



SIERA BEACON

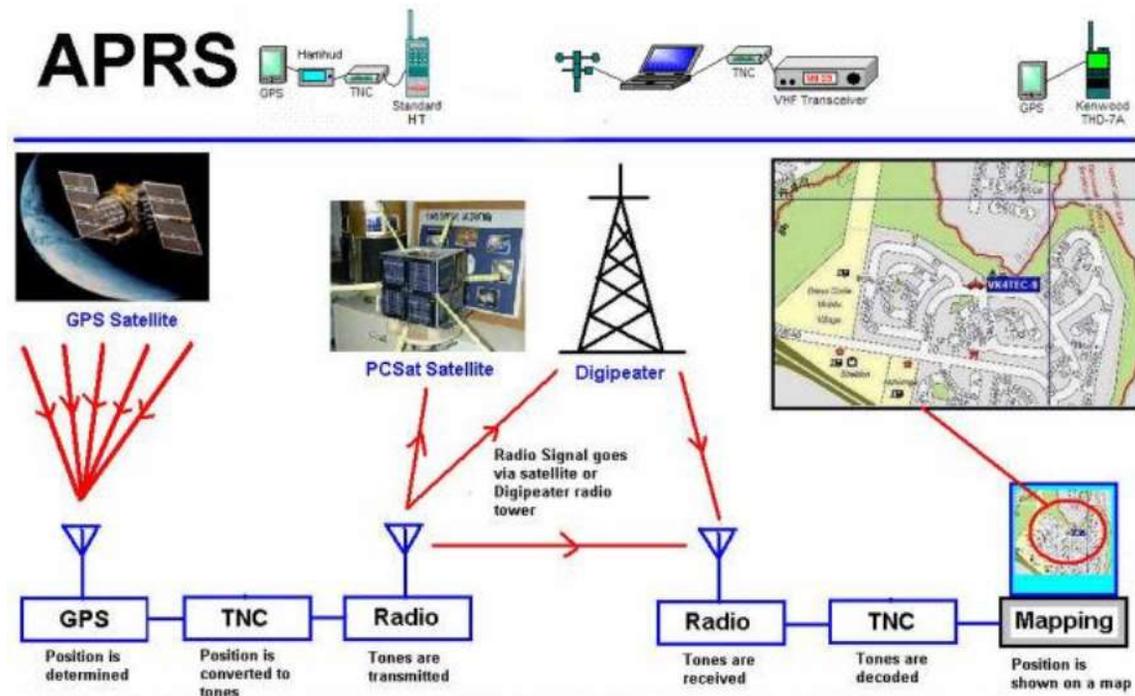


Carson Valley, NV

March 2020

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

February Meeting APRS Demonstration



At the February meeting, our new president, Jim Sanders AG6IF presented an introduction to APRS (Automatic Packet Reporting System). APRS is a digital communications protocol for exchanging information among a large number of stations. It was invented by Bob Bruninga WB4APR when he was an engineer at the United States Naval Academy in 1982.

APRS information is exchanged over the AX.25 protocol using 1200-bit/s on 144.390Mhz. It is not used for only positioning information. Data can include GPS (Global Positioning System) coordinates, weather station telemetry, announcements, queries, National Weather Alerts, and other text messaging. The data can be displayed on a map, which shows stations, objects, tracks of moving objects, weather stations, search and rescue data, and direction finding data. Packets can be sent via radio and the Internet at APRS.fi.

Radios can be meshed to provide basic communications in places that are normally inaccessible, like caves. Jim showed the track of a car trip he took from Wisconsin to Southern California that was available on APRS.fi. Jim shared a QSL card he received from TA5HO in Turkey for a contact made through APRS.

The HF frequency for APRS is 10.147Mhz. Many manufacturers produce radios that are APRS capable. Jim demonstrated an APRS capable HT. A link to APRS weather station on Carson Pass can be found at carsonvalleyweather.com. The APRS network has about 30,000 users.

Jim demonstrated how to access the information on APRS.fi. Beacon stations and gateways are displayed by hovering the mouse over the beacons/stations. This will display their location, speed, packets sent, messages, and stations heard. Gateways retransmit the data to the network and then to the Cloud. Jim has a video on YouTube that shares his APRS communications from all over the world with his friend N1ZZZ, who is a ship captain. Here's a link to the YouTube video:

https://www.youtube.com/watch?v=WwHC5ORGYZk&list=UUr5ouUbdqeWjDX_VP7Hf6fA&index=82&t=0s

Jim shared an older Power Point authored by Bob Bruninga, the inventor of APRS. The presentation provided visual reinforcement and summarized the information Jim shared. It also showed a typical APRS packet radio setup for a fixed station.

You can enjoy Jim's other videos on his YouTube playlist here:

https://www.youtube.com/playlist?list=UUr5ouUbdqeWjDX_VP7Hf6fA

Next Meeting: The next SIERA meeting will be Saturday, March 7th at 1:00 p.m. in the United Methodist Church, 1375 Centerville Rd., Gardnerville.

Portable/Mobile Antenna Options: a show-and-tell for "go-boxes", 10 or 15 minutes maximum. Also, we will have a sale table for anyone who wants to sell radio equipment. The break will be Part Two of the CAMP FIRE documentary. We'll close out the meeting with an "Elmer session," so bring any questions that need to be discussed.

Feeling Left Out?

During a recent VHF net, some members discovered they were no longer on the call list. That's because they haven't paid their 2020 SIERA dues. While the HF net is open to all, the VHF net call list includes only SIERA members who've paid their dues. So, if you want to be on the list, please send a check to Debbie Williams, P.O. Box 2348, Minden, NV 89423.

Individual

| | |
|---------|---------|
| 1 year | \$30.00 |
| 2 years | \$48.00 |
| 3 years | \$65.00 |

Household

| | |
|---------|---------|
| 1 year | \$38.00 |
| 2 years | \$62.00 |
| 3 years | \$84.00 |

In Other VHF News: during the March 3rd VHF net, net control Jim Sanders AG6IF asked participants about their emergency preparedness. Most claimed to have only a couple of weeks of food available, yet there were those who had a month or more of "pantry" items as well as freeze dried foods. Energy for household and radio station needs included Goal Zero type and car batteries, generators, and car/RV power supplies. Solar panels were plentiful. Water is another issue, especially if the grid goes down and your home is on a well. Bob Williams K7VOC suggested a local vendor, *Simple Pump*, who makes and sells hand-operated pumps specifically for wells. They are located at 2516 Business Parkway Unit B in Minden, NV. Another vendor of emergency items and food is *Emergency Essentials*, at www.beprepared.com. FEMA suggests at least a two-week to one-month supply of food to get you through a major disaster. It's fairly easy to keep that much food rotating through your pantry, but for real expertise in two-year-supply readiness, call the local Mormon Church for expensive information.



Last year, Cynthia Furse wrote a great article about HAM support of the Pony Express Re-Ride. Here's a link:
<https://utah.instructure.com/.../5589.../pages/fun-with-antennas>

By the way, Tom Tabacco KE7NCJ still needs base station operators for the Pony. A very cushy gig. Email him at smokey@gmail.com. The Pony is coming early this year, June 2-3, so if you want to participate, now is the time to get in touch with Tom.

For all you new hams in SIERA and beyond, the Pony Express Re-Ride takes riders through THE most remote wilderness along the route. We SIERA hams make the difference between success and disaster for this event. Also, it's a really a fun adventure for all concerned.

And then there's Field Day. Here is the updated ARRL Field Day

page: <http://www.arrl.org/field-day?fbclid=IwAR1UY-x0wE4urw7VBAFLyFEileDhs68r37XO2WmUf6zI3qjiN9dKw12xZ7E>

Batteries and Radios

After Jeff Cauhape's K7BCV HF radio failed to transmit during a recent net, he discovered the culprit was not enough voltage from his Goal Zero Yeti battery. For years, Jeff has powered his VHF and HF radios with a lead-acid deep-cycle marine battery. A week before Jeff was to do the nets, that battery lost power and only recharged to about 60%. He hooked up the Goal Zero Yeti lithium-ion battery to his radio's power supply and tried to transmit. Every time he keyed the mic, the radio changed modes and no one could hear his signal. Sheila Clement KA7AJQ took over the net and all proceeded as usual. Then the hard part for K7BCV and KI7CTT was to listen to all the great DX visitors who checked in and they were not to be able to talk to them after the net. The band, for some odd reason only the propagation gods would know, brought in contacts from Montana, Oregon, Colorado, and the Los Angeles area.



To correct the problem, Jeff ordered a new wall power supply; however, he's going to test the Goal Zero to check if it does indeed provide 12 volts of power as advertised. The HF radio's lowest power requirement is 12.5v and is really happy when it receives 13.8v. If the Goal Zero doesn't provide 12v, it can be repaired. (When Bryce Leinen KI7NIK borrowed the Goal Zero for the Death Ride, he transmitted all day and only used 4% of the power.) As for powering the HF radio, though, the wall power supply will be the answer to that problem, unless any SIERA members can advise differently. (Ed note: since this was written, K7BCV has had several discussions about this while driving to work or tuning in to the Watering Hole.

(Update) During the following week's HF net, Jeff had to hold the plugs in the surge protector while Sue KI7CTT stumbled through the net. After troubleshooting, Jeff threw away the defunct surge protector and checked all other connectors. Lesson: when the radio fails, plug it in!



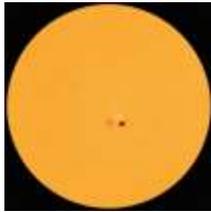
Ed Goldberg KE7EAA

Ed passed away on the 12th of February. There will not be a service, only a family viewing. Ed was active in SIERA since the early days. He served on the Boards and the nominating committee. Both Ed and Sue spent many Nevada Day Parades passing information to the announcer's stand in front of Heidi's. The past couple of years, due to Ed's failing health, he was no longer able to participate, otherwise they

would have been there. He always supported our communications as much as he was able and often came into our 911 Dispatch station for special events. He and Sue also enjoyed snow birding in Arizona during the winter in their RV, right up to the last year or so. Whenever he was back in Minden, he was on the air with that slow speaking voice of his. This sweet, dear man will be missed. Our deepest sympathy goes to Sue, his family, and friends.

Silent Key from the Bishop Amateur Radio Club

February 10 at 3:36 PM · With sadness, we have another silent key, passing away in January 2020 at a Northern Nevada hospital. Mike Fitzimmons, W6HDV of Chalfant Valley, a former Vice President of BARC, has gone.



India has been recording sunspot activity for 115 years. Here's a link to an article about how sunspots work and the historical archive built by the Indians:

<https://science.thewire.in/the-sciences/how-the-kodaikanal-observatory-tracked-sunspot-activity-over-115-years/>

DCART NEWS

2020 February DCART/Alpine ARES monthly comment:

The CARS repeater, 147.270 linked system that DCART has used for most of these years, has failed. So we have met with SIERA (Sierra Intermountain Radio Association) members to coordinate use of their repeater, 147.330, for our nets and emergencies. The 147.330 can be linked with 147.240, a Tahoe repeater. The link can be established for special events, nets and emergencies. TARA (Tahoe Amateur Radio Association) has given us permission to establish the link for these special circumstances.

Planning for Amateur Communications for some yearly events (Pony Express, Death Ride and other special events) has begun. Our members involved in DCART and those other special events have started planning meetings already.

The American Red Cross will be conducting a Quad County Shelters' Establishment exercise March 18th. We are deep into planning for our participation.

DCART members are coordinating net operations with the Tahoe Basin ARES members.

Our awesome DCART radio station at Douglas County 911 Emergency Services is always being upgraded and is available for all our members to practice.

Sheila Clement, KA7AJQ
ARES Emergency Coordinator
Alpine and Douglas Counties

Testing Our Skills

DCART members will participate in an ARC Shelter exercise, March 18, from noon to 2 p.m. Ben Echevarria N7BBE will deploy to the Douglas County Community Center; David Granish KI6EWK will report to Topaz, and Sue Cauhape KI7CTT, Mel Hogan WA6EYD, and Jim Marshall K6LR will operate the W7SR station at the 911 Dispatch Center in Minden. Tom Seeley W4FLL will operate out of Station 12 as part of an EOC Joint Command. Tom is the new head of the Carson City EC,

replacing Dave Law N7TNX. (For more information about Carson City ARES, here's the link: www.carsoncityares.org). For this Exercise, DCART members will shadow the in-charge person at each facility. Each field member should have a handheld radio and the ability to cross-band with their vehicle radio.



Aussie hams prove useful during catastrophic brushfires:
<https://www.abc.net.au/news/2020-02-01/amateur-radio-skills-prove-useful-during-bushfires/11903200?pfmredir=sm>

Left in the Dark: Power Outages in an Interconnected World

<https://www.youtube.com/watch?v=ccXmY0vN7gs>

Dr. Howard Kunreuther "Human Biases: Why People Underprepared for Disasters"

<https://www.youtube.com/watch?v=9- YeNdzIcg&feature=youtu.be>

Solar Activity Forecasts may become a "thing." Here's a great example of solar weather reporting:

https://www.youtube.com/watch?v=kMvi3DdwY1E&feature=share&fbclid=IwAR0qir9XrVV78Lf1qqS55DN7CLbRC8lyPKeF5ZUeBMSmZNTuhwl_P6i2n1A

(If the link doesn't connect from the Beacon, just cut and paste the URL into your browser's search window.)

Red Cross Protocols for Emergency Communications

Go to the sacvalleyares.org (the Sacramento Valley Section Regional ARES website) and scroll down to "**Red Cross Disaster Communications and the Amateur Radio Community.**" We have been having some lively discussions about Red Cross at our DCART meetings. The article is lengthy but interesting for us. There is additional news there that might catch your eye.

Coordinating Em Com Teams Between Tahoe Basin and DCART

DCART has been working with TARA, Paul Gulbro, WA6EWV, and Mike Cullen, KM6UWG, Tahoe Basin EC, and SIERA Officers and Board Members, to coordinate the 147.240 and 147.330 machines for nets and emergencies.

Talks are in progress, but beginning Monday, February 24, DCART and TBA (Tahoe Basin ARES) will alternate between 33 and DCART's usual frequency, 147.270 to better serve those who have trouble reaching either frequency. The first and fourth Mondays, DCART nets will be at 6:30 p.m. on 147.330 with Tahoe Basin members invited to check in after roll call. On the second Monday, the net will be on 147.270. Net controls will invite Tahoe Basin members check in after roll call. Since DCART holds its monthly meetings on the third Monday, TBA will do their net, inviting DCART members not at the meeting that night to check in.

All of this is still in the experimental stage. TARA is still working out details with ARES/RACES in Sacramento regarding TBA. Mike Cullen, the new ARES EC coordinator in the Tahoe Basin, is taking a crash course in how all the various agencies and protocols work; thus the alternating "training period" for all of us in coordinating these two groups for emergency situations is very important. DCART welcomes Mike to the em com team.

73, Sheila, KA7AJQ, ARES EC, Douglas and Alpine Counties

Repeater Blowout: The 147.270 CARS repeater on Mt. McClelland will be out of service until further notice because a fire burned some of the equipment. Jeff Brown K5BLS, repeater trustee, quickly checked the damage and will make repairs, getting the repeater back online as

soon as possible. Meanwhile, DCART will be using the 147.330 NV7CV repeater for nets and the March 18th exercise until further notice.

Update from Jeff Brown K5BLS:

Hello folks. The new repeaters for McClellan are in process and looking good. Working out some amplifier issues but may have that taken care of with some stuff in the bunker. If the weather goes back to spring soon we'll get this stuff put up and try to get the needed tower work accomplished at the same time. I'll keep you all advised of the status as we continue to move forward. So far we have used things we had in storage, so not a lot of out of pocket costs just yet. 73 From the K5BLS workbench in Fallon



Gems from David DeAngelis K1SCN

FYI: Solar, RF Propagation, & Tech license updates

An on-going concern of the Club has **always** been to find ways to best educate and support the new hams in the club. In fact, I believe there is a statement to that effect in the Club bylaws, but whoever reads those? (Ed note: Bob Williams K7BCV!) So let me start by telling you that I am philosophically opposed to re-inventing the wheel. Rather than re-hashing stuff that has already appeared in the *Beacon*, I would like to point members to my past articles that would be of interest to anyone planning to operate on HF, or for old-timers looking for the latest Solar Cycle information:



- | | |
|-----------------|---|
| May 2018; | Tech in Our Neighborhood (SDR Radios) |
| August 2018; | Watering Hole Follow-up (What's a Pileup?) |
| September 2018; | Some Thoughts on the Extended Solar Minimum |
| October 2018: | Reflections on a Dead Band (Logging Basics) |
| November 2018: | A Quick Primer of Morse Code Syntax |
| December 2018: | Choosing a Band |
| January 2019: | Maidenhead Grids |
| March 2019: | International Shortwave on 40 Meters |
| April 2019: | Solar Cycle 24 Update |
| July 2019: | Solar Minimum Primer |
| September 2019: | Are You Prepared? (Solar Storms) |
| January 2020: | (Another) Solar Update |

Back issues of the *Beacon* can be found at: www.cvhams.com/newsletters.htm

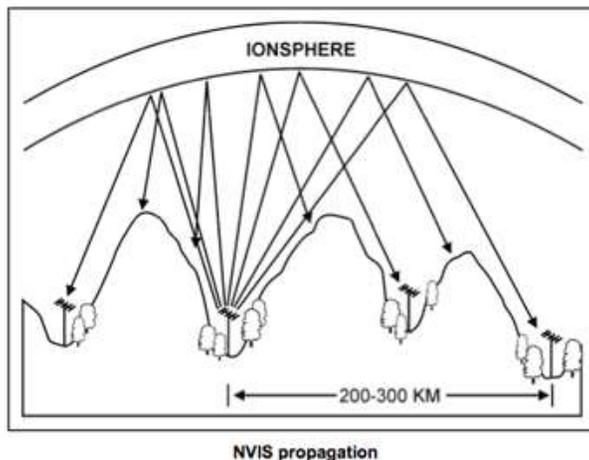
I might add there are also many useful articles submitted by other members that will also be of interest to new hams. I want to avoid repeating old material, and at the same time, I would like to address items of concern to the membership.

Because we are all not getting any younger, (No offense intended, but, I know there are many out there who are anxiously awaiting the appearance of some new sunspots - - soon.) I want to point you to an article that appeared this month (February) at: k9la.us/Feb20_Cycle_25_Sunspots.pdf . For those of you who want the solar cycle news right from the horse's mouth, this is the best up-to-date article I have seen on the subject. While you are at the K9LA main web page, you should also avail yourself of the link provided to either of the two articles "The Little Pistol's Guide to HF Propagation" and/or "The Big Gun's Guide to HF Propagation". (For the record, if you don't have a beam antenna and a linear amplifier, you are a "little pistol.")

Now you may have guessed that I am not an engineer or a scientist, (That's not entirely true, but we won't discuss that here.) and I can confess that I don't understand every word of these articles, but they have given me a much better appreciation of the complexities involved in radio wave propagation and prediction. Back in the day, we had only Solar Flux numbers and A and K Index readings from WWV that were broadcast at 18 minutes after the hour to guide us. Not so today, as there are many web pages able to assist you in evaluating the present state of RF propagation. Those two articles will point you to the information you need to focus on.

When I lived back East, I was introduced to Mark Dowling's, WM7D Solar Resource Page at www.wm7d.net/hamradio/solar/index.shtml. Mark's page supplies the basic solar information that you can use to gauge current conditions. Unlike "Solar Ham," which gets its data from the Pendicton Observatory in British Columbia, WM7D's site retrieves its data from the Space Weather Prediction Center in Boulder Colorado. In addition, there are numerous charts and graphs and a host of space weather links. I still have the page bookmarked on my computer, and I use it often. By the way, Mark is a Carson City resident, so support your local ham and check it out.

If you don't mind using YouTube, (which now seems to require a Google Log In to use) weekly solar updates can be found at: www.youtube.com/user/SpWxfx. This is the YouTube page of Dr. Tamitha Skov who works at The Aerospace Corporation, Los Angeles, where she is currently a Research Scientist with the Space Materials Laboratory. Dr. Skov's site also has instructional videos, and, for a paid subscription, you can get early access to her weekly updates as well as access to a large library of videos relating to space weather.



Continuing on the theme of educating both old and new hams, I would like to share with you a web page that I just recently stumbled across.

hamwaves.com/index/en/index.html is the home of Serge Stroobandt, ON4AA. The page title is "Hamwaves" and contains links to amateur radio, information technology, and electromagnetic wave propagation information. What I have found most helpful is the link to "Real Time HF Propagation Prediction". Using ionosonde data from Point Arguella, CA, the site provides real time readouts of MUF (Maximum Usable Frequency to 3000km)/OWF(Optimum Usable Frequency to 3000km)/MUF_c(Maximum

Usable Frequency for sporadic e)/Real Time Maximum NVIS (Near Vertical Incidence Skywave) Frequency / Critical Frequency for NVIS Blanket Sporadic e. (When no reflected signal from the F region is observed in the ionograms, it is because the E layer capable of supporting sporadic e completely hides (blankets) the F region up to the sporadic e critical frequency.). And, that is just the tip of the iceberg. There is not enough room in the entire *Beacon* to try to list everything you can find on this page, which makes this a great place to poke around when the bands are not working.

For the Technician License holders who have read this far, I want to point you to two items of interest. The first is that there have been discussions in the club about starting a Ten Meter Net, similar to the 75 Meter Club Net held on Tuesday nights. So far, there have only been discussions, but it would provide an opportunity for you to get your feet wet on HF.

The second item is that the ARRL recently (February) has presented a plan to address RM-11759 that would grant Tech licensees increased HF privileges. The band plan presented to the membership of ARRL for comment included phone privileges for Techs on 80, 40, and 15 meters. The ARRL and FCC RARELY move quickly on any rule making decisions, but I would advise that it pays to be prepared.

Finally, if you need any information pertaining to **any** aspect of Ham Radio, please feel free to contact any of the Board members or Officers. If we don't have the information you need, we can point you to someone who does have what you need. If you want to see a particular topic addressed in an article here in the *Beacon*, or in a live presentation at the club meeting, feel free to let us know. Even better, if **you** would like to write an article, let Sue KI7CTT know. She can be reached at: scauhape2002@ yahoo.com. If you would like to provide a detailed "show-and-tell" at a club meeting, let Jim, AG6IF, know. He can be reached at: ag6if@ arrl.net. If your concerns are pressing, you can also try *The Watering Hole: Questions and Answers Pertaining to Amateur Radio* hosted by Brad, WT6B, on the 147.93/33 Mhz club repeater on Wednesday nights at 7:30PM.

The Watering Hole

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. For a fun and informative half-hour, check in to the Watering Hole.

Want to learn more about wireless technology?

The ARRL offers multiple summer sessions of the [Teachers Institute on Wireless Technology](#).

Teachers Institute is an expenses-paid professional development seminar that provides teachers at all grade levels with tools and strategies to introduce basic electronics, the science of radio, space technology and satellite communications, as well as weather science, introduction to micro-controllers and basic robotics in their classrooms. Wireless radio technology can also be a useful tool with STEM (Science, Technology, Engineering and Math) project-based education.

Summer 2020 Teachers Institute Schedule

| Session | Location | Dates | Instructor |
|----------------|-----------------|-----------------------|----------------------|
| TI - 1 | Dayton, OH | July 13th - July 17th | Larry Kendall, K6NDL |
| TI - 1 | Newington, CT | July 20th - July 24th | Tommy Gober, N5DUX |
| TI - 2* | Newington, CT | July 6th - July 10th | Matt Severin, N8MS |

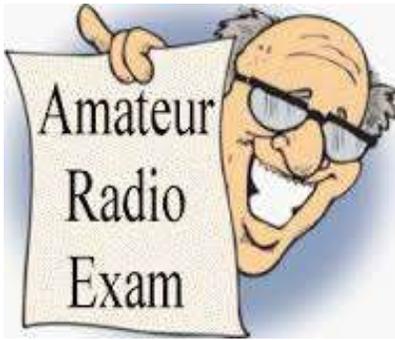
*Must have completed a TI-1 program, and have a current amateur radio license and ARRL membership

To qualify, applicants must be an active teacher at an elementary, middle, high school or at a community college or university, or in a leadership or enrichment instruction role in an after-school program. An Amateur Radio license is NOT required for the introductory TI-1 workshop. A license IS required for the advanced TI-2 workshop and you must have completed the TI-1 workshop.

Cost: Teachers Institute opportunities are virtually free for the participants. The grant to attend a TI covers transportation, hotel, a modest per-diem to cover meals, instructional resources for the electronics, microcontroller, and robotics segments of the course, and a resource library of relevant ARRL publications. There is a \$100 enrollment fee to be submitted with the application. If you are not selected for this year's session, that fee will be refunded. For more information to apply for this institute: <http://www.arrl.org/teachers-institute-on-wireless-technology>

Application Deadline is May 1st, 2020





ARRL Licensing Exams:

VE exams are held at 9 a.m. on the third Saturday of odd months, at Fire Station 51, 777 S. Stewart Street, Carson City. 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.

Contact: Greg at KG7D@arrl.net so we can prepare for the correct amount of candidates, or with any questions you might have. Also, he may be able to schedule special exam sessions.

The next licensing exam: March 21st.

Here's a link to a good YouTube study course using the latest edition of the ARRL Technician's manual:

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

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 147.270.

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 3982kHz.

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,

"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

Wanted: more hams to do SIERA VHF/HF net control on Tuesday evenings. Contact Sheila Clement at smclfc@gmail.com to join the crew.



BREAKFAST AND LUNCH WITH SIERA HAMS

8 a.m. breakfast every fourth Saturday at the Tail Dragger Café at the Minden-Tahoe Airport.

11:15 a.m. lunch every Wednesday at Jethro's on Kimmerling in Gardenerville.

SIERA General Meeting February 1, 2019

Call to order

1:15PM

Pledge of Allegiance

Introductions

Twenty-two members and guests in attendance. (For the record, the usual practice is for each member to give their name, where they live, and something about their interest in Ham Radio. Officers and Board members should also make an announcement to that effect.)

Guest Request

Danielle, a guest who is new to the area, inquired about getting information for obtaining a license. Jim S. explained that there is much information available on line and in books, and that the club has offered classes in the past and we do offer testing.

Informal discussion of various ways of operating mobile followed. Jim S. shared his experience of operating different modes and bands from his vehicle.

Treasurer's Report

Checking Account

Starting Balance 2022.73

Deposits:

| | |
|--------------|---------|
| Pot Luck | 205.00 |
| Repeater Jar | 200.00 |
| Membership | 658.00 |
| Total | 1063.00 |

Withdrawals:

| | |
|------------------------------------|----------|
| Repeater Controller (Jim Marshall) | <340.00> |
|------------------------------------|----------|

Ending Balance 2745.73

Savings Account

Starting Balance 4072.38

Dividends: .34

Ending Balance 4072.72

Grand Total 6818.45

New Business

Presidential inquiry – topics of interest

Jim S. asked “What topics would the membership like to hear about?”

- New radiation limits analysis requirements by FCC
- VSWR?
- Evolution of Ham Radio from spark to present day
- Update on the solar cycle
- What antennas do you use?
- Migration of the magnetic poles
- Using emergency battery power for the shack
- Using power inverters/solar power
- Emergency communications basics

If you have a topic you would like to hear about, post it on the Facebook page or send an email to Jim S. at: mooneypilot@gmail.com

Sales Table

JimS. announced that starting in March, the club will make a table available at the meeting for people who would like to sell equipment.

Show & Tell

Also the club will have a “show & tell” segment at each meeting. If you have something interesting you would like to share, bring it to the meeting.

JimS. passed around his kit-built iambic keyer. Cost was in the \$40-50 range.

SIERA Nets

Shelia needs net control operators. Contact Shelia if you are interested: smclfc@gmail.com

A brainstorming session concerning starting a ten-meter net followed. A time slot following the 80-meter net on Tuesdays was suggested.

A High and Awful Price: Lessons Learned from the Camp Fire

(available at: youtu.be/bo0yBOCvuwU)

Due to a lack of time, only the first 10 minutes was shared. (The link was also published in the January Beacon.) Members are encouraged to view it at their convenience. Don offered to put a link on the SIERA website.

Meeting adjourned at 3:10PM

Remember, send your photos and news for the Beacon AND the SIERA Facebook page to: scauhape2002@yahoo.com You DO NOT have to be a member Facebook to access the SIERA page.

The editor would like to thank all who have contributed to the Beacon over the years. Your articles, illustrations, website links, event and presentation reports, photos, stories about your projects and uses for amateur radio are what make the Beacon a valuable and interesting newsletter. Thank you so much.