



RADIO-ACTIVE!

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Santa Cruz County
Amateur Radio Emergency Service

Refocusing Disaster Preparation

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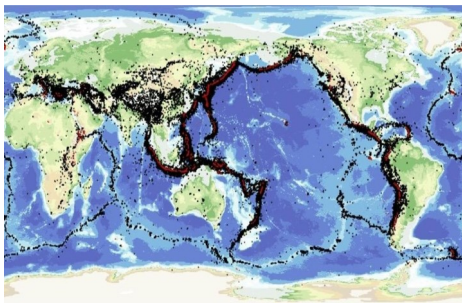
The recent widespread devastation of the Southeast we have heard about brings to mind the question, ‘How prepared are you?’. Here we may not have hurricanes but we have other significant types of disasters to give Santa Cruz County the tag line of ‘Disneyland of Disasters’. Even though some disasters do not give any warning, having thought about and some basic preparation can help you through many of the situations. After a disaster is not the time to run around getting supplies to allow you to evacuate. And we should not depend exclusively on others to help.

As Hurricane Milton was approaching landfall I was listening to the SARnet (Statewide Amateur Radio Network), Florida’s network of linked UHF voice repeaters. The state of Florida Emergency Operations Center is the custodian of the service and the linkage is hosted by Florida’s Department of Transportation.

There were three key events that happened while listening that made me want to refocus on preparation. The first, when the hurricane was just making landfall, it was announced that emergency services was being shutdown for a time period because it was not safe for the responders. That means 911 calls were not going to have responders arrive—you are on your own!

The second event was that one of the net controls were having to shutdown because they were losing power and can anyone else take over net control duties. The net control mentioned there was no back-up power at their location. What no back-up power? Redundancy is important.

The last event was the gas supply shortage. The gas shortage quickly developed in preparation for the hurricane and now the disaster is plaguing the timely resolution. Resources are not endless. And it takes time for things to return to normal.



Transitioning back to our local area, we are prone to earthquakes. Most people in the Central Coast live less than **15 miles from a fault** that can have a damaging earthquake. The most frequent large earthquakes that will affect the region will occur along the San Andreas fault. The San Gregorio fault follows the coast, usually just offshore. Numerous other faults are capable of having moderate magnitude (but still

damaging) earthquakes similar to the 1989 Loma Prieta earthquake.

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Coming in November!

Ham License Testing

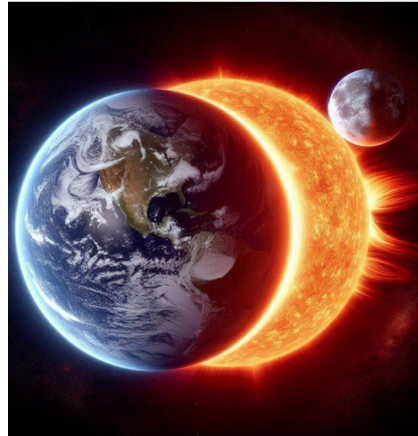
Our friends of the San Benito Ham Radio Club will be offering Ham License Testing at the Emergency Operation Center, 5200 Soquel Avenue on Saturday, November 2nd, 1300—1600. This is a great time to upgrade your license.

Equipment available to loan

Santa Cruz Communications Support have made **FOUR** kits available for loaning to allow ham operators participate in a deployment or to trial a different setup. Two kits are for a vehicle deployment and includes mobile dual-band radio, mag mount antenna, battery and kneeboard. The other two kits are for stationary outdoor deployments and includes the vehicle kit with additional supplies of a tripod antenna, lighting, and pop-up. Contact either John, N6QX, Roberta, AJ6KN, Stephen, KM6NEP or Gary, K6PDL for arraigning for check out.

FOUND ON THE WEB — Surfing the Solar Maximum

Allison, KM6RMN, Public Information Officer



Lately, our solar maximum is finally showing its stuff, with auroras reaching down even to Santa Cruz County. Our M-class and occasional X-class events make radio propagation very interesting. On one hand, some bands enjoy phenomenal, if quirky performance; and on the other hand, noise and radio blackouts make other bands hard to work.

The web is chock-full of informative solar activity forecasts and education. Last year I recommended the **NOAA Space Weather Prediction Center**: <https://www.swpc.noaa.gov/> and its **Radio Communications Dashboard**: [https://](https://www.swpc.noaa.gov/communities/radio-communications)

www.swpc.noaa.gov/communities/radio-communications). If you get lost in NOAA's dense graphs and numbers, you might benefit from Tamitha Skov's excellent YouTube mini-course **Data Products for Space Weather Forecasting**, which covers all the indices and their meanings. It's not for the faint-of-heart: her lecture is easy to understand, but it is four hours long. You may want to watch it over a few days. See: <https://www.youtube.com/watch?v=Qmx2iG0P3-s&t=9905s>

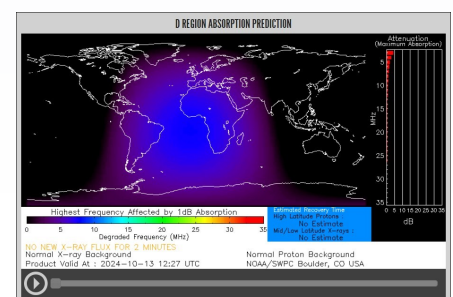
The newest darling in my stable of web pages is **Space Weather Live**: <https://www.spaceweatherlive.com/> . It is a sophisticated international aggregation site put together by a Belgian team of astrophysics specialists. It covers solar weather, auroral activities, a variety of reports, forecasts, and news. There are several community forums, including one dedicated to Amateur Radio. The landing page alone has a number of handy graphs and pictures of current conditions.

If you like your space news a little less dense, **Space Weather.com**: <https://spaceweather.com/> is a modest website that aggregates the latest news, current propagation conditions, and atmospheric data. It has many links to other sources at the bottom of the page.

Some of us may be a little rusty remembering how ionospheric conditions affect radio propagation. YouTube has handy informational videos to refresh your memory. If your last license test is more than a year in your rearview mirror, it couldn't hurt to check out the 20 minute review, **Understanding HF Propagation** by Rohde Schwarz: https://www.youtube.com/watch?v=7Y_RTdPs3NI . You can take a deeper dive with Radio Society of Great Britain's 40-minute video with identical title: **Understanding HF Propagation**: <https://www.youtube.com/watch?v=DIAGzpdB67A> . Same material, but in greater detail.

I have only covered a fraction of the space weather information now popping up on the internet. But these sites and videos are a good start to gaining a savvy understanding of what's going on "out there" and what impact it has on our radio communications. Study up; and go straight to these sites whenever the mainstream news claims that the sky is falling.

Email me at KM6RMN@SLVARES.org if you know a cool website, podcast, YouTube series, or online tool. I'll check it out and pass it on in the future.



Report your volunteer hours!

The reported volunteer hours for September was 494 hours. Please remember to enter your hours on the form on <https://xczcomm.com/index.php/hours-reporting/> Reporting the time you spend on ARES and ham radio activities reminds county public safety managers that we're around and ready to serve in time of need. Also, when you report your hours, your call sign is entered in a drawing. When you win, you get to select a valuable prize!







Save the Dates: ARES Events

2024 SCC ARES Events

Date	Event	Approx. or confirmed date?	Description
October 25th, 2024 1530 - 2000	Halloween Trunk or Treat 5200 Soquel Ave, Santa Cruz	Confirmed	Trunk of Treat is organized by the Santa Cruz Sheriffs. ARES provides monitoring of participants along with closed road staffing and shuttle parking location. Sign-up here: https://www.signupgenius.com/go/10C0D4DA9A822A4F4CE9-trunk

Refocusing Disaster Preparation — continued

The Earthquake Country Alliance suggests there are seven steps for managing an earthquake with the majority of the steps in preparation. Most of the steps can also be utilized for other types of disasters.

Prepare	Survive And Recover
<p>Before the next big earthquake we recommend these four steps that will make you, your family, or your workplace better prepared to survive and recover quickly:</p> <p>Step 1: <u>Secure your space</u> by identifying hazards and securing moveable items.</p>  <p>Step 2: <u>Plan to be safe</u> by creating your emergency plan and deciding how you will communicate.</p>  <p>Step 3: <u>Organize emergency supplies</u> in convenient locations.</p>  <p>Step 4: <u>Minimize financial hardship</u> by organizing important documents, strengthening your property, and considering insurance coverage.</p> 	<p>During the next big earthquake, and immediately after, is when your level of preparedness will make a difference in how you and others survive and can respond to emergencies:</p> <p>Step 5: <u>Drop, Cover, and Hold On</u> or other recommended actions such as Lock (wheels), Cover, and Hold On – if you feel shaking or get an alert.</p>  <p>Step 6: <u>Improve safety</u> after earthquakes by evacuating if necessary, helping the injured, and preventing further injuries or damage.</p>  <p>After the immediate threat of the earthquake has passed, your level of preparedness will determine your quality of life in the weeks and months that follow:</p> <p>Step 7: <u>Reconnect and Restore</u> daily life by reuniting with others, repairing damage, and rebuilding community.</p>

This coming Thursday, October 17th is the International ShakeOut Day, when over 52.7 million people worldwide will participate in earthquake drills. At 1017 am (local time) millions of people across California (with ~230,000 from Santa Cruz County already registered) will be practicing earthquake safety. **It would be a great time to make one update or change to your preparations.**

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@santacruzca.gov
- Submitting personal information such as DSW application, personal data update, education certificates: email K6PDL@ARRL.net, and EOC.ARES@santacruzca.gov