radios. Anyone who can help can contact him at [estati@aol.com](mailto:estati@aol.com) or 775-392-2223.



## **Field Day Food for Thought**

True, Field Day is eight months away, but this article posted to Facebook by Dave Hernandez makes an interesting read. Being on Facebook, Dave of course thought a virtual melee would ensue, but The Beacon knows how civil its readers are ... right? Besides, it's hard to argue on a newsletter attachment. Just doesn't have the same back-and-forth response time.

**Dave Hernandez**  
**ARRL Field Day (Annual Event)**

**What is Field Day?**

This post is not meant to start an altercation, so if you are thin skinned or have a propensity for getting butt hurt if someone disagrees with you, scroll on by and don't waste people's time hurling insults or engaging in put downs. But maybe this post will spark some discussions and others will civilly post what Field Day means to them.

The following is my take on what ARRL Field Day is and is not. I am not saying everyone else is wrong. Many will disagree with me, I am sure.

Amateur Radio Field Day is the subject of a lot of differing opinions in the ham radio community. This fun annual event appears to be different things to different people, which may be part of the attraction of Field Day, with operators participating from all over IARU Region 2 (The Americas, to include Greenland).

A commonly held opinion is that Field Day is a contest. Well, yes and no. It certainly abides by many contest rules, but there is no kind of award or certificate given for the people who achieve the highest scores or complete certain milestones like Worked All States. The contest aspect... meaning the points... in my humble opinion, is meant to drive participation and get people to focus on certain things such as publicity. But it is not actually a contest.

Another commonly held opinion is that Field Day is an emergency preparedness exercise. Again, yes and no. While using techniques which would be useful in an emergency is certainly part of Field Day, using off-grid and emergency power for example, it lacks some of the most important characteristics of an exercise: Uniform goals and objectives, evaluation of meeting those goals and objectives, after action reports identifying strengths and weaknesses, setting get well dates for the deficiencies, and follow on tests and evaluations to confirm the deficiencies have been addressed. Some of the points available kind of try to push people in a direction like an exercise, but do not really establish Field Day as an exercise. If you want to participate in an exercise, the annual ARRL Simulated Emergency Test (SET) is really what you want – and maybe the League needs to do a better job of emphasizing the SET.

Field Day is an “Open House” for ham radio. It is correctly referred to as an ARRL sponsored “operating event” which is meant to DEMONSTRATE (emphasis added) the many aspects of Amateur Radio, to include the art and science of ham radio, the public service aspects of ham radio, and to recruit new members and show government officials the importance of this great hobby.

Field Day is designed to bring together many of the different aspects of ham radio under one tent for one day of the year, with contest operators, youth STEM proponents, experimenters, recreational operators, National Traffic System operators, and ARES operators all coming together and showing off their skills for the non-ham public.

Field Day is also about the social aspects of Amateur Radio, fellowship and camaraderie, and barbeques and other good food.

I guess in many ways, Field Day is kind of the county fair of radio events, maybe minus the destruction derby. It has a little bit of everything for just about everyone -- like a county fair has rides and games, lots of food, judging of livestock and crafts, displays showing old tractors or how things work, etc.. It is really not just one thing. What is Field Day to you?

## **American Flag on Highway 50**

Perhaps many of you have seen the American flag perched upon a rock outcrop on the side of Highway 50 coming down from Spooner Summit and wondered about the story behind it. The person who placed it there calls himself Mr. Flash. For eighteen years, he has maintained it and replaces it every September 10th. Watch the video, it's pretty short.

- [American Flag on Highway 50 YouTube Video](#)

Perhaps we should spread the word and make it a point to attend this ceremony next year on September 10, 2021. - Don McRoberts W3DRM

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## **Bill Nichols NN7K Retirement and New Nevada Hams**

The number of ham radio operators in Nevada continues to grow. This is the result of many factors, including the camaraderie and enthusiasm shown by each Nevada ham.

As you are aware a lot of preparation goes into becoming an amateur radio operator. No one receives an amateur radio license without the assistance of fellow hams. Whether it was an Elmer, a licensing class, or the VE Team that administered our examinations, we all owe a debt of gratitude to those individuals who helped make our tickets possible.

One such person is Bill Nichols NN7K who has headed the VE team in the Reno area for some time. To date, Bill has administered a very impressive 336 examination sessions. Bill is retiring from his leadership role on the VE team. All of us thank Bill for his dedication and service in bringing amateur radio to so many new people.

Even with the restrictions imposed due to the COVID-19 virus, our VE Teams, Volunteer Instructors, Field Instructors, and Elmers are still at work educating and assisting in the development of new hams.

Currently between thirty and forty people per month are still earning their first license in Nevada. A check of last month's list of new licensees in Nevada revealed that 38% were female.

Kudo's to the Sierra Nevada Amateur Radio Society for their sponsorship of the Nevada QSO Party. A 'tip of the hat' to Jim Shepherd W6US for his promotion of this event and the 7QP.

A decorative graphic featuring the word "Congratulations" written in a large, elegant, cursive script. The text is positioned on the left side of a rectangular area defined by a red dotted border.

to Bob Barron KJ7RFF, of Carson City, who recently earned his Technician's license. He soon put it to good use by helping Brad WT6B rescue a stranded driver in Yerington by contacting a tow truck to get him to safety. Welcome to ham radio, Bob. Glad to have you on the team.

Don McRoberts W3DRM received an email recently from an old SIERA member, Dick Young and his wife Maren, announcing the death of their daughter, Ane Marie. Dick was an active member of SIERA years ago and was also club president for several years. They now live in Scottsdale, Arizona.



"Maren and Dick Young wish to tell you that their daughter, Ane Marie, became their *Angel in Heaven* on the morning of the 28<sup>th</sup> day of September. The cause of death has not been determined, but most likely cardiac arrest or massive stroke due to her prior medical conditions.

Ane Marie was born in Indianapolis, Indiana in the late afternoon of the 25<sup>th</sup> day of November 1956. On her 16<sup>th</sup> birthday, she soloed in a Cessna 152 at Montgomery Field, San Diego. In August of 1975, she graduated from Culver Military Summer School after three years in the School of Aviation.



She was a 4.0 GPA graduate of La Jolla High School and attended University of Denver for three years until she met Darren Smith who swept her off her feet. They married at the Atlantis, Perez Cove on Mission Bay, San Diego, with lots of laughter 'n fun inside for dinner and dancing. They had four children, Jenifer Patricia 1979, Justin Richard 1980, Jori Caryn 1982 and Janet Marie 1986.

They divorced in 1989 and sold the house in San Bernardino. Ane Marie, as a single mother now, moved to Poway with four young'ins in tow. Her most cherished moments were spent with her children and six grandchildren, now 11-15 years old, namely Zachary Serrano-Smith and Taylor Marie Smith,

Lindsey Ane and Alexzander Eugene Maximoff and Grace Kelly and Sara Elisabeth O'Reilly.

Our loved ones never truly leave us. They live on in the kindness they showed, the comfort they shared, and the love they brought into our lives. We are at peace."

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## **DCART: a draft report on the October SET**

**Reverse 911** - Request response requested - check for 911 response records

- SET called by DEC, Rick Russell, about 9:15 a.m. to Sheila, KA7AJQ
- 911 Supervisor available for Reverse 911 callout about 9:45 a.m.
- DCART members activated and responded about 10 a.m.
- KA7AJQ might figure out a cell phone text group and plan another backup call out procedure
- Compile report of Reverse 911 deliveries and those not receiving the notification
- 911 Station frequencies list needs review to match with radio programming

### **Participation**

- 4 members participated with other agencies.
- 11 ka7uis, ka7ajq, ki6ewk, kj7gvy, kj6ix, ki7zvx, k7bxb, n7bbe, k7voc, n7xyl, k6lr
- 4 kg7zop, wa6ewv, km6uwg, n7zev stood by to assist our tests.

Nice that participants checked in and out with their availability.



### **Frequencies use notes**

kj6ix had communications with DEM on DMR

KI7NIK checked in on EchoLink (147.240 supports) - leave a long pause for EchoLink stations to respond

Jim - good communications VHF HF Winlink 27 to DEM Simplex  
Net Control - streamline, HF marginal 911 noise, HF contact with Burbank & SLC

Fusion (and DMR) was planned for EC's to coordinate with DEM. Fusion system was down. KA7AJQ coordinated with several other participants to use other communications to DEM

CARLA frequencies tested with Las Vegas - Thanks to Bob, K7VOC, and Debbie, N7XYL and N7ZEV, Frank of LV

3 Winlink status messages to DC 911 Communications Supervisor

Winlink messages also generated between participants, DEM and out of state operators including CA SEC

146.655 repeater is stand alone right now. Link into Bishop and other areas is pending subject to technical considerations. Still a good repeater for some Alpine County areas.

HF - State planning frequencies are 3965 kHz and 7280 kHz (7278 used). Members mix matched reaching DEM. The Saturday morning 0700 hours ARES net on 3965 kHz seems to have check-ins from all over Nevada and California and occasionally Washington and Oregon. Remember to go up and down planned frequencies to find.

Oregon state planning officials use 3964 kHz so we will have to work it out in a real incident. -- Sheila Clement, KA7AJQ, ARES EC Douglas and Alpine Counties.

### **State of Nevada DEM Wednesday Mornings Nets**

W7DEM welcomes all to the Wednesday morning State DEM Net. Fusion, DMR, Winlink, Winlink Packet, VHF/UHF - your choice, any or all.

This net starts at 9 a.m. on the Fusion system. Due to other requirements in the DEM radio room, we conduct the Fusion net between 9 and 9:20 a.m. We take a break at that point to do the statewide NAWAS roll call. Then we take check-ins via the DMR Nevada Talk Group from 9:30 to 9:45 a.m.

#### Fusion Repeaters:

Eagle Ridge	442.225	T 156.7
Carson DEM	442.900	T 156.7
Lake Tahoe	442.300	T 156.7
Smith Valley	440.050	T 94.8
Lovelock	444.225	T 123.0
Las Vegas	449.950	No Tone

Angels Peak 449.550 is the new Fusion repeater located in the Las Vegas Metro area. Coverage is from Mercury, NV south to Boulder City. It is the first wide-area Fusion machine in Las Vegas Metro.

VHF/UHF check-ins are welcome as conditions permit. DEM scans most local area frequencies, but again your call may be missed due to other ongoing activities. Keep trying especially so we can see which frequency you are using and stop the scan. Good bets for VHF are 147.150, 147.180, and 147.330

Winlink check-ins are welcome via Telnet any time. When the DEM radio room is unattended, Telnet messages are forwarded to a personal account and responded to as soon as possible. We appreciate all Winlink checkins. If you're not using Winlink, it's very easy to set up. See this [YouTube Winlink Setup Video](#)

Packet messages can be sent to W7DEM on 145.090 and will also be answered as soon as possible.

Please understand that during the COVID-19 Pandemic, the radio room is very busy and only one operator is permitted at a time. We may miss your call due to other activities. If you do not receive a response, please wait a bit and try again. At 10 a.m. we participate in the CalOES HF Net which runs until around 10:45a.m. We also participate in a FEMA FNARS net during this time period and acknowledge calls on the State 800MHz Public Safety radio system.

#### **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 the following schedule: The first two Mondays on 147.330 linked with 147.240. The third Monday is Tahoe Basin ARES on 147.240 to be linked with 147.330. The fourth (and fifth) Monday(s) on 147.270 to be linked with

147.240

**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.

**W7DEM Net**, Wednesdays at 9 a.m., various frequencies: Eagle Ridge 442.225 T156.7, Carson DEM 442.900 T156.7, Lake Tahoe 442.300 T156.7, and Smith Valley 440.050 T 94.8.

**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

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 their radio problems. 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.

### **License Testing Still Available**

In these COVID days, you can study AND take your exams online at <https://hamstudy.org>. OR Greg Moore KG7D may be able to arrange a private exam for you. Just send him an email: [Kg7d@arrl.net](mailto:Kg7d@arrl.net).

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### **Tube Of The Month**

#### **X-375**

Starting in 1942, EIMAC started assigning “X” numbers to experimental tubes. One of the most common of the “X” tubes is the X-375. You will find it in many tube collections which is surprising when you consider that there was no known use for it. The tube is a double tetrode allegedly made from parts from 3C24 tubes. It is also unusual in that it uses a giant 7-pin socket like an 813. The X-375 was made of thick hard glass and should have been able to take very high voltage. From some EIMAC notes, we find the project was started in April 1944 at Salt Lake City, with the X-159 and continued for over a year ending with the X-375. Why at the peak of WWII would EIMAC expend such an effort and then abandon it?



If this tube was probably made to replace an existing tube and that tube must have been about the same size and shape. The SLC plant was very busy making vast numbers of VHF triodes for use in RF and pulse service at this time. The newer RADARs used magnetrons, so pulse modulators would still remain in demand. Several of the early RADAR units used the RCA 3E29 dual tetrode as a pulse modulator. The 3E29 is a pulse rated version of the 829B which was a popular pre-war VHF tube. In pulse service, it could handle 5000 volts. Much of the tube development was pushed by the military to have more rugged and dependable tubes. Many early RADAR sets were still in service and they may have wanted to modify them with stronger tubes. The pulse duty cycle is very hard on tubes.

#### **It's just a theory**

Why would you use a giant 7-pin socket? The giant 7-pin socket has the same mounting pattern as the 7-pin septar socket that the 3E29 uses. When you want an easy modification to a piece of gear, you don't want to cut up the chassis to mount it. The X-375 like the 3E29 has a pair of tubes with 6.3-volt filaments. EIMAC didn't make many tubes with 6.3-volt filaments. The exchange would only require a screwdriver and a

soldering iron. EIMAC was in full production until August 1945 when it stopped abruptly when something happened that they never planned on. The Army dropped a bomb, the war was over and soon all the gear that needed tubes was available in surplus for small change. Many of the "X" tubes after this date were reserved for post war tetrodes like the 4-250A and other tubes for commercial as well as military use.

Visit the museum at <http://n6jv.com>.

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## **SIERA General Meeting October 3, 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, the Board meeting was held utilizing the NV7CV, SIERA 2-meter repeater.*

**Call to order** 1PM

### **Attendance**

10 members and two guests checked in to the repeater.

### **Last month's minutes**

*The September minutes were published in the October issue of The Beacon. Copies available on the SIERA webpage.*

### **Treasurer's Report for September 2020**

*The detailed Treasurer's report was presented to the Board and approved by email.*

### **NEW Business**

Thanks to Sue KI7CTT for an outstanding *Beacon* that highlighted the recent emergency events that were handled on the repeater.

AG6IF related his personal experience in handling an emergency through Amateur Radio. He shared an audio recording of the event. (Go to YouTube and use the search terms: "KJ6MOY AG6IF" to listen for yourself.) He also shared audio from our recent emergency events using the NV7CV repeater. (Audio available on the SIERA web page at <https://cvhams.com>) He highlighted the importance of being able to find your GPS coordinates. Jim encouraged the membership to investigate how to access GPS information on your smart phone, since additional apps may be required.

Monitoring the repeater and being able to successfully handle emergency traffic requires some planning. Monitoring the repeater from multiple radios/scanners can be advantageous. Also, being able to record the audio can be useful. Jim uses a free program called "Audacity" to record audio from his radio.

AG6IF has been invited to host an em-comm net on Sunday in So-Cal, using his IRLP node to connect everything up. This event is related to our recent on-air emergency events.

Jim mentioned that the local newspaper (the *Record Courier*) picked up the *Beacon* article concerning the repeater use in the emergency as did *Amateur Radio Newslines*. (Ed note: *The Beacon* editor submitted the article to the RC as part of her PIO duties.)

In response to a question from Chuck, KG7PGI, Jim pointed out that most smart phones have a satellite receiver that can access GPS information without needing a cell tower

connection. Your results might vary, so testing is encouraged. Try validating the results by inputting the lat/lon on a map.

APRS mode will beacon your location to a publicly accessible map. (APRS.fi) Three pieces of necessary information to collect in an emergency are: name, location, and nature of the emergency.

Many HT's have GPS receivers included.  
Some HT's and mobile radios are APRS capable.

K7VOC reminded that K6LR is looking for volunteers to serve on the board and officers.

K3VO shared that QTH.com and eHam were good sources for used Ham equipment.

In response to a question from Chuck, KG7PGI, Jim gave a quick explanation of IRLP and how it works.

**Correspondence:**

We received correspondence from Greg Moore, KG7D:

Next weekend is the Nevada QSO party. <http://nvqso.com/> It looks like Douglas County has yet to be activated. So I'm sending this in hopes that someone in your club will be interested. The contest will take place on Friday Oct 9 @0300UTC(8PM PDST) until Sunday Oct 11 @ 2100UTC (2PM PDST).

**Adjournment** 1:51PM

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**All of you have undoubtedly received THE EMAIL FROM SUE CAUHAPE a couple of weeks ago. You also undoubtedly saw that it was a scam. I would never burden SIERA members with personal monetary requests, especially for a niece I doesn't even have. (Although my favorite nephew complained that he could use that gift card.) I apologize to all of you for the inconvenience and hope the hacker didn't worm its way into your computers and do damage. These things can be heinous.**

**So, I changed my email service to protonmail.com, a platform developed by scientists at CERN in Switzerland who suffered their own hacker maladies years ago. If you want to contact me with news and photos for the Beacon, (or for any other reason) the new email address is below. Thank you for your concern and patience during this ridiculous situation. Hopefully, it's all good for a laugh and what else can we do but laugh in these crazy times. 73s to you all.**

**Remember, send your photos and news for the Beacon AND the SIERA Facebook page to: [scauhape2020@protonmail.com](mailto:scauhape2020@protonmail.com)**