



CITY OF HUNTINGTON BEACH CERT NEWSLETTER

SINCE 1991

November 2022

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CLASS 1

Fall CERT Class, Sept. 16-18, 2022

by Carol Burtis

Thirty-four students graduated from our 20-hour 3-day CERT class! We had our usual great lineup of instructors including a new presenter of Fire Suppression, Noah Fisher, from HBFD Community Risk Reduction. Noah did a great job, especially since it was his first time teaching at our class! Battalion Chief, Jeff Lopez, also did his usual great job on Disaster Psychology.

We had a total of 26 CERT volunteers and instructors throughout the weekend. They were: Nancy Boyer, Phil Burtis, Debbi Crothers, Bob Dow, Ashlee Dunn, Cynthia Goebel, Stuart Goldberg, Chad Hicks-Beach, Mimi Irvin, Ed Klotz, Blanche Kung, Shelley MacKay, Susan McClaran, Ryan Meadors, Gabriela Menendez, Deborah Morris-Quintero, Peter Petrelis, Virginia Petrelis, Dana Prante, Karen Robinson, Ken Robinson, Raji Shunmugavel, Valerie Spingola, Patrick Upstill, Linda Vircks, Linda Vollmar, Brandon Wegner and John Wysocki! Without these amazing volunteers we could not do the CERT classes! I want to thank each of them for their time and their training talents! Looking forward to more great classes next year!

See the separate November 2022 Newsletter Photo Supplement # 1 CLASS for lots of photos.

The Passing of Ron Roth

This past August we lost a long time member of our CERT family. Ron served many years as Logistics Chief as well as CERT President from 2006 to 2008. Ron was always ready to help whenever needed. He had a great smile and an amazing laugh.



Many of our long time members, Bob Dow, Raji Shunmugavel, Anna Pinter, Linda and Cecil Wright, Billie Brandon and former Emergency Services Coordinator Gloria Morrison, attended his service Sept. 3 at St. Bonaventure Church.

Ron will be missed.

Cars n' Copters 1st Aid Booth

CERT staffed a First Aid booth on October 16 at this fun event! Not too many patients, but a great opportunity to be out in the community and spend the day at the beach! Thank you to Susan McClaran, Mimi Irvin, Melisse Bridges and ambulance operator, Madison Deffenbaugh.



HB CERT Supports HBFD Open House

By John Bishop

On October 15, 2022, the Huntington Beach Fire Department (HBFD) hosted their first public open house at the Gothard Avenue training facility since the start of COVID-19. The event was wildly popular with 1910 resident attendees.

The HB Community Emergency Response Team (HB CERT) were requested to support the event and the team arrived “dark and early” Saturday morning. Initial CERT efforts were to help set up for the event which included establishing safety barriers through the yard, setting up Easy-Ups for the interactive displays and our own CPR training area, CERT education table and our electronic fire extinguisher immersive display.

The official schedule for the day included:

- 0700 – HB CERT early arrival and set-up.
- 0900 – HB CERT team orientation and assignment distribution.
- 0930 – HBFD official orientation and safety briefing.
- 1000 – HBFD Open House opening.
- 1100 – HBFD Skills and Equipment Demonstration #1.
- 1300 – HBFD Skills and Equipment Demonstration #2.
- 1500 – HBFD Open House Closure.

Nineteen HB CERT very engaged and flexible volunteers worked the event over the course of eight hours providing well needed assistance in the following areas:

- CERT program booth support – many residents were educated and some plan to take the training.
- CRP training and education – 277 people trained.
- Electronic fire extinguisher training – one of the most popular event booths.
- Children’s area safety and housekeeping – you can imagine the challenge here!
- Static fire engine display safety – tough job “please don’t climb on the fire trucks”.
- Safety support for the two HBFD Skills and Equipment demonstrations – very popular.
- Overall public assistance, safety and education – “keep your head on a swivel”.

Due the extremely engaged, supportive and flexibility of the CERT volunteers, all our tasks were accomplished thoroughly and professionally. We wrapped up the day conducting an informal After Action Review (AAR – a US military technique) to list what went well (Strengths) and what could have gone better (OFI’s – Opportunities for Improvement). These were provided to Carol Burtis for use at future like events.

See the separate November 2022 Newsletter Photo Supplement # 2 Open House for lots of photos.

October 2022 CERT Meeting

By Phil Burtis

The October 13 CERT meeting featured a speaker from SCE, Scott Brown, who talked about safety when dealing with downed lines. The really quick summary is this:

- **Call 911**
- **Assume any downed line is live and dangerous**
- **If you see one end of a downed wire, look for the other end so you know where it goes**
- **Stay at least 30 feet away from any downed wire**
- **Attempt to secure the area and keep others away**
- **Be conscious about back-feed (more on that later)**
- **If you’re digging, call 811 beforehand to find out where utilities may be**

He had a video presentation that had many sections and he went over most of them. He also left us a few copies of that video, so, if you’d like to have one, we can possibly get it to you.

The main thrust of the presentation is summarized in the bullets above. Unlike other hazards, electricity does not affect the five basic senses: you can’t hear it (usually), touch it (we hope), taste it, smell it or see it. A wire on the ground could be energized or not. The size of the wire is not indicative of its potential danger. And if it happened to be unenergized at the moment, unless you know different, it could become energized at any moment.

Most of the electricity wires that you see on power poles around town are very high voltage; 13,800 VAC is a typical amount of voltage. The reason the electricity stays on the wires on the pole is because the wires are insulated from the pole and thus no electric current can get from the wire to the ground. It is this current flow that is dangerous to you. Electricity wants to return to ground through the path of least resistance. The idea is NOT to be that path.

Consider a bird or squirrel on the wire. They are not electrocuted. Why not? Because they are not touching the ground so they are energized to the same voltage as the wire, but there is no current flow and thus safe. But if they happen to get a foot/paw on the pole itself, which sits in the ground, then there is a massive flow of current which will simply blow them (or you!) apart.

When an energized high voltage wire lands on the ground, it may or may not cause the line to become deactivated. You have no way to know. Yes, sometimes it may spark and thrash about on the ground (a good sign it’s live!), but there is no guarantee. If it is energized, it will radiate its charge across whatever surface it is laying or – like a street. Much like ripples in a pond when you toss in a pebble, the electricity will radiate in a circular pattern for up to 30 feet from the point of contact. All power companies in the US recommend a 30-foot minimum distance be kept from any downed wire to avoid

(continued on page 3)

crossing two rings of differing voltage. A video discussing that more can be found on the HBCERT Facebook page.

<https://www.facebook.com/100000293724129/videos/439719388083689/>

The main point of the entire presentation is to be aware and stay away from any downed line.

One other aspect is back-feed. As solar panels become more prevalent, the potential to push the electricity they generate back into the power grid exists. Under normal conditions, this is of course the desired behavior. But when the power grid line goes down, it is important that the solar system disconnects itself so it does not back-feed the power line. Any system installed per code will have such an automatic disconnect switch, but any device can potentially go bad. If your system has any manufacturer recommendations on testing this feature, please follow those instructions as and when directed. Any power fed back into the system, that is actually turned off by the power company, is a major hazard to workers trying to repair the line or anyone else that comes in contact with it.

The same is true for any type of generator you may have at home. In an emergency, plug items you want to power into the generator. Never try plugging the generator into the home electrical system as this can cause back-feed into the grid. It is very dangerous (and illegal).

For safety tips from SCE, visit:

<https://www.sce.com/safety/family/outdoor-tips>

The Great ShakeOut Day

By Virginia Petrelis

This year on October 20, 2022, millions of people worldwide participated in earthquake drills at work, school or home. At 10:20 am local time, people across California practiced earthquake safety. The City of Huntington Beach successfully evacuated the City Hall building.

CERT and RACES ham radio operators are trained to monitor the 440 repeater in the event of an emergency. Jeff Turlis, KE6BNS, reported that he called in to the RACES net to offer his services during the event.

The Great ShakeOut Drill

By John Wysocki

Although the official date of the Great ShakeOut was October 20, the emergency response team in the Huntington Beach senior community of Rancho del Rey, conducted its second annual Great Shakeout disaster drill on Saturday, October 29, 2022, at 10:21 am. Our team of 24 residents spent this year planning to respond to a 7.0 earthquake where the epicenter was within five miles of our location. In the scenario, no cell phone communications were operational, and the emergency responders were overwhelmed with calls for medical, rescue and fire issues. We planned on potentially being without help for 48 hours.

The Rancho del Rey Emergency Response Team responded to a two-way radio transmission from the Director and started to gather at the designated command center. Along the way, they conducted a quick visual survey of damage in their designated areas and reported conditions for prioritizing.

The team then removed necessary disaster response materials from our storage area and set up a full scale command center complete with a triage medical area, check-in table, communications table, search and rescue table and a logistics area. Each area had tables, chairs and shade canopies erected. This took only 35 minutes to construct.

The command team then organized team members to operate the stations within the command center. Our two registered nurses were assigned to the medical area, one former firefighter was our Public Information Officer (PIO) and one former peace officer communicated with and advised the team members via two-way radio. He also monitored the HAM radio and FM 107.9 disaster frequencies. Our PIO also posted pertinent news on easel boards to keep concerned residents informed.

Search and rescue teams (SAR) were formed and given disaster scenarios to respond to; at least one CERT trained person was assigned to each team. To add some reality to the drill, a SAR team would arrive at a predetermined home, they would open an envelope with the scenario within and radio the situation to the command center. Scenarios included small fires, trapped residents, natural gas smells, panicking residents, homes off their foundations, run away pets, medical situations, etc.

Each area of the command center was active responding to unrehearsed situations. We had four residents show up and play roles. In one scenario, a heavy object fell on and trapped a family member. This activated the SAR team to respond, who then had to safely crib the object off the survivor and transport them to medical. Medical radioed command center with their assessment and condition of their survivor. Other scenarios were presented to which the team responded. Everything was documented on the FEMA provided forms so when the First Responders did arrive, we could communicate our priorities and explain our processes up to that point. Also, these forms would be used if FEMA wanted to interview the team.

At 1:00 pm our director role-played the part of a "Sergeant" from the HBPD who arrived and could communicate with the City's EOC. The "Sergeant" asked what our priorities were, and using our documentation, we were able to quickly communicate that two residents needed to receive emergency medical treatment and transport to a hospital. There was one deceased and two structure fires were in progress with the neighbors evacuated and gas lines shut off.

We concluded our command center activities at 1:15 pm and conducted a 20 minute debrief and noted areas for improvement and other recommendations for future drills. We then deconstructed the command center and stored everything back in our emergency shed. We finished the drill at 2:00 pm.

**Tustin Active Shooter Preparedness Exercise,
October 7, 2022**
By Guy Jackson

I've done a number of active shooter trainings. This now makes six; four with Irvine PD (in conjunction with Spectrum mall security) and now two with Tustin PD (the first happened at the Tustin Marketplace in conjunction with Marketplace mall security).

This was the ONLY time that moulage was used in any of external trainings I've done. The makeup artist was a CERT member named Marie from the North County CERT. I believe my "look" was the worst...basically a good chunk of my head was shot off!

This was my first time doing an exercise at a school. My understanding is that this high school provides makeup courses or "credit recovery" for those students who have missed classes for various reasons and now want to fill in the gaps in order to graduate. Also, my understanding was that this was a planned day off for, not only the students, but the teachers and staff too. We had the whole place (including the parking lots) to ourselves.

In addition to HB CERT, there were members from North County CERT, Tustin CERT, Irvine CERT and, I believe a member from Long Beach CERT. Along with us CERT members, high school/college members (roughly seven) of the Tustin Police Explorer Post 615 joined us as volunteers.

During our safety meeting, a number of the participating training and support officers were introduced but the names were rattled off so quickly that few of us remembered them! However, the main officer who interacted with us was Mark Sauerwein, personnel officer with the Tustin's Professional Services Division. Mark informed us that roughly 20 officers out of 40 were run through the exercise that day. For your future reference, the Tustin PD plans to do this at least two times a year. There will be more opportunities for CERT members to get involved!



**The Pacific Air Show, September 30 – October 2,
2022**

by Carol Burtis

The air show was fantastic again this year and we had a huge attendance. Friday crowds are usually a bit lighter, but there was a great turnout. Saturday had to be one of the largest crowds ever! People were lining the beach when I arrived at 8:00 am and the number of people grew throughout the day. Sunday may have been a bit smaller but still had a ton of people. The planes were fantastic, lots of jets, which I love! The C17 and B52 flyby on Saturday was the BEST!!!

**Raji Shunmugavel's Comments regarding the
Logistics Team**

On Wednesday, September 28, the CERT logistics team (including Carol and Phil Burtis) started loading things into the trailer for setting up the air show First Aid Med Tents One and Two.

All three days of the air show, the team arrived early to be able to park their vehicles nearby and easily unload the supplies for the med tents. Later in the day, lines of cars entered and filled the parking lots. Some families even parked their cars hours earlier along the beach on Pacific Coast Highway and later were dropped off at the air show.

The Huntington Beach RV campground was full of RVs that camped all three days.

I enjoyed my three days of volunteering at the beach and joining the crowds in the beautiful sunny weather.



Tri-City CERT Decathlon, August 30, 2022

by Raji Shunmugavel

I have participated in the three previous CERT Decathlons. Competing areas were Search and Rescue, Triaging and quizzes using the Field Operating Guide (FOG) book, all good preparation for emergencies.

To our relief, our Coordinator, Carol Burtis, announced this year's Decathlon would be training instead of competition. The tabletop task for the evening was to set up a command post to respond to a local emergency--a tsunami! Each table included members from the three cities who developed a team. We enjoyed learning to work with people from other cities. In a county mutual aid situation, we would be working with CERTs from other communities, not just the people/friends we've always trained with.

The materials provided were a map of Costa Mesa-Newport Beach and a small receptacle filled with cards listing people responding, available materials, vehicles, and supplies.

Interestingly, all participants chose the Fashion Island area for their command posts because of the elevation, open space, and accessibility with many roads to and from.

My role was the team communicator. As the other participants were busy planning, decision-making and setting up the command post location, my task was communicating. Though it seems like a simple task, communication flow is a very important part of the command post.

At the end of the time allotted, the team leaders presented their reports. All three coordinators received certificates. Participants were given their certificates later.

At the end of the event, we all enjoyed ice cream and candies!

CommUNITY Picnic

from the Surf City Break Newsletter & Carol Burtis

The City of Huntington Beach hosted its second annual CommUNITY Picnic on Saturday, August 20 at the bandstand in Huntington Central Park. The CommUNITY Picnic began in 2020 to engage, embrace, and celebrate Huntington Beach's richly diverse community.

This free event allowed attendees to experience music and dance from a vast array of different cultures, engage with multiple speakers and community activists, enjoy various food options from unique multi-cultural food trucks and visit multiple informational booths hosted by local nonprofit organizations.

CERT hosted an information booth to inform attendees of

our program and to increase awareness of disaster preparedness.

The event featured local exciting multi-cultural dance and music performances by:

- **Tupua Polynesian Entertainment** presented by Tupua Productions
- **Taiko Japanese Drumming** presented by the OCO Youth non-profit organization
- **Las Estrellas Dance (featuring Folklorico Dance)** presented by the Orange County School of the Arts
- **Native American Dance** presented by RedBoy Productions
- **Reggae and Steel Drums** presented by Lamour and the Mystik Band

A huge thank you to all of our community collaborations who helped make this event possible.



National Night Out Event Tuesday August 2, 2022

By Phil Burtis

Interesting and interactive community-building services were hosted by HBPD, K9, SWAT, Motor and Mounted Police. The atmosphere was festive and quite busy for a Tuesday night. Booths were also hosted by the HBFD, U.S. Army, Fish & Game, Home Depot, Be Well, RACES, and CERT. There were food trucks, popcorn, gifts for the little ones and even Darth Vader and other Star Wars characters were there as well as a pretend jail. I think the most visited attraction was the Mounted Police or the HBPD's Cornhole competition.

About 40 or 50 visitors came to the Huntington Beach CERT booth. Four volunteers were at the ready with program and disaster information for the adults and rewards for the little ones. It was amazing to see about 25 to 35 children, ages 3 to 17, eager to learn about gas meters and how to shut them off. They were rewarded with a small flashlight or whistle.

Overall, it was fun for all to see the community come together and meet the great and dedicated folks who serve this wonderful community.

U.S. Open of Surfing 2022, July 30-August 1, 2022

by Susan McClaran

Let me start off by saying how AWESOME it was to be back at the beach, in pretty much, full swing again! CERT's First Aid tent was a ton of fun in the sun and you could tell our community and visitors were super excited to be at the Van's US Open of Surfing, once again.



Long time US Open fan, Jim, and I. Every year he comes to this event and stops by to take a photo!

The weather was hot and humid but still, absolutely beautiful. Waves were small during the start of the event but then the swells came in and made for a few days of perfect waves for our surfers in the competition.

Most of our days in the tent were fairly quiet but we did have our share of the usual injuries of stubbed toes, cuts and scrapes, and a bee sting. Happy to say, no Sting Ray incidents though! We did have a couple of overheating incidents but, thanks to our new handy, dandy bucket top misting fan that Brevyn got us, we were able to cool some folks down rather quickly. Everyone needs one of these!

Only one incident this year sent a young girl to the hospital due to an allergic reaction. She ate a sample from one of the vendors and did not realize there were cashews in it. Unfortunately, she left her epi pen at home. We contacted our paramedics who quickly came in and resolved the situation (as they always do ☐).

One thing that was different this year, from all the others, is that we had the fun task of assisting our Battalion Chief, Jeff Lopez, up his numbers for training the community in Hands Only CPR. A pop-up tent was setup next to our First Aid tent and the volunteers had a fun time spending the day teaching visitors all about Hands Only CPR. We had the assistance of some of our Fire Dept. friends, who also had a pop-up tent next to that one, for recruiting.

Valerie Spingola, Jill Senecal, Linda Rowison, Ashlee Dunn and Karen Robinson were our super star "Hands Only CPR" trainer champions! Between all of us, we trained 655 people during the event! Outstanding results! Needless to say, Chief Lopez was very pleased!

I want to give a very special thanks to all of our volunteers who helped out at this event and especially to those first-time helpers. Thank you, thank you! I hope you all found it fun and rewarding, even during the quiet and uneventful times. After all, we really don't want first aid to be a busy place, do we? Well, ok, maybe just a little!

Many thanks to: Stephanie Deagle, Cynthia Goebel, Rey Robles, Raji Shunmugavel, Ed Klotz, Ken Robinson, Ben Hansen, Nancy Boyer, Cheryl Hapgood, Linda Vircks, Barbara Scott, Linda Vollmar, Julyne Herrera, John Wysocki, Mark Phillips, Buffy Harris, and of course, our fearless leader, Carol Burtis.

Lastly, as I always do.....I must end this was a special thanks to Phil Burtis, for his ever ready logistics assistance and willingness to be my partner in holding down the parking spots when necessary. As well, of course, to our amazing HB Fire Department who is always so supportive of what we do and always there to assist us as needed.

I thank them all and I thank all of you and feel so blessed to work with each of you and to be a part of our CERT family.



Carol, and the mystery of the missing Fire Branch radio—she found it! At the end of each day, the radio was taken by Fire Department personnel. It was MIA for a couple of days. Carol and Chief Ortiz went on a hunt and finally found where it was hiding!



The October CERT meeting featured a speaker from SCE who talked about safety when dealing with downed lines. But many people do not fully understand electricity, so what follows is a short description.

Think about water. Every drop of water has one goal in mind: to return to the ocean by the easiest path it can find. It makes streams, rivers, and canyons depending on how much water has accumulated at the source, be it a lake, glacier, water tower, dam, or just plain old ground that cannot soak up the water. The higher the water source, and the more water it has, the more potential energy it has to flow down the path to the ocean.

Electricity is much like that. The potential energy a given source has is measured in **Volts** (abbreviated V). The higher the voltage, the more potential energy it has. But much like water, that potential energy is useless unless it has a path to return to its base. That path from the source to base is called a circuit, and electricity flowing through that circuit is called **current** and is measured in Amperes (usually called **Amps**, abbreviated A). The other unit you often see is **Watts** (abbreviated W) which is essentially amps multiplied by volts. Thus, if you plug in a 1200 W hair dryer into a 120 V socket, it will pull 10 A through the wires ($10 \text{ A} \times 120 \text{ V} = 1200 \text{ W}$). A 100 W light bulb will likewise pull just under 1 A through a 120 V circuit.

The other aspect that comes into play is what type of voltage we're talking about. One type is called Direct Current (abbreviated DC). That says that the power from this source flows only one direction around the circuit. Think of a standard AA battery. Somewhere it will say that it is 1.5 VDC (Volts Direct Current). The electricity flows out one end of the battery with the goal of returning to the other end. If there is no circuit – like a flashlight turned off – then no current flows. But turn on the switch and the current flows through the flashlight bulb (which turns the current into visible light) and returns it to the other end of the battery. The same with a car battery (not an electric, that's a different voltage). But most cars have a 12 VDC battery that is used to power the electronics in the car and is applied to the starter to make the engine start. All the power that leaves one side of a DC battery wants to get back to the other side.

The second type of electricity is called Alternating Current (abbreviated AC). In this type, the current actually flows first one way through the circuit, and then flows the other way around the circuit. The rate at which it changes direction per second is called frequency and is measured in **Hertz** (abbreviated Hz). Here in the USA, the standard voltage is 120 VAC, and the standard rate of an AC circuit is 60 Hz, which means every second it changes directions 60 times. This is fast enough your eyes don't detect much flicker in incandescent lights. (Side note: if you buy a string of LED lights and plug them in, since LEDs are meant for DC not AC, they only allow the current to flow one way. So, they are only powered $\frac{1}{2}$ the time, or 30 Hz. Your eye

can often detect that and see a slight jitter in an LED light string.)

60 Hz is also convenient for clocks: the second hand needs to go through 60 steps in one minute around the clock face. So, if you connect a small motor to a 60 Hz source, the motor will rotate at 60 turns per second. Now with a little gearing, the second hand will move all the way around in exactly one minute.

When plugging something in, you need to be sure they match. In the US, that is usually no problem. But in Europe, 220 VAC at 50 Hz is much more standard. That's why if you travel internationally, you need a converter lest you blow up your favorite hair dryer! And an electric motor clock would turn slower on 50 Hz, so after a while you could be off by hours!

The reason that most electricity is delivered via AC is because AC voltages can easily be converted from one voltage to another. A device called a transformer can step down a higher voltage to a lower one, or the other way and step up a lower voltage to a higher one. It is not nearly as convenient to do that with direct current, and physically there is less loss in long-distance transmission of AC as compared to DC. (This was a huge feud back in the day between Edison and Westinghouse. AC won.)

So, what does this mean in terms of the downed wire problem discussed at the CERT October meeting?

First off, the power grid generator is connected physically to the ground. That means every bit of electricity that leaves the generator on a wire wants to get back to the physical ground through the shortest path possible. We would like that to NOT be you.

In terms of the voltage on top of the power pole, it can be really high – 13,800 VAC is a typical residential feed but it can be much more. The big power towers that interconnect larger areas can easily be 200,000 VAC or more. That much potential energy, when connected directly to ground, will cause thousands of amps of current to flow. For a person, that much current is at best really bad, likely fatal, and, at worst, totally disintegrates whatever is in the path. Think of lightning strikes that slice trees in half and start fires.

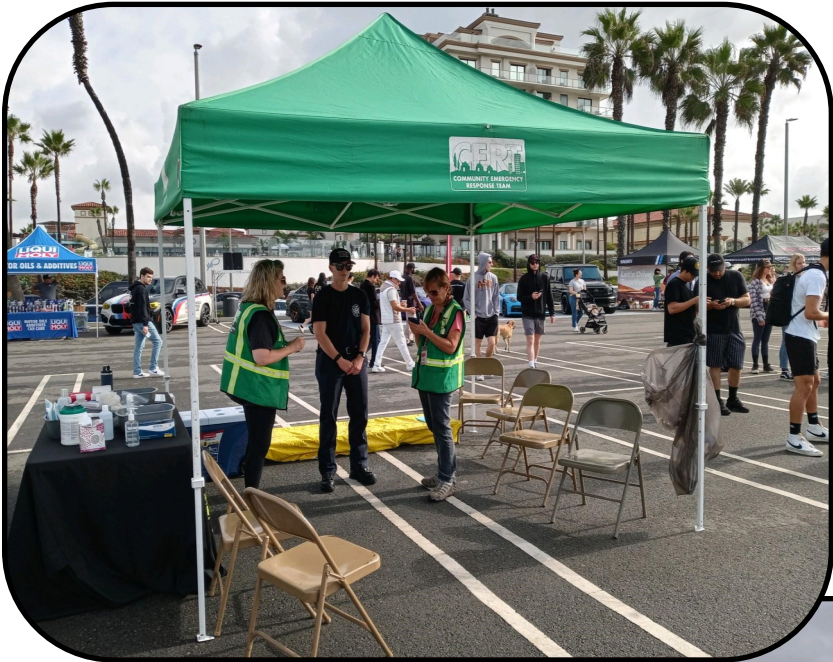
Notice that your usual household voltage is 120 VAC. That means somewhere either on the power pole or in/on the ground there is a transformer. It has to convert the high voltage (like 13,800 VAC) down to the 120 VAC for you. It does this using a whole bunch of wire wrapped around a huge magnet, and as it works, it gets hot. To keep it cool, the transformer is filled with oil. Sometimes that leaks out and the transformer gets too hot. Then it explodes. Not good. So if you happen to see oil dripping from one, call the power company (or 911 if it looks really bad!).

So now consider what happens if you connect a generator or your solar system to the grid. (Quick note: the solar panels

actually generate DC and there is a device that converts that to 120 VAC for your house). So that 120 VAC from the generator or solar, if it gets back on the line leaving your premises, will next find the transformer. Just as it takes 13,800 VAC down to 120, it takes 120 VAC up to 13,800 VAC. This is called back-feed. You would now be energizing the lines and likely powering your neighboring houses as well. This is extremely dangerous and, if a power company person then goes to work on a line they have intentionally turned off, they can get seriously injured.

So, the short story is this: what injures or kills people is electric current flowing through your body. Higher voltage leads to more current. More current leads to more injury. So, stay away from downed lines, be careful using a personal generator, and stay vigilant at all times around electricity. As we close in on the holiday season, check light strings for pulled or exposed wires, do not over load extension cords or sockets, and turn off lights not in use. And don't let Mylar balloons loose outside!

Final note: there are many devices that call themselves 'solar generators'. They advertise they can run your house when power is off. Now technically these are not really generators. They are batteries. The batteries are charged by sunlight hitting a solar panel (or you plug a charger in), and they have an electronic device called an inverter that can take the DC voltage stored in the battery and convert it electronically into a quasi-sine wave 120 VAC, 60 Hz source. The quality of the simulated 60Hz sine wave is important to know; some electronic devices (e.g., laptop computers) are sensitive to how clean the incoming AC power is. Be sure to check manufacturer specifications. And note the run time of the battery when looking to buy one. Knowing that it will produce 500 W is nice, but for how long? So, look for specifications like Kwh (kilowatt-hours). A 500 W battery that can provide power for 8 hours would be rated as 4 Kwh (500 W times 8 Hours = 4000 WH = 4 Kwh). A 1000 W system that can provide power for only 4 hours is also a 4 Kwh system. Read the specifications before making a purchase. Typically, a higher wattage rating costs more and last longer, but the "costs more" part is the only guarantee.

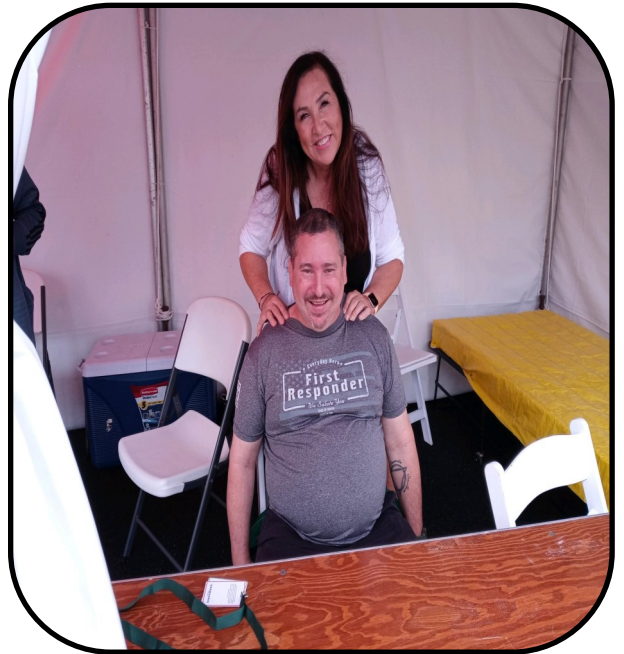


Great ShakeOut Drill, Rancho Del Rey, October 29, 2022



Great ShakeOut Drill, Rancho Del Rey, October 29, 2022 (continued)







HBPD National Night Out, August 2, 2022





US Open of Surfing, 2022, July 30—August 7, 2022





CITY OF HUNTINGTON BEACH CERT

Neighbors-Helping-Neighbors

MISSION STATEMENT: The mission of the Community Emergency Response Team (CERT) Program is to provide information and training on disaster preparedness; provide leadership and coordination during an emergency, and assistance to help victims recover from an emergency.

CPR Classes

To be Determined

Please record your volunteer hours at our CERT Member Portal at <https://www.huntingtonbeachca.gov/government/departments/fire/cert/cert-members-login.cfm> and log in using your CERT ID# and the password **cert2013**

CERT COVID –19 NEWSLETTER REMOTE STAFF: Cynthia Goebel ,Virginia Petrelis (Editor), Peter Petrelis (Publisher),

NORMAL CURCUMSTANCES ADDED STAFF: Richard Batistelli, Anna Pinter, Carol Nehls, Rajarajeswari (Raji) Shunmugavel, Cynthia Goebel

IMPORTANT ANNOUNCEMENT!

CERT Website: www.huntingtonbeachca.gov/cert **CERT Contact:** CERT@surfcity-hb.org
CERT Message line 714-536-5974 (THIS IS A MESSAGE LINE ONLY!)