

Advancing Technology for Humanity

IEEE MOVE Volunteer Newsletter An IEEE-USA Initiative

2019 Year in Review

The IEEE MOVE truck is deployed by the Red Cross to respond to hardest hit areas that frequently have no power or communications. MOVE can quickly set up temporary operations and provide the Red Cross with the power and communications required to initiate services to the people affected by the disaster. MOVE is staffed by a network of over 200 IEEE volunteers who cross train with the Red Cross to provide power and communication 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, see move.ieeeusa.org

MOVE Receives ASAE "Power of A" Gold **Award**

We are pleased to report that IEEE-USA's MOVE Community Outreach program has been chosen to receive a 2019 Gold Award from the American Society of Association Executives as part of their Power of A Awards.

The Power of A Awards recognize and celebrate the extraordinary contributions associations make to society by enriching lives, creating a competitive workforce, preparing society for the future, driving innovation and making a better world. The Award is one of three ASAE awards granted to IEEE programs this year.

Congratulations to the MOVE team and to all our partners and supporters, including the American Red Cross.



International MOVE Project team members: James M Conrad, Jenifer Castillo (R9), Jing Dong (R10), Deepak Mathur (R10), Mary Ellen Randall (R3), Percy "Butch" Shadwell (R3), and Kathy Land (TA)

New Initiatives Committee (NIC) – International Disaster Relief Study

There is a study underway to evaluate the feasibility of a MOVE-like program in other parts of the world. The study is sponsored by the New Initiatives Committee of IEEE. The study seeks to determine how to enable disaster relief efforts customized to local conditions. The study will include focus groups and discussions with non-governmental agencies (NGOs), government programs, and volunteers.

Since disasters often cause significant damage to infrastructure on islands, deploying equipment quickly is a challenge. Modular solutions, such as Modular MOVE (discussed in our last newsletter) are also being explored because they are quicker to deploy.



Participants at meeting in Bengaluru, India

Two Focus Groups were recently held in Kochi, India on October 20, 2019 and Bengaluru, India on October 22, 2019. Cooperative discussions were held with IEEE leadership & volunteers, NGOs, and government officials. The results were very promising for cooperation and collaboration.

Mobile Disaster Relief with MOVE

Welcome David-NEW IEEE Member

My name is David Sewell. I have volunteered supporting Disaster IT relief work with the American Red Cross for many years and on many operations.



When IEEE USA MOVE developed the disaster relief truck I have been on the receiving end of the incredible Disaster Relief support provided by the MOVE truck starting with Hurricane Matthew in Goldsboro, NC and most recently Hurricane Dorian mainly in the Outer Banks with a lot of operations in between.

The technological tools for good brought to the table by IEEE USA MOVE are amazing but it is far more than the physical truck and equipment. The caring relationships and the humanitarian efforts of IEEE are what have led me to embrace the shared mission between IEEE and Red Cross. I dove right in and began to train the MOVE Truck Team members on how the Disaster Service Technology Team works so all of the MOVE Truck team members become both IEEE MOVE and Red Cross DST Volunteers. This has resulted in an indomitable cadre of disaster responders who demonstrate how technology can be utilized in a compassionate way to help those affected by disaster.

After being privileged to teach the Red Cross
Disaster Services Technology 101 classes at two
IEEE SoutheastCon's. I am very proud to now be a
member of IEEE. For me, this is a natural
progression of my support of IEEE and the MOVE
Truck. I am excited to be able to serve on the truck as
a full fledged crew member and Red Cross volunteer.

Redcross Reflections



I was excited when first approached about the idea that IEEE leadership was envisioning how to help those individuals and communities impacted by large scale disaster events. Five years later to be in full partnership with IEEE and to see the impact that the MOVE truck has had on our ability to provide disaster relief more efficiently and effectively, because of the capabilities of the truck and the commitment of IEEE volunteers, has been amazing.

With 14 deployments of the truck and team of volunteers to major disasters, the quick set up, the technical capabilities to support operational headquarters, large shelter locations and other unique needs for communications has been imperative to our mission delivery. Now I can't imagine a large scale disaster response without the MOVE truck and volunteers being on scene.

Barry Porter
Regional Chief Executive Officer
American Red Cross



Mobile Disaster Relief with MOVE

2019 Hurricanes supported

"In records going back to 1980, the U.S. has endured a total of 254 billion-dollar weather disasters inflicting a combined \$1.7 trillion (USD 2019) in damage.

Out of those 254 events, 65 have occurred in the last five years. That's more than twice as many per year as the annual average since 1980. Inflation doesn't explain the increase, because the figures are inflation-adjusted." From https://weather.com/news/news/2019-10-08-billion-dollar-weather-disasters-us-2019

The IEEE MOVE team has been responding to these events with the American Red Cross since 2016. We have responded to 14 disasters as part of our mission. In 2019, we responded to 3 major disasters.

Alabama Tornado

- "The 23 people killed make it the USA's deadliest in six years, since May 2013. That's when an EF-5 tornado killed 24 people in Moore, Oklahoma.
- The violent, devastating tornado that roared through eastern Alabama on Sunday was unusual for its extreme size, strength and duration – all of which contributed to its high death toll." From https://www.usatoday.com/story/news/nation/2019/03/05/alabama-tornado
 - https://www.usatoday.com/story/news/nation/2019/03/05/alabama-tornado-2019-twister-usas-deadliest-strongest-years/3067339002/
- Supported DRO-HQ (Headquarters for the event)
- Provided communications support for the operation as there was initially no communications capabilities in that building
- Setup and provided communications to a MARC Multi-Agency Resource Center
 - Provided communications to Red Cross and the Public



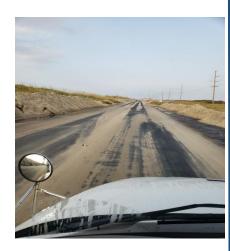


Hurricane Barry

- "Hurricane Barry was an unusually asymmetrical tropical cyclone that made landfall in Louisiana in July 2019, causing \$600 million in damages." From
 - https://en.wikipedia.org/wiki/Hurricane_Barry_(2019)
- Prepositioned at DRO-HQ (Headquarters for the event) in Baton Rouge Louisiana.
- Provided DST support for headquarters
- Stopped in Jackson Mississippi and displayed the MOVE truck to local operations there and did a TV interview which aired on local TV station

<u>Hurricane Dorian</u>

- "storm surge flood damage in North Carolina's Outer Banks where Dorian made landfall, as well as wind and tornado damage" with over \$1 billion damage and 3 deaths from https://weather.com/news/news/2019-10-08-billion-dollar-weather-disasters-us-2019
- Responded to Lake City Florida to support a district office with communications
- Was repositioned to DRO-HQ Florida (Headquarters for operations in Florida) to standby for Florida impact – minimum damage
- Was repositioned to DRO-HQ South Carolina minimal damage in South Carolina
- Was repositioned to DRO-HQ Greenville North Carolina supported communications at the headquarters
- Was repositioned to North Carolina Outer Banks, Hatteras Island, where there was significant damage. We provided communications support to the kitchen where meals were produced to feed responders and the public.



STEM and Public Visibility

MOVE at IMS 2019



Jay Diepenbrock and Grayson Randall took the IEEE MOVE truck to the IEEE International Microwave Symposium (IMS) in Boston this summer. The truck was parked on the exhibit floor in an IEEE booth with over 9,000 conference participants and 1,000 industrial exhibits of state-of-the-art microwave products. The MOVE team was able to provide tours and information about the program to conference participants and invited inner city school students.

Want your IEEE Society to support MOVE?

Possibilities include (depending on level)

- Sponsor a Joint STEM event
- 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."

For more information, contact jebalsam@bellsouth.net

Many Thanks to our many dedicated MOVE volunteers



STEM Events

2019 UNC Charlotte Science and Technology Expo, a NC Science Festival Signature Event on April 28, 2019. This event featured over 100 activities for the science-curious of all ages, including hands-on educational presentations and fascinating displays — engineering demonstrations, tours of the MOVE truck, computer and software explorations, hourly live science shows, all kinds of cool robots in action, lab tours in the life sciences, STEM education activities, environmental science, rockets, drones. Estimated attendance was 5,000.



Brian Greene and Jim Conrad

Atlanta Science Festival was held March 23,2019 in Piedmont Park and approximately 25,000 people attended. The MOVE team was proud to participate for the 3rd consecutive year, in the Atlanta Section's Curious Kid Zone. It is truly a highlight of our STEM outreach efforts.

