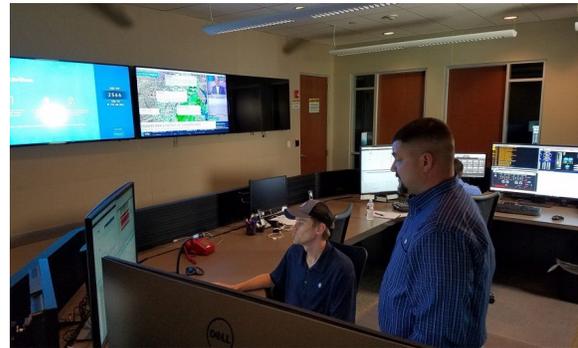


Texas Firefighter Wellness Newsletter

Texas A&M's New Wildfire Prevention Technology



<https://www.kxan.com/news/texas/firefighting-demonstrations-highlight-training-and-aim-to-inspire/> (left); <https://www.latimes.com/world-nation/story/2019-12-19/texas-has-technology-that-could-prevent-utility-caused-wildfires-california-is-interested> (right)

Texas A&M University is pioneering the development of new technologies and trainings to advance safety and efficiency in fire service. The Texas A&M Engineering and Extension Service has held trainings for fire crews to learn new techniques, trade best practices, and sharpen skills for the past ninety years. Texas A&M's commitment to meeting advancements in technology has sparked the development of a new project related to fire service.

Professor B. Don Russell developed a tool to detect power line problems before power outages and big disasters occur. Dr. Russell did not intend to apply this technology to fire service initially, but he soon discovered his product could be a new "holy grail" for California and other areas that have suffered devastating wildfires caused by electrical equipment. Dr. Russell explains that this new technology will "find [utilities] that are in the process of degrading before a catastrophic event occurs," which will help prevent electrocutions, power outages, and wildfires.

This new diagnostic tool called Distribution Fault Anticipation is already being used in Texas, and it is now being tested in

California. Electrical utilities have caused some of the most lethal fires in California, so multiple companies in the state are invested in the development and application of this product. Texas A&M hopes to expand the testing of this diagnostic tool in other nations that experience destructive wildfires, such as Australia and New Zealand.

The Distribution Fault Anticipation tool works by detecting variations in electrical currents, which are caused by deteriorating equipment or harsh conditions. The diagnostic tool then notifies electrical operators to send backup to fix the problem. Prevention is of the utmost importance when considering new applications of wildfire technology. This tool has the power to detect some problems years before the damaged utilities could present a real hazard. Dr. Russell explains that this diagnostic tool is novel because with current wildfire technology we must assume utilities are in healthy condition until power outages occur, which is often too late to prevent a fire.

Although the product has just begun testing in California, it has been tested by Pedernales Electric Cooperative in Texas since 2015. Pedernales began testing the product in rural areas outside of San Antonio and Austin, and the

company is delighted by the diagnostic tool's success. Robert Peterson, the principal engineer on the project, was amazed by the product's ability to "[find] failing arrestors, capacitors, and connections." Peterson shares that the tool can troubleshoot many different kinds of problems.

The Distribution Fault Anticipation tool shows a lot of promise, but it is not sufficient to prevent wildfires alone. While the tool can help dispatch backup to the equipment that needs to be fixed, it cannot exactly pinpoint the problem. This tool still gives the dispatch crews an advantage, however, as they do not have to spend hours patrolling miles of power lines. The team at Texas A&M University and their partners at different electrical companies are excited about this advancement in fire prevention technology.

<https://www.nbcdfw.com/news/local/texas-am-professors-technology-could-help-prevent-wildfires/2267274/>

<https://www.kxan.com/news/texas/firefighting-demonstrations-highlight-training-and-aim-to-inspire/>

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What's New at the WRI?

The WRI welcomes a new therapist!

Mariah Stickley

Mariah joined the WRI team in September of 2019. She received her B.S. in Behavioral Neuroscience from East Tennessee State University in 2017 and her M.Ed. in Counseling Psychology from Texas A&M in 2018. She is currently a third-year doctoral student in the Counseling Psychology program at Texas A&M University. Mariah grew up in rural Appalachia and has a passion for working in rural and underserved communities. Prior to joining the WRI, Mariah provided counseling services at Texas A&M Health Science Center through the Telebehavioral Care Program and the Texas A&M Physicians Family Medicine Clinic. More than anything, Mariah loves meeting clients where they are at and working collaboratively to help them find healing.

We have a podcast!

We encourage you to listen to our podcast, *Warriors and Wellness*, to hear about our work with veterans and their families! Scan this QR code with your smartphone camera, or follow this link: <https://open.spotify.com/show/6fOURImKxuZELOtQsaGNtP>



If you would like more information about our treatment program, please contact us at WRI@BSWHealth.org or 254-716-6208.



This program is supported by a grant from the Texas Veterans Commission *Fund for Veterans' Assistance*. The *Fund for Veterans' Assistance* provides grants to organizations serving veterans and their families. <https://TVC.Texas.gov>

Dutch Hot Chocolate Recipe

Ingredients

- 1/3 cup dark chocolate chips
- 1 teaspoon cocoa (Dutch process)
- 1 1/4 cup whole milk
- 1 tablespoon whipped cream
- Optional: sugar or sweetener, to taste
- Garnish: dust with ground cinnamon or cocoa

Directions

1. Gather the ingredients.
2. Put the chocolate chips, cocoa, and 1/4 cup of the milk in a small saucepan over medium heat.
3. Allow the chocolate to melt into the milk while stirring with a wooden spoon.
4. Add the rest of the milk and whisk lightly until well mixed and foamy.
5. Pour into small cups, top with whipped cream, dust with cinnamon or cocoa, and serve piping hot.

Source:
<https://www.thespruceeats.com/classic-dutch-hot-chocolate-recipe-1128602>



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Moving? Changing your phone number? If so, please let us know so we can update our information.

Contact Megan Cardenas at: (254) 730-2677

OR Megan.Cardenas@BSWHealth.org



Don't forget that you can contact us 24 hours a day, 7 days a week, 365 days a year!