



# RADIO-ACTIVE!

October 17, 2022, Volume 1, Issue 7

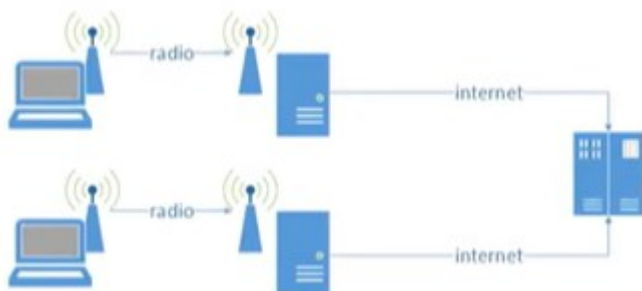
## A NEW NET COMING TO YOU SOON!

Roberta, AJ6KN, Santa Cruz County Net Manager



Santa Cruz County ARES Winlink Net starting soon! I have enjoyed the Winlink Nets that I have participated in this past year so much that I decided to take on managing one here. "What is Winlink"?, you might ask. Winlink is a network of amateur radio and authorized government stations that provide worldwide radio email using radio pathways where the internet is not present. Winlink express is a software program that allows you to send and receive email via your radio, with the help of the internet. (Additional information is available on the XZC-Comm You Tube channel— <https://www.youtube.com/watch?v=BRbocJ5QY4I&t=2804s> and <https://www.youtube.com/watch?v=JpY01uzNQUM&t=3321s>).

You do not need internet to use Winlink, however. I experienced this today, when the internet disappeared. I was able to connect via Winlink and download my emails from the operators who are responding regarding their participation. I was then able to send a reply back to them. My internet is still down, but I am happily sending Winlink messages back and forth. Somewhere else in the country are the internet servers (CMS stations) that DO have internet and are able to forward my messages.



Continued on page 2.



## Inside this issue

SC Triathlon Thank you ...	2
Test your knowledge.....	3
Using APRs at an event .....	3
EC Bob's Thoughts .....	4
Hours Corner.....	6
ARES Vests .....	6
Training available .....	6
Learning from others .....	7
Sneak Peek .....	7
DC Power Management....	8

## Upcoming events

**Friday, October 28:** Trunk or Treat, sign-up here:  
<https://www.signupgenius.com/go/10C0D4DA9A822A4F4CE9-trunk>

## THANK YOU Santa County Triathlon VOLUNTEERS



AI AI6GL  
Ann KE6BQA  
Bob KO6XX  
Bruce KN6DBR  
Cap AE6FE  
Dan N6RJX  
Dawn KM6RME  
Debra KM6HGI  
Glen KJ6AQM  
Jim KN6NCG  
John NS6K  
JoMarie KM6URE  
Mark KN6DBW  
Mike W6MLB  
Rob KM6YHC  
Roberta AJ6KN  
Ryan KI6UAP  
Stephen KM6NEP  
Teresa KN6TDK

## 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.

## Santa Cruz County ARES Winlink Net—continued



WINDOWS



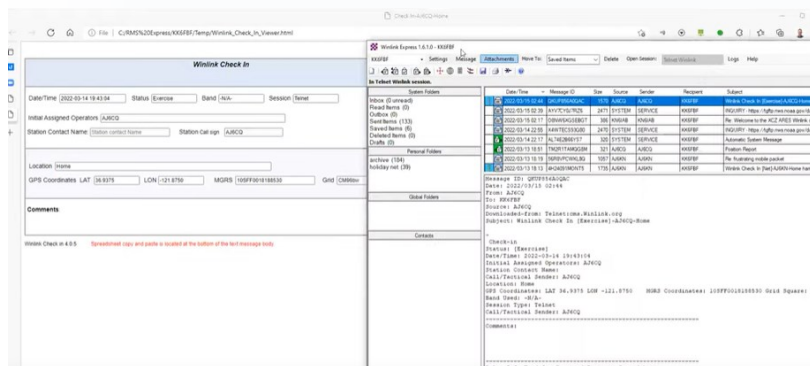
Another question I have been asked is “What is a Winlink Net”? Our Winlink Net will consist of any operators who are registered with Winlink and want to participate in a Net. I will send out instructions once a week, and operators will have 6 days to do the exercise and reply to me. It will start simply, with plain text messages, and following the correct format to check in so that I can download the information onto a spreadsheet. A record of all of the participants and their information will then be available to send back to everyone, so that everyone can see participation and answers to the Winlink questions that I might ask. Once we have the format down, we can move on to trying out different templates, so that we can become familiar with them in the event their use is needed during an emergency.

You should have all received an email from me on Thursday, 10/13/22 about whether or not you wish to participate, along with a link to instructions on how to register and how to access some training materials.

Our net is open to all amateur radio operators, and will likely include some out of the area operators. The net will be open to those who only have Telnet, also, with the hope, of course, that you can eventually get your station working for packet radio. My hope is that we will all help each other through this learning process and getting stations up and running – I am NO expert, but have just had some experience that I enjoy and want to share. I have a mentor from the fabulous American Legion Post 42 Winlink net, so I will be learning along with you all.

If you are interested and haven’t yet responded, please follow the instructions in the 10/13/22 email. Much of the Winlink Net is about following instructions, figuring things out (with a little help from your friends) and becoming more and more independent.

We already have 20 operators answering “YES” to participation, so come and join us and share in the fun!



## Using APRS at an event

JoMarie, KM6URE

As mentioned in a previous newsletter article (May 16 2022 edition), APRS stands for Automatic Packet Reporting System. It is a digital mode that supports the automatic periodic broadcasting of information.

Some of the events this year I have been in the Support and Gear (SAG) car and been able to use APRS as way to communicate my position via a radio frequency. For APRS, I am using my Baofung UV-5R HT radio connected using a BTECH APRS-K2 audio interface cable to old Samsung smartphone (without service). The cellphone has APRSdroid application loaded. I am using a different radio (Yaesu FTM-100 dual-band mobile) for voice communication.

My desire was to have my relatively updated position known with net control at all times. This way net control can deploy me if I was the

closest one to a location in need of something. What I had not considered enough is the ability for the APRS radio to reach a digipeater as I traversed the terrain of the event courses. I was much more successful during the Triathlon Bike race portion than the Santa Cruz Mountain challenge bike ride. I have only been using the 18-inch whip antenna on the HT inside the car. I might need a second mag mount antenna to have better success with APRS in a SAG wagon.

At least four other operators (Roberta AJ6KN, Dan N6RJX, Stephen KM6NEP and Jim KN6NCG) used APRS during the Triathlon but the majority of them were on foot.

Here is the map of activity. Yes it looks like a child's scribble but one can drill into the map and see exactly where everyone was at.

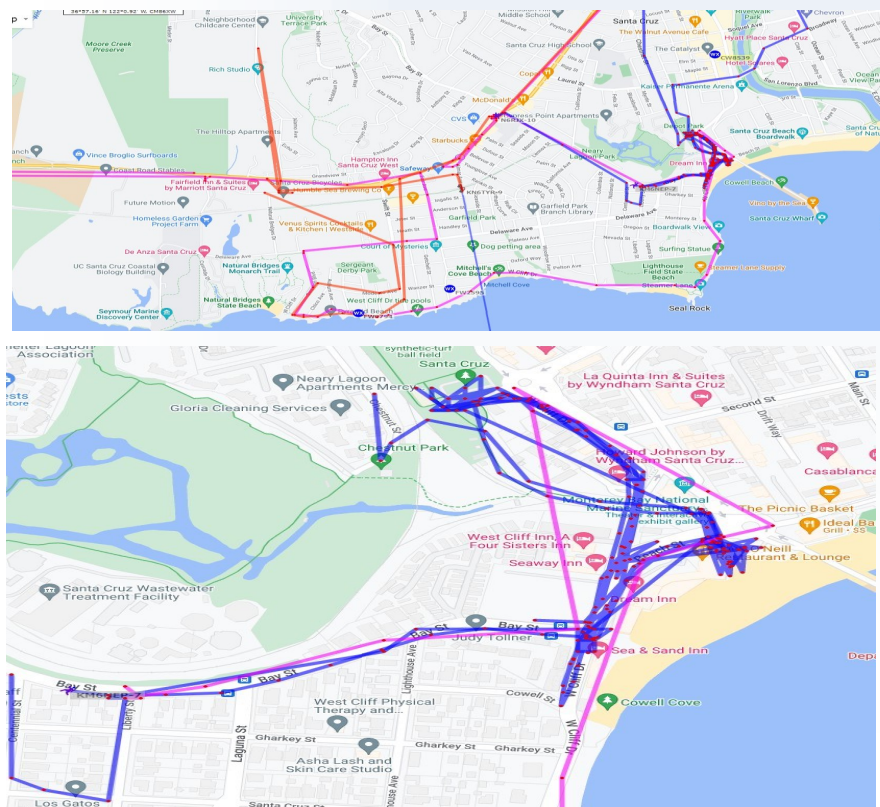
Hope you give it a try.

### Test your knowledge

When does a communication emergency exist?

- A. Whenever the public is at risk.
- B. When there is an earthquake in your area and the public is inconvenienced
- C. When a critical communication system fails and the public is inconvenienced.
- D. When a critical communication system fails, and the public is at put at risk.

Answer on page 5





## Reminders

- ▶ AECs submit articles for newsletter by the Sunday before the meeting to [KM6URE@slvares.org](mailto: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 (coming soon) please contact Lisa at [KN6IAB@slvares.org](mailto:KN6IAB@slvares.org)

## 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

Never ceases to amaze me even being in Amateur Radio for over 30 years how much I still have to learn (and re-learn). As we all know, I am certainly not a master at anything, but have tried most things ham radio. So this weekend (15-Oct-2022) Kathi KE6VTY, Dan N6RJX and I headed to Pacificon, the annual ARRL Pacific Division Ham Radio Convention.

One lecture that was interesting to us was "EmComm Mutual Aid in a Digital World" with Dan Goldstein KJ6KEU. The room was packed with like minded hams. Yep, digital methods were covered, and I thought about all of our fellow members who are passionate about our digital modes and how grateful we have them to teach us how to work this mode as easily as possible (you know who you are).

There were some very important parts to this lecture that I had to be reminded of in my role as the Emergency Coordinator (EC) for our Santa Cruz County ARES. The topic came up about how many hams in the USA that are NOT trained for emergencies (something like 65%!!), used to be trained and out of date, and those who do not have DSW registration. Something that I have been thinking about for years, as our EC, is that we have about the same ratio for Santa Cruz County. So I put it to the whole room, just what do they do with hams eager to help, but are not DSW registered and not trained? I was so happy to see hands go up. First one said to have them as "Runners". Ummm well, not sure we will need that, but ok, something to consider. Another said for logistics, great! Another said for scribes, yep, perfect! We had someone from the Red Cross say the persons may not be trained for Red Cross, but they certainly will swear them in for DSW on the fly and have them help where they can. Ok, I am always open for anyone who can help within their limitations.

The group also hit on a topic that all of us need to remember. When (not if) there is a disaster, volunteers need to get on the radio and find the resource net. No resource net? It is critical that we start a resource net and it can be done by anyone. Then it is the EC that assigns the volunteers for deployment. Everyone in the room had issues with volunteers going to management (This would be our District Emergency Coordinator (DEC) John N6QX and anyone higher) for assignment. And they need to let everyone know that **when it comes to assigning volunteers, it is the EC's responsibility** so that Management can concentrate on the larger picture



and what ARES as a whole needs to do.

There were many more things discussed, but not enough room here to share this time. I will share more in future newsletters.

Continued on page 5

Test your knowledge from page 3 Answer: The correct answer is D. When a critical communication system fails, and the public is put at risk.

## 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 and 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.



## EC Bob's Thoughts Continued from page 4



### Volunteering —

We have such a wonderfully diverse group, and I swear one of the thousands of reasons why we are so resilient. We have those who are retired and can spend more time on having fun in ARES. We have those volunteers who are having real life-shaking things going on in their life. Some are still working long hours, and their time is very limited in volunteering for ARES. When work, and life get in the way of volunteering, donating even a few hours a month

is very precious. And they wish they could spend more time having fun in the hobby, but can't. I get it. Bottom line, I cherish any time our volunteers spend with us. Even a few hours a month is greatly appreciated.

With this said, **we are going to have a monthly drawing!!** It isn't much, but it is the thought that counts.

For any of our members who *log their hours* (does not matter how many hours) for the month with Dawn (for ease use the form on <https://xczcomm.com/index.php/hours-reporting/>), will be entered into a drawing. At the following ARES meeting we will randomly select a winner. That person will have a choice of prize items of:

- ▶ Used (but in good condition) dual band mag mount antenna
- ▶ New Baofeng UV-82 HT
- ▶ Btech MURS Radio
- ▶ 1926 first edition of the ARRL Manual but it was in suspiciously good condition. Signed by FE Handy.
- ▶ Paid lunch with John N6QX, Bob KO6XX, or Dan N6RJJ.
- ▶ Lunch (not paid) with a mentor of their choice.

As always, thank you for everything you all do to keep our communities safe!! :-}

Till next month, 73,  
Bob KO6XX

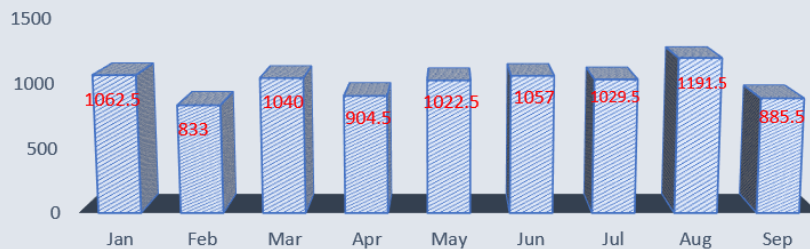


## Hours Corner

Another amazing month with 885.5 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/>. See page 5 for a new opportunity!

### 2022 ARES VOLUNTEER HOURS

Total to date: 9026



## Vests still available



Have you obtained your **free** ARES vest (Level 1 and above) provided by Santa Cruz Communications Support?

If not, contact John, N6QX, Karen, KM6SV or Gary, K6PDL to arrange a pick-up at the Emergency Operations Center (EOC) at 5200 Soquel Avenue, Santa Cruz.

## Training available

Equine Evac will be holding a basic training on Sunday, Oct 30, 2022 from 9 am to noon at the Santa Cruz Horseman's Graham Hill Showgrounds, 1145 Graham Hill Rd, Felton.



All ARES members are invited to come observe the training.

## 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/UCHZH8TUSgh4SqHTPXSWolPA>
- 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 / N6RJJ, N6RJJ@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

## LEARNING FROM OTHERS IS PREPARING FOR OURSELVES

Stephen KM6NEP, Safety Officer



33 years ago we experienced the Loma Prieta Earthquake, October 17, 1989. For those wondering how ham radio operators performed on that day, check out these recordings. They show how opera-

tors maintained calm but quick demeanor, and prioritized various incidents due to the aftermath. All the while maintaining net control discipline.

Our XEZ ARES link, <https://xczcomm.com/index.php/history/>, points to the recordings at: <http://n6oim.com/loma/#anchor1633481>

Here you can listen to: loma1.mp3, loma2.mp3, loma3.mp3, and loma4.mp3.

This year's International ShakeOut Day is October 20, when millions of people worldwide will participate in earthquake drills at work, school, or home! <https://www.shakeout.org/index.html>

Response and recovery from an earthquake or any incident is always a learning experience as we move forward.

With that, take some time to review how the response and recovery is being performed with Hurricane Ian (Some videos included below). Though in some places the devastation looks to be more extreme than an earthquake, it is good to see and understand:

- ▶ the response immediately after the incident has past (such as search and rescue) <https://youtu.be/i--5o4i4XwA>,
- ▶ the recovery steps (debris removal then power and water restoration) <https://youtu.be/bRFVHoKHreE>, and finally
- ▶ the rebuild and restoration efforts.

Lastly, let's be safe during the time change from daylight to standard time on November 6.



**Sneak Peek for  
Membership  
Meeting 10/19 at  
1900**

- ▶ Have you ever wondered what the City and County EOC's (and their radio rooms) looked like? John N6QX will be providing a virtual tour.
- ▶ Want to know about antenna patterns and how they relate to real life settings? Think about a beach ball, a dinner plate and a length of pipe. What kinds of antennas produce these patterns? How well can they work? Jim N6EWP will be providing some key thoughts.



## 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.

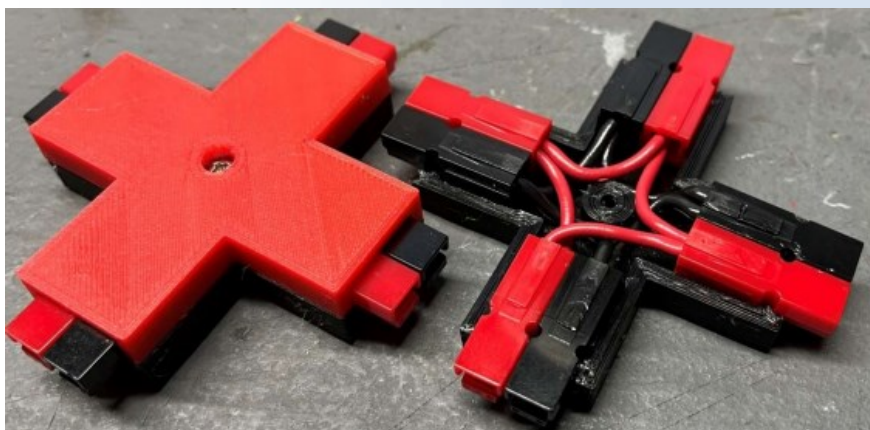
## Ham Radio's Motto

"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.

## DC Power Management for Ham Shack/Go bag: A DIY Project for a 4-way DC Anderson Powerpole Hub

Neil, KN6JOI, AEC Antenna Specialist

We have a DIY 4-way DC hub project, using Anderson Powerpole connectors. It offers flexibility for the operator of a direct current (DC) power source to distribute energy for low voltage operations. The 3D printed design is functional and compact for field deployments as well and ham shack work bench use. The 4-way DC power hub can temporarily attach at any surface by way of double-sided tape, or more permanently. A distribution hub for a DC power source could be from a deep cycle marine sealed lead-acid AGM (Absorbent Glass Mat) battery, LiFePO4 (Lithium Iron Phosphate), LiPo (Lithium Polymer) batteries, or foldable solar panels.



With instructions available on the Amateur Radio Emergency Communications You Tube channel ([https://www.youtube.com/watch?v=nn\\_68Ki5zTw](https://www.youtube.com/watch?v=nn_68Ki5zTw)), this is a solder and mechanical assembly project creating a 4-way DC power distribution hub, one (1 each) input source and three (3-each) distributed DC power distribution connections. The electrical wiring color code for this project is Red which is in use by the Amateur radio community at +12 VDC (13.8 VDC) for emergency power and mobile radio use. Black is electrical ground. The Anderson Powerpole is a family of electrical connectors which has been adopted by many segments of the Amateur Radio (Ham Radio) community as their standard 12-volt DC power connector for everything from radios to DC power sources to accessories. Powerpole connectors are physically and electrically hermaphroditic, thus avoiding the need to worry about which end is the plug and which the socket, or which end has the correct polarity.



## COM2 VAN BITES THE DUST

John N6QX DEC

John N6QX, was unable to find any affordable way to make the old Com2 van look like anything but a derelict. Despite the application of a stouter lock, the van was vandalized a second time while parked in the fenced county road maintenance yard on Brommer Street, and the yard manager said it had to go. Dan N6RJX, and John removed any remaining equipment of value and reluctantly wished the old van well in whatever Valhalla a tired 1963 Chevy step van advances to.



XCZ COM2, a much-abused 1963 Chevrolet step van



Dan, N6RJX, salvages a solar panel from the van's lichen-encrusted roof



Removing anything of value from the vandalized interior



Salvaged gear in Dan's pickup truck