



# RADIO-ACTIVE!

July 18, 2022, Volume 1, Issue 4



## In memoriam.

KI6UWK, Dr. Kenneth Coale became a silent key (died) on July 12th after becoming ill while volunteering at a Santa Cruz Horseman’s event.

Kenneth received his B.A. and Ph.D. from UC Santa Cruz before he joined Moss Landing Marine Laboratories in 1988. Dr. Coale became an adjunct faculty member of the lab in 1992 and helped teach courses before becoming the Acting Director of the Labs in 1998, then permanent Director in 2001 until his retirement



as Director in 2011 and Chemical Oceanographer in 2018.

Kenneth had many passions, hobbies and interests. He obtained his Ham radio technician license in 2018. We often heard Kenneth on the SLV and Coastal weekly ARES Nets. He had great ears, and style, often referred to as a ‘Big Gun’ and provided many relays from his location in Bonny Doon.

Kenneth was a long-time Wilderness Pa-

trol and Mounted Assistance Unit Volunteer team member. He began volunteering with California State Parks in 2008 alongside his wife Susan where he worked to promote multi-use trail harmony amongst park visitors, provided general education on our parks, and helped to share park regulations with the public. He often acted as a liaison between California State Parks and the Santa Cruz County Horseman's Association and supported the public safety of park visitors on horseback or otherwise.

When we think of Kenneth we think of his kind and generous heart. Our deepest condolences go out to Kenneth’s wife Susan, son Tyler and daughter-in-law Ashley and their kids Finn and Reed, and daughter Megan.

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## Upcoming events

**Saturday, July 23, 2022:**  
Santa Cruz Mountain Challenge Road Bike event.  
<https://www.signupgenius.com/go/10C0D-DA9A822A4F4CE9-mountain>

## Events Save the Dates

- Saturday, July 23, 2022: Santa Cruz Mountain Challenge Road Bike Event
- Saturday, August 6th: Santa Cruz County CERT Emergency Preparedness Drill and Activation event (Some ARES support will be needed).
- Sunday, August 7, 2022: South Skyline Emergency preparedness
- September 14—18, 2022: Santa Cruz County Fair
- Sunday, September 25, 2022: Santa Cruz Triathlon

## Equipment available to loan

Go Pro Hero cameras and supporting accessories to enable event participants to record content all of which can be edited to a viewable video. Contact Neil, KN6JOI at [KN6JOI@slvares.org](mailto:KN6JOI@slvares.org).

## ARES Activities

This past month has had many volunteer hours supporting events contributed by ARES members. Here is a recap of some of those events:



*Post 1 setup —Net Control*

► The Active Shooter and Casualty Care Training event, provided by the UCSC Police Department, ran for eight days, June 21 to June 29, 2022 (excluding June 26<sup>th</sup>), at the Scotts Valley High School campus. ARES and CERT (Community Emergency Response Team) members were activated to monitor the perimeter and parking areas of the access-controlled training site, redirecting unauthorized pedestrian

and/or vehicle traffic that may inadvertently enter the area, and reporting/communicating potential suspicious activity or other issues. Radio communications were via MURs and public safety radios. There were 137 shifts filled by ARES, CERT and Scotts Valley Police Explorers. Many of the volunteers have dual citizenship with both CERT and ARES. And because of this, it is difficult to state exact hours were provided by each entity. There was a total of 487 hours of service by 48 CERT/ARES volunteers over the entire event.

Volunteer survey responses stated the event was enjoyable by meeting up with friends, supporting the first responders, meeting new friends, working as a team and practicing radio protocols (tactical call signs and Health and welfare checks). We were challenged with the temperature during the eight days (104 degrees F under the canopy was recorded on one of the days), the boredom (as one volunteer stated - 'watching grass grow'), and volunteer shortage.

One group of volunteers experienced a longer than anticipated shift as a situation arose that required the site to become lockdown until it was deemed safe. The volunteers, who were asked to remain at each of their posts, adapted to using text messaging after requested to go radio silent but continue Health and Welfare checks. Flexible and adaptable we are.



*Roxy, WE6C at Main gate Post*

## Test your knowledge

(question/s come from one of the Ham radio class exams; answers on page 8)

What is the best speed to use when answering a CQ in Morse code?

- A. The fastest speed at which you are comfortable copying, but no slower than the CQ
- B. The fastest speed at which you are comfortable copying, but no faster than the CQ .
- C. At the standard calling speed of 10 wpm
- D. At the standard calling speed of 5 wpm

## ARES Activities —Continued



*Dan, N6RJX and Karen, KM6SV ready to start shift.*

► On July 4th ARES volunteers provided crowd monitoring for the Aptos 'World's Shortest Parade'. There were 14 volunteers including two recent licensees experiencing their first event. Most of the volunteers had their new vests on. Looking spiffy! Dan N6RJX setup up a cross-band repeater to aid in make sure net control can hear all operators. It worked very well. Check out the 4.5 minute video montage captured by Bob, KO6XX of the event: <https://www.youtube.com/watch?v=pC1kCFL3MGM&t=145s>



*Showing off our new vests and readiness for the activity.*



*Dan, N6RJX and Bob, KO6XX verifying donut arrival*



## Be ready for PG&E outages like PSPS and EPSS

With Summer and Fall, lets prepare and be knowledgeable about possible power outages.

On their outage information website ([https://www.pge.com/en\\_US/residential/outages/planning-and-preparedness/types-of-outages.page?](https://www.pge.com/en_US/residential/outages/planning-and-preparedness/types-of-outages.page?)), PG&E describes outages as either planned or unplanned.

One of the planned outage, many of us in ARES is familiar with, is Public Safety Power Shutoff (PSPS)([https://www.pge.com/en\\_US/residential/outages/public-safety-power-shutoff/learn-about-psps.page](https://www.pge.com/en_US/residential/outages/public-safety-power-shutoff/learn-about-psps.page)). This type of outage we know weeks or days in advance and can plan/prepare for the outage event. Generally this is associated with high wind days.

A new unplanned outage that is being deployed is the EPSS (Enhanced Powerline Safety Settings) ([https://www.pge.com/en\\_US/residential/outages/enhanced-powerline-safety-settings/enhanced-powerline-safety-settings.page?ctx=large-business](https://www.pge.com/en_US/residential/outages/enhanced-powerline-safety-settings/enhanced-powerline-safety-settings.page?ctx=large-business)). Current breakers can trip and turn off major sections of the grid, but may not be sensitive to branches falling on the line. Thus sparks can rain down on dry brush.

EPSS is designed to trigger smaller sections much quicker, within 1/10 of second, if a hazard like a branch fall on the power lines. This can immediately stop the potential rain of sparks that can occur.

With both PSPS and EPSS, PG&E crews still need to check the lines before re-energizing, and thus recovery for both is not instant. In fact more delays can occur if they find other issues on the line that need repair, or hanging trees that need to be addressed.

For EPSS, we may never discover the branch, tree, etc. that caused the EPSS as the branch may have since fallen to the ground.

EPSS being more quick to react, this may cause more inconvenience for customers, but hopefully more peace of mind as far as fire safety.

Here are some steps in being prepared for outages from an information standpoint.

- ▶ For PSPS events, be aware of red flag warning days in our county. Use National Weather Service: Bay Area on Twitter to monitor extreme weather on your smartphone. You can monitor NOAA on your Ham radios, or your crank Emergency Radio.
- ▶ Determine your cell coverage during outages and its availability.
- ▶ Determine your internet coverage into the house and its availability duration during a power outage.
- ▶ Coordinate with your local CERT or local community if they are using MURS radios. Unplanned outages are a great exercise to turn on that MURS radio and check your neighborhood of the extent of the outage.

## Upcoming class

Cross Band Repeaters, **Monday August 8th will be** provided by Dan, N6RJX. More details when we are closer to the date.

Crossband Repeating is a process where a Ham transmits one signal on one band (typically UHF), and it is received by another radio with a better antenna/ power installation, and re-transmitted (typically on VHF) to another radio system, or a repeater.

A brief introduction was presented at the June 15th. Meeting—see minutes for the introductory slides.

## Correct frequency?

There was a recent instance of what sounded like VARA transmissions on the K6BJ 2m repeater frequency. As a reminder, the Winlink VARA FM Gateway is named K6BJ, but it is **not on the same frequency as the K6BJ 2m** repeater. Winlink VARA FM K6BJ Gateway is on 145.710 MHz (Channel 78 on the ARES frequency list). This can be verified in Winlink by going to the Channel Selection menu.

## Photo reminders

Next time you participate in a radio related activity, take a picture or two of yourself, your friends, your equipment, or your environment (preferably a combination of these factors) and send it to [KM6RMN@SLVARES.org](mailto:KM6RMN@SLVARES.org) and [KN6IAB@SLVARES.org](mailto:KN6IAB@SLVARES.org).

With your permission, Allison will use the material to make creative Facebook posts. Extra points for natural action poses, equipment still-life, or well-framed presentations. Even a funny or awkward moment is useful. If your shots involve other people, try to get permission or identifying information so Allison can make sure it is all right to use their appearance in her posts.



## 2022 ARRL Field Day recap

The year's Field Day was at the Bonny Doon Airfield on June 25th and 26th. The Santa Cruz County Amateur Radio Club & San Lorenzo Valley Amateur Radio Club co-hosted the event and the public was welcome. The airport owners (Rafael Ortiz and Lisa Allen Ortiz) were honored to give back to the emergency communications organizations.

The airport provides the lifeline to emergency responders during emergencies and is live for emergency vehicles and helicopters/ planes.

The event included testing out some new equipment or setups. Propagation was a challenge on Saturday and therefore the number of contacts made was lower than expected. However, there were lots of visitors and sharing.

Many of our ARES operators contributed their time and energy for this event. Roxy, WE6C was given an extra shoutout at the most recent Santa Cruz County Amateur Radio Club meeting. Roxy was the primary contact for the airport, organized all the food, organized the sign-up and...let's just say she is an energizer bunny.

*Satellite tent at Field day. Why was the antenna mounted on tables? FOR SAFETY! The antenna is rotated frequently for best signal capture and to avoid hitting a visitor.*



*Roberta, AJ6KN receiving some information on satellites*



## Reminders

- ▶ AECs submit articles for newsletter by the Sunday before the meeting to KM6URE@slvares.org
- ▶ Net Control sign-ups will be taken during the monthly meeting. Everyone is encouraged to take this on this role.



## Calling all party planners

If anyone is interested in helping plan the next party in October please contact Lisa at KN6IAB@slvares.org

## Newsletters Online

Prior versions of the Radioactive Newsletter can be found on the website at this location: <https://xczcomm.com/index.php/news/>

## Disclaimers

This newsletter is made of news items provided by many of the Leadership and AECs of the ARES membership. Clarifications can be asked at the monthly ARES meeting.

## EC Bob's Thoughts

Hi everyone!

I want to thank you all for your volunteering in our communities and ARES.

We are in the heat of the summer and events are happening. Just a few of the things we are working on:

- ▶ We have a [temporary] videographer—me. I have purchased a Go pro and editing software. I have taken a few videos now and practiced the editing techniques. Check out the results at the <https://www.youtube.com/channel/UCnt11yW90Rrkfm-c0VDmDyw>. There is recording of the KBCZ Radio show which I was interviewed about ARES and also the July 4th parade. My intent is to capture the spirit of the Santa Cruz ARES group and emergency communications. Feedback is always welcome.
- ▶ Our ARES instructors have started working on what teaching tools will



be used for the next Technician class as the question pool changed July 1. There are 51 new questions and 62 questions were eliminated. A new course book is under evaluation. We hope to announce the dates soon of the new class.

As always, please have fun, and in our busy lives please take care of yourself first. I am incredibly blessed to be part of our group.

73, de Bob KO6XX

## The CERT report

Similar to ARES, Community Emergency Response Teams (CERT) of Santa Cruz County have been busy volunteering. Many of the CERT volunteers enjoyed being paired with an ARES member at the recent Active Shooter Event. It shows how well we can collaborate.

CERT has also been busy connecting with our Firewise partners. There have been several Firewise events CERT and ARES representatives have spoken at to inform the community on



various aspects of emergency preparedness.

CERT has also been tabling and shared emergency preparedness tips at many of the San Lorenzo Valley Fire Department pancake breakfast.

CERT is looking forward to working with ARES Radio Operators on August 6, during the Santa Cruz County-wide CERT Exercise. CERT appreciates the help in practicing and refining our mutual disaster communications plan.

## Hours Corner

Another amazing month with 1057 total reported volunteer hours! Keep up all the great work and thank you for volunteering. Please remember to enter your hours on the form on <https://xczcomm.com/index.php/hours-reporting/>



## New Safety Vests being distributed

Santa Cruz Communications Support ([www.santacruzcs.org](http://www.santacruzcs.org)) is the non-profit 501c3 agency supporting the trained volunteers Santa Cruz County depends on to supplement public safety communications during emergencies and large events. **The agency is supporting ARES by providing a**



**FREE new safety vest to each of the members.** The vest has the ARRL logo on the front, 'Santa Cruz Amateur Radio' on the back and lots of pockets. Many members have already received their vest and they look fabulous. Reach out to Gary

([K6PDL@arrl.net](mailto:K6PDL@arrl.net)) or Karen ([karen@slvares.org](mailto:karen@slvares.org)) to arrange pick-up of your new vest. *Thank you* Santa Cruz Communications Support!

## PG&E Grant Award

The Santa Cruz Communications Support has received a \$5000 grant award from Pacific Gas and Electric Corporation Foundation. This donation is to be used specifically for the emergency communications support for Santa Cruz County. The Board of Directors of Santa Cruz Communications Support will be meeting to determine where these funds will be spent.



## Revised ARES COVID policy

The Santa Cruz County ARES COVID policy has been revised. It is posted on the website at this location: <https://xczcomm.com/index.php/policies/> . Please review prior to any event or activity participation.

## Resources

- Website: <https://xczcomm.com/>
- Reporting volunteer hours: <https://xczcomm.com/index.php/hours-reporting/>
- Upcoming events: <https://xczcomm.com/index.php/calendar-of-events/>
- Facebook page: <https://www.facebook.com/ARES-of-Santa-Cruz-County-Ca-296232310799866>
- Facebook group: <https://www.facebook.com/groups/431308973875528>
- PIO Articles: <https://arrlsantaclaravalley.org/news/> or <https://xczcomm.com/index.php/news/>
- XCZ Comm You Tube: <https://www.youtube.com/channel/UCHZH8TU5gh4SqHTPXSWolPA>
- Submitting deployment documents: **send in PDF form to** [EOC.ARES@santacruzcounty.us](mailto:EOC.ARES@santacruzcounty.us) and your appropriate EC (Bob: [KO6XX@slvares.org](mailto:KO6XX@slvares.org))
- Submitting personal information such as DSW application, personal data update, education certificates: email [K6PDL@ARRL.net](mailto:K6PDL@ARRL.net), [KM6SV@SLVARES.org](mailto:KM6SV@SLVARES.org), and [EOC.ARES@santacruzcounty.us](mailto:EOC.ARES@santacruzcounty.us),

## Org. Positions

- DEC  
John / N6QX, jfgerhardt@gmail.com
- Assistant DEC  
Gary / K6PDL, K6PDL@arrl.net
- Assistant DEC and Deputy EC  
Karen / KM6SV, KM6SV@slvares.org
- Operations and Events  
Dan / N6RJX, N6RJX@slvares.org
- Webmaster  
Nate / KM6THA, KM6THA@gmail.com
- Administration  
Dawn / KM6RME, KM6RME@slvares.org
- Safety Officer  
Stephen / KM6NEP, KM6NEP@slvares.org
- Public Information officer  
Allison / KM6RMN, KM6RMN@slvares.org
- Net Manager  
Roberta / AJ6KN, AJ6KN@slvares.org
- EC Loma Prieta  
vacant
- EC Coastal and SLV  
Bob / KO6XX, KO6XX@slvares.org
- AEC-Antenna Specialist  
Neil / KN6JOI, KN6JOI@slvares.org
- AEC-CERT Liaison  
Liz / W6LTS, W6LTS@slvares.org
- AEC-Coastal  
vacant
- AEC-Education Coordinator  
Bill / AJ6CQ, wtyler@gmail.com
- AEC-Logistics  
[temp vacant]
- AEC-Meeting Trainer  
Jim / N6EWP, N6EWP@arrl.net
- AEC-MRC Liaison  
John / KN6DCA, drjohnrx54@gmail.com
- AEC-Net Trainer  
Kathy / KE6VTY, KE6VTY@slvares.org
- AEC-New Member Liaison  
Alex / AJ6QY, AJ6QY@slvares.org
- AEC-Packet Radio /Digital  
Sebastian / KK6FBF, Sebastian@steinhauer.info  
Ryan / KI6UAP, KI6UAP@gmail.com
- AEC-Photographer  
Lisa / KN6IAB, KN6IAB@slvares.org
- AEC-Scribe  
JoMarie / KM6URE,  
KM6URE@slvares.org
- AEC-SLV Safety Officer  
Tom / KK6NMZ, KK6NMZ@slvares.org
- AEC-SLVEN Liaison  
vacant
- AEC-Video Production Team  
vacant

## ASK AN ELMER

?

### Assisting in an emergency deployment



*Roberta, AJ6KN setting up portable station at Animal Services during CZU fires*

We do our nets, exercises and meetings to train us to help during community events and, ultimately, to help out in an emergency, if requested. There will likely be a variety of roles for a deployment. There will probably be a net control station (or 2), and possibly a scribe (writing/logging the activities and priority/emergency traffic) and perhaps even a person just monitoring the radio(s). You can practice any or all of these positions during every net. Practice writing the operators' call signs, names and locations on a computer or on paper. There is a handy form for this at <https://xczcomm.com/index.php/forms/> at the bottom.

In an emergency, you may be asked to run a station at a specific location – passing messages, collecting information and passing it on to Net Control, or riding in someone else's vehicle and assisting with whatever is needed. The CZU fire is a good example of this. ARES members rode in vehicles with Equine Evacuation members and passed information on the animals that were fed, their locations (arriving and departing – to keep track of them in the field), and keeping a written record of their activity, turning in their ICS-214 form at the end of each day. A handy talkie might not be sufficient for this, if you are way out in the boonies, and a magnetic mount antenna is a must. The alternative is a mobile, 50W radio with the magnetic mount and a 12-volt charger or battery box for power. Basic equipment recommendations are here: <https://xczcomm.com/index.php/equipment/>

For emergency deployment, you may be required to have a Level 1 Disaster Service Worker Communications ID. If you are active in ARES, you probably have already met the requirements for meeting and net attendance. The FEMA ICS-100 class may be all that you need to reach Level 1, and it takes an hour or two at the most to complete on line. Go to <https://xczcomm.com/index.php/ics-classes/> for more information.



*Roberta, AJ6KN at City EOC for Equine Evac support during CZU fires*

*Test your knowledge from page 3 Answers: Question 1—The correct answer is B. The fastest speed at which you are comfortable copying, but no faster than the CQ.*



## Santa Cruz County ARES Purpose

- We serve the public, not our egos and the best service we can render in a truly major event. To provide and distribute a corps of trained operators into the right places of the scene in that first, critical 48 hours (sometimes weeks).
- We are not Fire personnel, Police Officers, Sheriff's Officers, or any other authority. We are volunteers who care about our communities by using our emergency communication skills.
- Before volunteering we first take care of ourselves, immediate family, friends, and some of our relatives.
- We value the contributions that everyone makes, irrespective of license class, years of experience, or the price tag of your radio.

## Ham Radio's Motto

"When all else fails – ham radio works". That is because, when all the normal communication systems stop working, Ham Radio is still in operation, helping people, conveying messages, and sometimes, even saving lives.



## Exciting opportunities for those who are interested in getting more involved with ARES!

- ▶ First, we are looking for a new Webmaster. This can range from just maintaining what we have with updates, posts of new content, and occasional enhancements to a complete redo if you prefer something different. Some training/transition can be provided. If you are interested in this position or have questions, please contact Karen (karen@slvares.org) or Nate.
- ▶ Second, Karen, KM6SV is stepping down as Bob's Novice/Deputy EC. So Bob KO6XX is looking for a new assistant. This position is a great way to get more exposure to how ARES is run and how we handle emergencies. It is a bit of a mixture of different activities and some of what it entails will depend on how you would like to be involved and what you and Bob decide together. If you are interested in this position or have questions, please contact Bob (bob@slvares.org) or Karen (karen@slvares.org).
- ▶ As always, if there's something you would like to do that you think would benefit the group, even if it isn't something that we are specifically requesting, we would love to hear from you! Please contact Bob (bob@slvares.org), Karen (karen@slvares.org) or John (jferhardt@gmail.com) if this is you.

## Education Opportunity



**Course Name:** Personal Preparedness for Essential Workers, Disaster Service Workers, Nonprofit and Faith Based Organization Staff

**Target Audience:** This course is designed for CP - Community Preparedness personnel

**Course Description:** To provide individuals with personal preparedness tips, including a communication plan, meeting place, go bag, and stay box for home, to ensure that staff are able to support cli-

ents of organizations. This seminar is intended as part of the training and exercise program for the 12 counties and 3 cities that comprise the Bay Area Urban Areas Security Initiative.

**Date/Time/Location:** July 26, 2022, 10am - Noon Via Zoom (link provided with registration)

**How to Register:** <https://www.batep.org>; contact Karen (karen@slvares.org) for assistance with registration

**Attendee Cost:** \$0—course fee is paid for by the Department of Homeland Security Urban Areas Security Initiative Grant Program.

## Setting up a REAL Base station in Pictures (Alex, AJ6QY)

Shack equipment ground buss



Antenna feed line lightning arrestors and grounding



Dual band antenna and HF antenna feed point up on the roof



The HF antenna is an end-fed wire antenna the terminates at about 90' up in a fir tree down the hill from my house, making it horizontal. It works pretty well so far on all bands 40m and above. I can hear great on 80m, but is kind of weak on transmit.

## Membership Meeting Training Teaser: Setting up a temporary mobile station in someone else's vehicle

Mobile stations have been around for awhile, but usually done as a custom setup for one car.



Some people have experimented with mobile setups that can just be placed into another vehicle. Maybe on top?



**What are you ready for,  
when it's not your car?**

**Find out Wednesday at "Training Time".  
If time allows, share yours.**