

The IEEE MOVE truck is deployed to respond to hardest hit disaster areas that frequently have no power or communications. MOVE can quickly set up temporary operations and provide the power and communications required to initiate services to the people affected by the disaster. MOVE is staffed by a network of hundreds of IEEE volunteers who cross train with the Red Cross to provide technology and services at disasters. IEEE volunteers designed, maintain, and operate the truck.



When not at disasters, IEEE MOVE provides public outreach and STEM education at schools, universities, public events and IEEE events. The large truck draws interest to IEEE from over 50,000 people annually. For additional information, visit move.ieeeusa.org.

MOVE News by Mary Ellen Randall

Hurricane season has been especially active this year. So far, in 2020, Mobile Outreach VEHICLE (MOVE) has deployed (5) five times. This includes Tennessee Tornado, Hurricane Isaias, Hurricane Laura, Hurricane Sally and Hurricane Delta. Since 2016, MOVE volunteers have responded to 19 natural disasters. Read about these deployments later in this issue.

In 2020, there are special challenges associated with COVID. The MOVE truck is fully equipped with appropriate PPE and the volunteers are trained on appropriate protocols to operate in this environment. We are fortunate to have volunteers to go out during these times. Thank you to John Balsam, Alan M. Brown, Jay Diepenbrock, Steve Kemp, Sara Spencer, Grayson Randall and all the volunteers who supported them during deployments

The recently formed MOVE weather team closely monitors for potential hurricanes and alerts the volunteers deployed of possible concerns. If you are interested in getting involved with the MOVE team – deployments, weather team or other activities, please contact Grayson Randall (g.randall@ieee.org)

A MOVE Fundraising Campaign is currently underway. Please consider a donation today to assist your fellow IEEE Volunteers as they respond to those in need. Visit <http://bit.ly/DONATION-MOVE>.

Welcome new Sponsors



Thanks to our Supporters

IEEE Foundation



Mobile Disaster Relief with MOVE

2020 Delta Hurricane Response

By Alan Brown

Hurricane Delta brought significant storm surge, heavy rainfall, and strong winds to parts of Louisiana and Texas. Storm surge reached over 5 feet and more than 17 inches of rain fell in portions of Louisiana, with flooding and more than 507,000 extended power outages. Worse, Delta arrived on the heels of devastating Hurricane Laura, which had brought Category 4 windspeeds of 150 mph to this same area of Louisiana in late August.

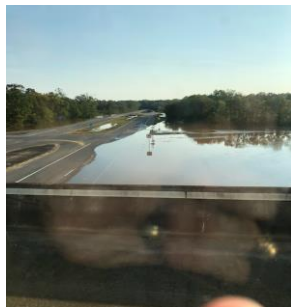
An IEEE MOVE team, specifically Grayson Randall and Alan Brown, responded in the MOVE truck beginning October 9th to southwestern Louisiana for nearly two weeks. We provided support through Red Cross' Disaster Services Technology team to multiple client locations. Examples of our assistance include the following.

- Delivered laptops, a printer, and network equipment and setup services for Red Cross volunteers at the state-run congregate shelter at LSU Agricultural Center in LeCompte, LA.
- Delivered a printer and network equipment and setup services for Red Cross volunteers at the staff shelter hosted by Acadia Baptist Center in Eunice, LA.
- Transported equipment and diagnosed and repaired communications and software issues for the Red Cross warehouse in Port Barre, LA
- Provided various technical support to Red Cross volunteers at the Disaster Relief Operations headquarters, located in the Louisiana Capitol Area Chapter office.

This was a successful deployment, and we appreciated the opportunity to partner with Red Cross while assisting those in need.



Network & Printer squeezed into tiny room to serve ARC volunteers at staff shelter



Flooded intersection at I-49 SB / LA-181 exit ramp, Oct. 11th St. Landry, LA

2020 Sally Hurricane Response

By Grayson Randall

Hurricane Sally hit the area between Mobile, Alabama and Pensacola, Florida which took the brunt of the storm with widespread wind damage, storm surge flooding, and over 20 inches (510 mm) of rainfall. Damage totals are estimated to be at least \$5 billion. The Red Cross requested IEEE MOVE to support operations in Pensacola Florida. Grayson Randall and Alan Brown responded to the call.

We had the opportunity to support the distribution of meals and recovery materials to the public at the Friendship Missionary Baptist Church in Pensacola Florida. The church had lost power from the storm. IEEE MOVE set up power for the church staff to create meals and provided internet to the Red Cross, church members, and the public while the distribution of meals and recovery materials was in progress. While providing this support we assisted in serving over 1000 meals and disaster recovery materials including drinking water, cleaning materials, shovels, rakes, and other materials to the public to support recovery from the storm. It was rewarding to work with the Red Cross and the church to provide to those in need after the hurricane disrupted their lives.



Red Cross and church members distributing meals and resources to the public



Grayson Randall and Alan Brown



IEEE MOVE providing internet to the local community

Hurricane Season lasts through November

Mobile Disaster Relief with MOVE

2020 Laura Hurricane Response

By John Balsam

On August 27, 2020, Hurricane Laura made landfall as a Category 4 hurricane near Cameron, Louisiana and quickly moved northward. Damage from wind and storm surge was widespread and catastrophic in areas of Southwest Louisiana. Through contacts at AT&T and the United Way, IEEE MOVE was asked to deploy to Lake Charles, LA to assist with disaster relief efforts.

On September 2nd, the MOVE Disaster Response Vehicle was en route to Lake Charles. MOVE driver Jay Diepenbrock picked up John Balsam along the two-day route to Louisiana. The team arrived late in the afternoon on September 3rd and made their way to the Southwest Louisiana Center for Health Services, a clinic that shares a building with a community center. The roof was torn off the community center, destroying their server and disabling their network communications and Wi-Fi service for the whole building. There were many destroyed buildings, billboards, and structures, broken off trees and power poles. Power was off in most of Lake Charles, even a week after Laura struck.

The community center was still operational with a building generator but without network communications. The building was planned to be used for storage and a distribution center for food, clothing, and other supplies to the community, so restoring network communications was paramount. The MOVE team quickly set up WI-FI and internet communications in the building using wireless access points running off of the truck's satellite system. WI-FI access was also enabled to the public as they came to the center for assistance. Additionally, the team made available cell phone charging capability using the truck's generator.

Late on Friday, September 4th, the building's generator went offline. The MOVE team ran extension cords into the building and supplied power for critical lighting needs in the hallways in order to keep relief operations going. The generator was repaired the following day but was taken down for maintenance a few days later, so again MOVE provided power for lighting during the downtime.

The community center was closed on Sunday September 6th, so Jay and John relocated the MOVE truck to a church where the United Cajun Navy was distributing cleaning and other supplies, and the Salvation Army was providing meals.

Back at the community center on Monday the 7th, the MOVE team continued to provide network services via satellite, WI-FI and cell phone charging capability thru Friday September 11th. While on duty, they also completed an inventory of all items and equipment in the truck.

The clinic and community center were in the process of restoring their internal network in anticipation of re-opening the clinic on Monday September 14th, so on Saturday September 12th, Jay and John packed up the MOVE truck, completing its assignment in Lake Charles, LA, and headed back on the two-day return trip to its home base in Durham, NC.



MOVE support at the SWLA Clinic hurricane relief center



Massive storm damage in Lake Charles, LA



Power system damage in Town of Iowa, Louisiana

Meet John Balsam

Meet John Balsam – MOVE Volunteer

John Balsam first became involved with IEEE MOVE in 2017 when he toured the vehicle while it was on display at SoutheastCon in Charlotte. During SoutheastCon 2018 in St. Petersburg, FL, he completed the MOVE vehicle operations training and the required Red Cross Disaster Services Training in order to be certified to deploy with MOVE.

His first deployment with MOVE came in September 2018 during MOVE's response to Hurricane Florence in North Carolina, where he deployed for two weeks while serving in Fayetteville, Lumberton, Greenville and Newport, NC.

His second MOVE deployment occurred in March 2019, assisting with the recovery efforts after the killer tornadoes struck south of Opelika, AL. He has also helped staff the truck during the 2019 Atlanta Science Festival.

Recently, he completed his third deployment in September 2020 during MOVE's response to Hurricane Laura's impact in Lake Charles, LA and is now currently enrolled in MOVE's driver training program.

MOVE well represents the IEEE goal of Advancing Technology for Humanity and his personal involvement to date has been very fulfilling. He is excited to utilize his technical experience while assisting MOVE with humanitarian relief efforts and STEM activities.

John is a LIFE Senior Member of the IEEE, and has been an IEEE member continuously since he was a Student Member and Treasurer of his local Eta Kappa Nu Chapter at Clarkson University in the mid 70's.

He retired several years ago as a Principal Research Engineer at the Georgia Tech Research Institute. He was Treasurer of the IEEE Atlanta Section in 2017 and 2018 and is the current Treasurer of IEEE Region 3.

When he's not working on IEEE and MOVE related operations, he keeps busy on his farm on Lake Weiss, AL tending to his classic car and race car hobbies and spending time with his four grandchildren.



Need a speaker on MOVE?

MOVE volunteers are available. Contact g.randall@ieee.org for more information.

Mobile Disaster Relief with MOVE

2020 Isaias Hurricane Response by Jay Diepenbrock

Jay Diepenbrock and Sara Spencer deployed with the MOVE truck to Windsor in Bertie County, NC following a tornado spawned by Hurricane Isaias in August, 2020. This was Sara's first deployment on the truck. The tornado did extensive damage in two neighborhoods in Windsor; at least ten homes were destroyed and two people were killed. The Sheriff there said that the damage was the worst he'd seen in 38 years working in the Sheriff's office. Windsor has no hotels, so many of the affected people were lodging with friends or relatives in this tight-knit community. The remaining families were lodged at one of the several Red Cross Shelters.

Although the Red Cross shelter at Bertie High School had electricity, cell phone service in town was extremely limited and unreliable. Jay and Sara set up the truck at the shelter at the High School and provided satellite-based Internet service to the Red Cross staff so they could conduct their business. Residents and staff could also make cell phone calls by WiFi, some using solar battery packs from the MOVE truck to recharge their phones. Once the few families staying at the Bertie High School shelter found longer term lodging, the Red Cross closed that shelter and consolidated it with another shelter in town. Jay and Sara then shut down operations on the truck and returned to its home base in Durham, NC. Jay and Sara were happy to be able to help those that had suffered so much.

A video of the damaged area can be viewed at

<https://bit.ly/EF-3tornadohitWindsor>

with still images at

<https://bit.ly/StormdamageinBertieCounty>



MOVE truck on station at Red Cross shelter at Bertie High School



Daily standup briefing for team



Staff coordination meeting



Jay checking the mounting hardware for the solar panels and satellite dish.

**MOVE 2019 ASAE
"Power of A" Gold**



Want your IEEE Society to support MOVE?

Possibilities include (depending on level)

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MOVE truck at your conference

Your Logo on MOVE web page

Facebook post featuring your society

Your Logo on the MOVE truck

The MOVE program is funded by donations to the IEEE Foundation "MOVE fund." Help today!
leefoundation.org/move

For more information, contact merandall@ieee.org

Giving Tuesday is December 2 – Consider donating to MOVE

Mobile Disaster Relief with MOVE

MOVE is expanding internationally!

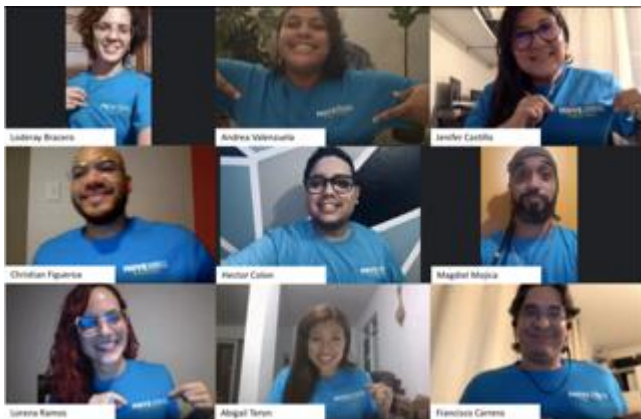
The International MOVE Disaster Relief proposal for expansion into India and the Caribbean was approved by the IEEE New Initiatives Committee in September 2020.

The implementation of this proposal will include a worldwide MOVE Steering Committee and country or regional operational committees. Initially, these will include India, Jamaica and Puerto Rico.

Disaster relief solutions will be tailored to the specific local needs. Stay tuned for additional details.

Congratulations to our Puerto Rico MOVE volunteers!

After a virtual presentation on MOVE, 9 IEEE volunteers from Puerto Rico volunteered! They learned about the MOVE program and then took training in Red Cross technologies, as well. They are ready to deploy when needed and are identifying local needs to bolster that effort!



Thanks to Luis A. Tatis Moraless for his webmaster skills in our recent fundraising campaign. Luis is from the Puerto Rico Section.

MOVE weather team by Danny Merkl.

Danny is an IEEE R3 volunteer and one member of the MOVE Weather Team. For this recent hurricane season, the MOVE Weather Team has been on an important mission to provide upfront information regarding potential weather threats that could affect the Team's Area of Responsibility.

This year has been epic in terms of the number named storms assigned by the National Hurricane Center (NHC). There have been so many named storms that it has required the use of characters in the Greek alphabet. The Team uses a multifaceted approach to notify many entities within the IEEE. Starting with notifications to the Leadership, the Weather Team has been organized to communicate with the membership and others through the use of Collabratic and to stay in touch with the MOVE Response Truck when it is deployed.

For additional information, visit move.ieeeusa.org. To Volunteer, Join the MOVEment!
<https://move.ieeeusa.org/help/volunteer-resources/>

